

**NEGERI SEMBILAN TOURISM AND HOTEL HALAL MANAGEMENT
SYSTEM**



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

NEGERI SEMBILAN TOURISM AND HOTEL HALAL MANAGEMENT
SYSTEM

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This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Database Management) with Honours

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2024

DECLARATION

I hereby declare that this project report entitled
NEGERI SEMBILAN TOURISM AND HOTEL HALAL MANAGEMENT SYSTEM
is written by me and is my own effort and that no part has been plagiarized
without citations.

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DEDICATION

To my beloved parents

My mom, Mrs Rusmah binti Lebai Yahya

My dad, Mr Norasikin bin Nordin

To my beloved supervisor, Gs Ts Dr. Safiza Suhana Binti Kamal Baharin

To my beloved evaluator, Mrs Ts Dr. Noraswaliza binti Abdullah

And fellowship friends that give me support and sharing knowledge in order to finish my project



ACKNOWLEDGEMENTS

Assalamulaikum. Firstly, thank you and praise to Allah Almighty who giving me strength, good health and knowledge to me to complete my Projek Sarjana Muda (PSM) I. I also thanks to my family and my friends who were always there for helping and giving any ideas they shared to make this final year project. They were always giving me strength and moral support and passionate encouragement to me and make it possible for me to complete this project.

I submit my heartiest gratitude to my respected lecturer Madam Safiza Suhana Binti Kamal Baharin, the supervisor of my final year project, for her sincere guidance and help me for completing this final year project.

Lastly, thanks again to all those involve for helping me throughout in completing my final year project. May Allah bless all of your kindness.

ABSTRACT

The "Negeri Sembilan Tourism and Hotel Halal Management System" is an integrated digital platform designed to enhance the tourism experience in Negeri Sembilan, Malaysia. This project addresses the absence of a centralized online resource that consolidates detailed information about tourist attractions and halal-certified accommodations within the state. By creating a user-friendly system, tourists can easily access comprehensive details on various attractions and verify the halal status of hotels, thus streamlining trip planning and ensuring halal compliance. The platform supports multiple user roles, including staff, hotel verifiers, webmasters, Applicants, and tourists, each with specific functionalities to manage and utilize the system efficiently. This initiative aims to boost tourism, support local businesses, and promote cultural exchange by leveraging modern technology to provide a cohesive and seamless user experience.

ABSTRAK

"Sistem Pengurusan Pelancongan dan Hotel Halal Negeri Sembilan" adalah platform digital bersepadu yang direka untuk meningkatkan pengalaman pelancongan di Negeri Sembilan, Malaysia. Projek ini menangani ketiadaan sumber dalam talian yang berpusat yang menggabungkan maklumat terperinci tentang tarikan pelancongan dan penginapan yang disahkan halal dalam negeri ini. Dengan mewujudkan sistem mesra pengguna, pelancong boleh mengakses maklumat komprehensif tentang pelbagai tarikan dan mengesahkan status halal hotel, sekali gus mempermudah perancangan perjalanan dan memastikan pematuhan halal. Platform ini menyokong pelbagai peranan pengguna, termasuk kakitangan, pemeriksa hotel, webmaster, pemilik, dan pelancong, masing-masing dengan fungsi khusus untuk mengurus dan menggunakan sistem dengan cekap. Inisiatif ini bertujuan untuk meningkatkan pelancongan, menyokong perniagaan tempatan, dan mempromosikan pertukaran budaya dengan memanfaatkan teknologi moden untuk menyediakan pengalaman pengguna yang menyeluruh dan lancar.

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LIST OF ABBREVIATIONS

FYP - **Final Year Project**



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CHAPTER 1: INTRODUCTION

1.1 Project Background

Negeri Sembilan, a state located in the southwestern part of Peninsular Malaysia, is known for its rich cultural heritage, unique Minangkabau architecture, and a variety of attractive tourist destinations ranging from historical sites to natural landscapes. Despite its wealth of attractions, Negeri Sembilan has not fully capitalized on its tourism potential due to the absence of a centralized online platform that can guide tourists effectively. In an era where digital solutions are pivotal to enhancing tourism experiences, this gap significantly hampers the state's ability to attract and accommodate tourists efficiently.

Tourism plays a critical role in the economic development of any region, contributing to income generation, job creation, and cultural exchange. For Negeri Sembilan, developing a robust digital presence is essential to compete with other Malaysian states that have already embraced technological advancements in promoting their tourism sectors. Currently, tourists seeking information about places to visit in Negeri Sembilan often face difficulties due to the scattered and sometimes outdated information available online. This lack of a cohesive platform results in a fragmented user experience, making it challenging for tourists to plan their trips effectively.

Additionally, for Muslim travelers, the process of finding halal-certified accommodations adds another layer of complexity. Malaysia, being a predominantly Muslim country, places significant importance on halal certification, especially in the hospitality industry. The halal status of hotels is a critical factor for many Muslim tourists when choosing where to stay. However, the current system requires users to visit different websites, such as the official portal of JAKIM (Department of Islamic Development Malaysia), to verify the halal status of hotels. This fragmented approach

not only consumes time but also creates a disjointed user experience, deterring potential tourists from visiting Negeri Sembilan.

Recognizing these challenges, the "Negeri Sembilan Tourism and Hotel Halal Management System" aims to bridge these gaps by creating an integrated, user-friendly platform. This project will provide comprehensive information about tourist attractions in Negeri Sembilan while simultaneously offering a seamless way to verify and book halal-certified hotels. By leveraging modern technology and integrating various data sources, this system aspires to enhance the overall travel planning experience for tourists, making Negeri Sembilan a more appealing destination.

1.2 Problem Statement

The current lack of a unified tourism and hotel management system in Negeri Sembilan presents several challenges:

1. **Inaccessibility of Information:** Tourists have difficulty finding reliable and up-to-date information about the various attractions in Negeri Sembilan due to the absence of a centralized platform.
2. **Fragmented Halal Certification Data:** Travelers seeking halal-certified accommodations must navigate multiple websites, specifically JAKIM Malaysia, to verify the halal status of hotels, leading to an inconvenient and time-consuming process.
3. **Lack of Integration:** There is no integration between tourism information and hotel halal certification, which could provide a seamless and efficient planning experience for tourists.

1.3 Objective

The primary objective of Negeri Sembilan and Hotel Halal Management System is to address these issues by creating a comprehensive, user-friendly online platform that integrates both tourism and halal hotel certification. The system aims to :

1. **Provide a Centralized Tourism Portal:** Offer detailed information on the attractions in Negeri Sembilan, including cultural sites, historical landmarks, natural wonders, and recreational spots.
2. **Integrate Halal Hotel Certification:** Allow users to easily identify halal-certified hotels through integration with JAKIM Malaysia's certification data.
3. **Enhance User Experience:** Streamline the process of planning a trip by offering a one-stop solution that caters to both tourism information and halal accommodation needs.

1.4 Scopes of the Project

1.4.1 Staff

1. Superadmin
 - **View Reports:** Access detailed reports of each tour place and hotel, including user reviews, ratings, and booking statistics.
 - **Manage Staff:** Add, update, and remove staff members and assign roles (Hotel Verifier and Web Master).
 - **Manage Applicants:** Oversee the registration and profile management of hotel and tour place Applicants.
 - **Profile Management:** Update personal profile information, including contact details and password.

2. Hotel Verifier

- **Verify Hotels:** Review and verify the halal certification of hotels to ensure compliance with halal standards.
- **Manage Verification Documents:** Approve or reject uploaded halal certification documents provided by hotel Applicants.
- **Profile Management:** Update personal profile information, including contact details and password.

3. Web Master

- **Manage Tour Places:** Verify and approve the insertion of new tour places into the website, ensuring they meet the platform's standards.
- **Content Management:** Oversee the content related to tour places, ensuring accuracy and relevancy.
- **Profile Management:** Update personal profile information, including contact details and password.

1.4.2 Applicant

1. Hotel Applicant

- **Register Hotels:** Submit hotel registration with detailed information, including amenities, contact details, and halal certification documents.
- **Profile Management:** Update personal and hotel profile information, including contact details and hotel details.
- **View Register Hotel:** The hotel Applicant can view the details list and status of the registered hotel.

2. Tour Place Applicant

- **Register Tour Places:** Submit tour place registration with detailed information, including descriptions, images, and contact details.
- **Profile Management:** Update personal and tour place profile information, including contact details and place details.
- **Manage Content:** Ensure the information about their tour place is accurate, engaging, and up-to-date.

1.4.3 Tourist

- **View Tour Places:** Browse detailed information about various tour places in Negeri Sembilan, including descriptions, images, operating hours, and contact details.
- **Submit Reviews and Ratings:** Provide feedback and rate tour places and hotels, helping other tourists make informed decisions.
- **View Halal Hotels:** Search for and view detailed information about halal-certified hotels, including contact details.

1.5 Project Significant

The "Negeri Sembilan Tourism and Hotel Halal Management System" represents a significant advancement for various stakeholders, including tourists, hotel and tour place Applicants, and the broader community. This system enhances the visibility of Negeri Sembilan's attractions by providing a centralized platform that offers comprehensive information about tour places and halal-certified hotels. By integrating halal certification details directly into the tourism website, the system assures Muslim tourists of halal compliance, saving them the time and effort of searching multiple sources.

For local businesses, this increased exposure translates to a higher likelihood of attracting tourists who are assured of the halal status of hotels, thus driving foot traffic and enhancing the local economy. Hotel and tour place Applicants can directly update their profiles, ensuring potential visitors always have the latest information. The system also streamlines administrative processes, allowing Hotel Verifiers and Web Masters to efficiently manage and approve listings, and enabling Superadmins to oversee staff, Applicants, and listings, thus maintaining high operational standards.

Tourists benefit from an intuitive and user-friendly interface that allows them to easily find information on attractions and halal-certified accommodations, and they can leave reviews to help future travelers. All users, except tourists, can update their profiles, enhancing the overall user experience. This system not only boosts tourism revenue and job creation within the hospitality and tourism sectors but also encourages cultural exchange and awareness by providing information on cultural and historical sites.

In essence, the "Negeri Sembilan Tourism and Hotel Halal Management System" supports economic growth, fosters cultural exchange, and positions Negeri Sembilan as a leading destination for both general and halal-conscious travelers. By promoting the state's attractions and ensuring halal compliance, the system plays a crucial role in enhancing tourism and supporting local businesses.

1.6 Conclusion

In conclusion, the "Negeri Sembilan Tourism and Hotel Halal Management System" addresses the critical need for a centralized, integrated platform to enhance the tourism experience in Negeri Sembilan. By providing comprehensive information about attractions and halal-certified accommodations, the system simplifies trip planning for tourists, particularly Muslim travelers. This project not only improves user experience by streamlining access to essential information but also boosts the local economy by increasing the visibility of tour places and hotels. Furthermore, it supports local businesses by allowing Applicants to manage their profiles and ensures operational efficiency through structured administrative roles. Ultimately, this system positions Negeri Sembilan as a competitive and appealing destination, fostering economic growth and cultural exchange.



CHAPTER 2: LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

This chapter provides an in-depth examination of existing literature relevant to the development of a centralized tourism and hotel halal management system. The literature review focuses on the significance of digital platforms in tourism, the importance of halal certification in the hospitality industry, and the integration of these elements to enhance user experience. Additionally, this chapter outlines the methodology employed in the project, detailing the systematic approach taken to design, develop, and implement the "Negeri Sembilan Tourism and Hotel Halal Management System". The methodology section covers the research design, data collection methods, system design, development processes, and evaluation techniques used to ensure the project's objectives are met effectively. By combining insights from existing studies and a robust methodological framework, this chapter aims to establish a solid foundation for the project's implementation and success.

2.2 Facts and Finding

The "Negeri Sembilan Tourism and Hotel Halal Management System" demonstrated a significant impact through enhanced user engagement and operational efficiency. By consolidating tourism information and halal certification data into a single platform, the system facilitated easier access to detailed attractions and verified accommodations, particularly benefiting Muslim travelers. Administratively, it streamlined processes for Superadmins, Hotel Verifiers, and Web Masters, improving management of listings and content updates. User feedback drove continuous system improvements, enhancing overall user experience and operational effectiveness. Beyond functional gains, the system promoted local tourism, cultural exchange, and economic growth, positioning Negeri Sembilan as a leading destination while ensuring scalability and technological relevance for future developments.

2.2.1 Existing system

The Negeri Sembilan Tourism and Hotel Halal Management system is inspired by 2 existing systems which can be researched for this system will build the new system.

Case study 1: Portal Rasmi Kerajaan Negeri Sembilan

Portal Rasmi Kerajaan Negeri Sembilan is owned by the state government of Negeri Sembilan which is a central service related to Negeri Sembilan. For example, 'Pejabat Tanah', 'Pihak berkuasa Tempatan', 'Jabatan Kerajaan', and many services that related. On the website, there's a tourism section but it is not user-friendly since it is in magazine form. Since tourism is in the government system, it is hard for tourists to find the central finding of tourism.



Figure 2.1 Collection E-Risalah Pelancongan

The E-Risalah is in the template or pamphlet form which makes it hard for the user to read. The pamphlet is usually a summary of something. In this case, some pamphlet is very crowded with words. It is also hard to find specific information, for example, the location of the place.

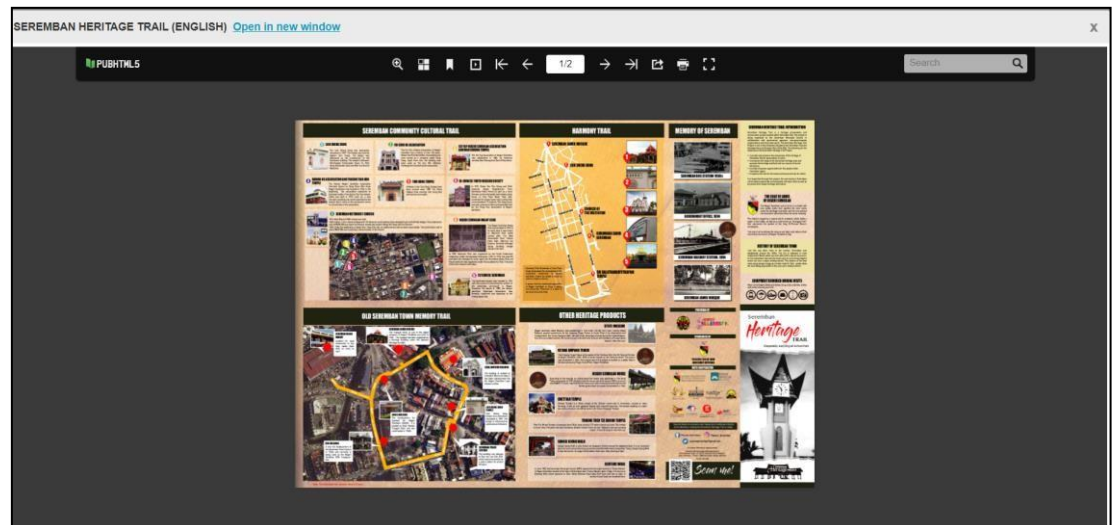


Figure 2.2 E-Risalah Pelancongan

Case study 2: Halal Malaysia Official Portal (JAKIM)

In research of Halal Malaysia Official Portal (JAKIM), the website is allowed to show the list of hotel halal in Malaysia. The website also allows user to view the file of a list food that has HALAL verification.

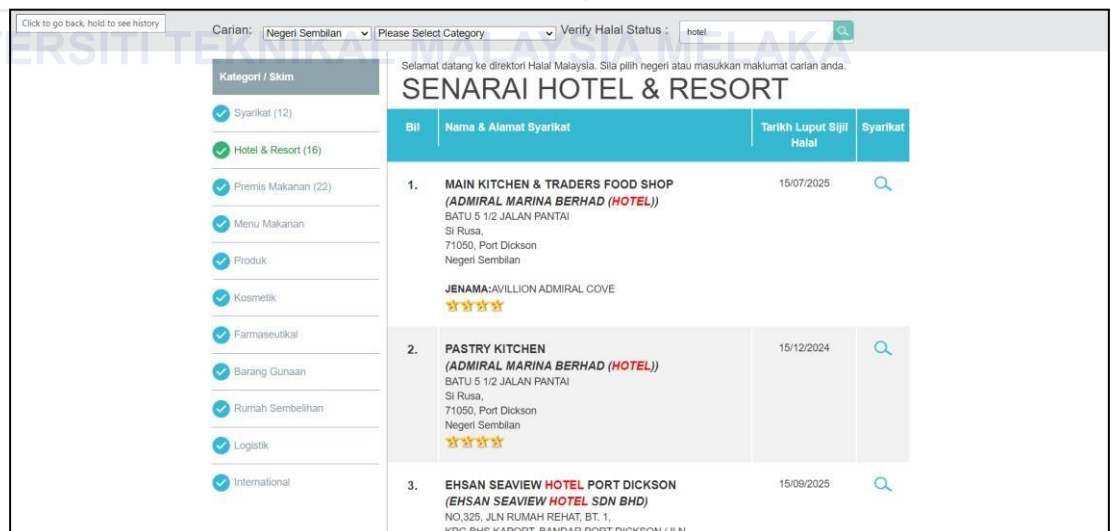


Figure 2.3 JAKIM Website

2.3 Project Methodology

The methodology employed in developing the "Negeri Sembilan Tourism and Hotel Halal Management System" seamlessly integrated agile practices with structured planning to achieve efficient and adaptable project execution. Agile methodologies, characterized by iterative development cycles known as sprints, allowed for continuous improvement and responsiveness to stakeholder feedback throughout the project lifecycle. This approach enabled the development team to prioritize features based on user needs and rapidly incorporate changes, ensuring the system remained aligned with evolving requirements and market demands.

Simultaneously, structured planning phases were meticulously implemented to establish clear project objectives, scope, and milestones from the outset. These initial phases included comprehensive requirements gathering, detailed system analysis, and meticulous design processes. By defining these foundational aspects early on, the project maintained focus on delivering key functionalities essential for enhancing tourism management in Negeri Sembilan while adhering to predefined timelines and quality standards.

During the development phase, agile sprints facilitated the incremental construction of system components, allowing for early testing and validation of functionalities. This iterative approach not only fostered collaboration and communication among project stakeholders but also ensured that technical challenges and user requirements were addressed proactively. Rigorous testing, including unit testing, integration testing, and user acceptance testing (UAT), was conducted to verify the system's reliability, performance, and user-friendliness.

Furthermore, effective collaboration and communication channels were pivotal in maintaining transparency and alignment throughout the project. Regular meetings, workshops, and feedback sessions facilitated ongoing dialogue among developers, stakeholders, and end-users, enabling swift resolution of issues and ensuring that the final product met stakeholder expectations.

Post-deployment, the methodology emphasized continuous monitoring, evaluation, and iteration to refine and enhance system features based on user feedback and emerging needs. Documentation and user training materials were also integral to supporting seamless deployment and ensuring stakeholders were proficient in utilizing the system effectively.

In essence, the hybrid approach of agile development with structured planning enabled the successful delivery of the "Negeri Sembilan Tourism and Hotel Halal Management System," providing a robust, user-centric platform that enhances tourism management capabilities and promotes economic growth in Negeri Sembilan.

2.4 Project Requirements

A software and hardware requirement is urgent for each system development. These requirements are necessary for system development and system testing after the system is already finished and in testing mode.

2.4.1 Software Requirements

Software requirements a fundamental detail for software systems is to develop. It is a full explanation of the conduct of the system next to the build. Table 2.1 shows the software requirement and its description.

Table 2.1 Software Requirement and its Description

No	Software	Description
1	Xampp	Xampp is a free and open source cross-platform web server solution stack package developed by Apache Friends consisting mainly of the Apache HTTP Server MySQL database, and interpreters for script written in the PHP
2	MySQL	MySQL is a freely available open source Relational Database Management System (RDBMS) that uses Structured Query Language

		(SQL). SQL is the most popular language for adding, accessing and managing content in a database
3	Microsoft 365 (Office)	Microsoft 365 is a product family of productivity software, collaboration and cloud-based services owned by Microsoft. It encompasses online services such as Outlook.com, OneDrive, Microsoft Teams, programs formerly marketed under the name Microsoft Office (including applications such as Word, Excel, PowerPoint, and Outlook on Microsoft Windows, macOS, mobile devices, and on the web), enterprise products and services associated with these products such as Exchange Server, SharePoint, and Viva Engage.
4	Google Chrome	Is a free website and the function is to run and preview the system.
5	Microsoft Window	Microsoft Windows acts operating system and Windows OS is 64-bit

2.4.2 Hardware Requirements

These hardware requirements are very minimal. Table 2.2 shows hardware requirements and its description in the table below:

Table 2.2 Hardware Requirements

No	Hardware	Description
1	Hardisk	This laptop has 237 GB free disk space
2	RAM	This laptop has 4 GB of RAM memory
3	Processor	This laptop is using Intel(R) Core(TM) i3-8145U CPU
4	Laptop	The brand for this laptop is ACER

2.5 Project Schedule and Milestones

Project schedule and milestones are so important to give clear guidance to finish the job based on a particular date. This can assist in managing the work and accomplishing the project on time that have been given. Project for PSM I are shown below to demonstrate in details in Table 2.3.

Table 2.3 Project Schedule and Milestone For PSM I

WEEK	ACTIVITIES	START DATE	END DATE	DELIVERABLES
1	Preparation to understudies and understudies started to finish the project title and proposal	12 March 2024	15 March 2024	List of topics and supervisor aware
2	Submit a complete proposal subject to supervisor for approval	18 March 2024	22 March 2024	Accreditation form reserves project is complete
3	Proposla presentation Chapter 1	25 March 2024	29 March 2024	Proposal presentation
4	Chapter 1 Chapter 2	1 April 2024	5 April 2024	Chapter 1 Action by supervisor and student
5	Chapter 3	8 April 2024	12 April 2024	Action by supervisor and student
6	Chapter 3	15 April 2024	19 April 2024	Action by student
7	Project Progress presentation	22 April 2024	26 April 2024	Action by supervisor and student
9	Chapter 3	6 May 2024	10 May 2024	Action by Student
10	Chapter 4	13 May 2024	17 May 2024	Action by supervisor and student
11	Chapter 4 Project progress presentation	20 May 2024	24 May 2024	Action by supervisor and student

12	Project Demo	27 May 2024	31 May 2024	Action by supervisor and student
13	Undergraduate project report and presentation Schedule	3 June 2024	7 June 2024	Action by supervisor and student
14	PSM I project report and demo	10 June 2024	14 June 2024	Deliverable of complete undergraduate project report
15	PSM I presentation	17 June 2024	21 June 2024	Committee of PSM, supervisors, assessors, and students

2.6 Conclusion

This chapter discusses the literature review and project methodology that are used to describe the arranging of the project. This chapter includes an introduction of the chapter, existing system, project methodology, project requirement and project schedule and milestones



CHAPTER 3: ANALYSIS

3.1 Introduction

Based on Chapter Three, this chapter section intends to talk about the analysis stage while creating the Negeri Sembilan Tourism and Hotel Halal Management System. Previously this system was developed, the research of the present and new systems is truly serious to ensure that the ongoing system will be describing the points of detail, and a flowchart is applied to demonstrate to show the sequence of the system.

Requirement analysis will cover the subject of information fulfillment which is the information that should be the system input and output the system that has to save inside of a database. At that point, for functional requirements, a Data flow diagram (DFD) will be used to demonstrate the flow of information between external entities and between processes stored in a database. The DFD depicts the system as far as its component pieces, with all interfaces among the components demonstrated. Non-functional requirements then will conclude how the system its expected capacities.

3.2 Problem Analysis

The goal of the problem analysis is to learn and find out the issues domain well enough to analysis its problem issues, chance and restrain. It additionally defines the current based into account the business flow figure. The customer data update system will be analyzed and the disadvantage taken away this system that can bring the issue over it will be talked about in details in Section 3.2.1 which is in current system analysis.

3.2.1 Current System Analysis

3.2.1.1 Tourism information in Negeri Sembilan

The official portal of Negeri Sembilan includes a section on tourism, but it fails to provide detailed and comprehensive information about the state's attractions. The portal relies on 'E-risalah,' an electronic pamphlet, to disseminate tourism information. This approach is problematic as it lacks interactivity and depth, making it difficult for users to access up-to-date and detailed information about various tourist spots. The reliance on static pamphlets limits user engagement and does not meet the expectations of modern travelers who seek dynamic and easily navigable online resources.

3.2.1.2 Hotel halal Certification in Malaysia

Similarly, the current system for halal hotel certification in Malaysia is fragmented. The primary authority, JAKIM, provides halal certification but does not offer an integrated, user-friendly platform for tourists to easily verify the halal status of hotels. Travelers must visit multiple websites, including JAKIM's official portal, individual hotel websites, and third-party travel sites, to gather this information. This scattered approach is time-consuming and often results in outdated or incomplete information. Furthermore, JAKIM's listings are static and lack interactive features, such as filtering and sorting, making it difficult for users to find relevant information quickly. The absence of user reviews and real-time updates further exacerbates the problem.

3.3 Requirement Analysis

Requirement analysis, additionally called requirement engineering, is the procedure of deciding user expectancy desires for another or altered item. These elements, termed requirements, must be quantifiable, compatible and meticulous. In software engineering, such fulfillments are regularly termed as functional specification.

Fulfillment test is an advocate part of project management.

Requirement analysis includes general connection with system user to define exact component point up prediction, determination of contention or uncertainty in fulfillment as requested by the different users or grouping of user, prevent of highlight creep and documentation of all parts of the project development process all the way. Energy ought to be coordinated towards guaranteeing that the last system or item fits in with customer needs as opposed to pursue to form client desires to fit the fulfillment. Next, requirements analysis is a grouping that requests a associate of hardware, software and human factors engineering designing and in addition aptitudes in managing individuals. The architecture fulfillment that will be include here comprises of data requirement, functional requirement, non-functional requirement and other requirement (software, hardware and network).

3.3.1 Functional Requirement

The functional requirement catches the proposed conduct of the system. This conduct as it could be imparts as administrator, assignment or scope the system is recommend to perform A function is define as an arrangement of information, the performance and the output. It drives design of a system. Functional requirement for Negeri Sembilan Tourism and Hotel Halal Management System will be show applying DFD.

3.3.1.1 Context Diagram

A Context Diagram demonstrates the system under thought as a high level procedure then demonstrates the relationship that the system has with other outer elements (systems, organizational groups and external data stores).

Another name for a Context Diagram is as known as Context-Level Data-FlowDiagram or a Level-0 Data Flow Diagram. As seeing that a Context Diagram is a particular form of Data-Flow Diagram, understanding a touch about Data-Flow Diagrams can be useful. Figure 3.2 show the context diagram of the Negeri Sembilan Tourism and Hotel Halal Management System.

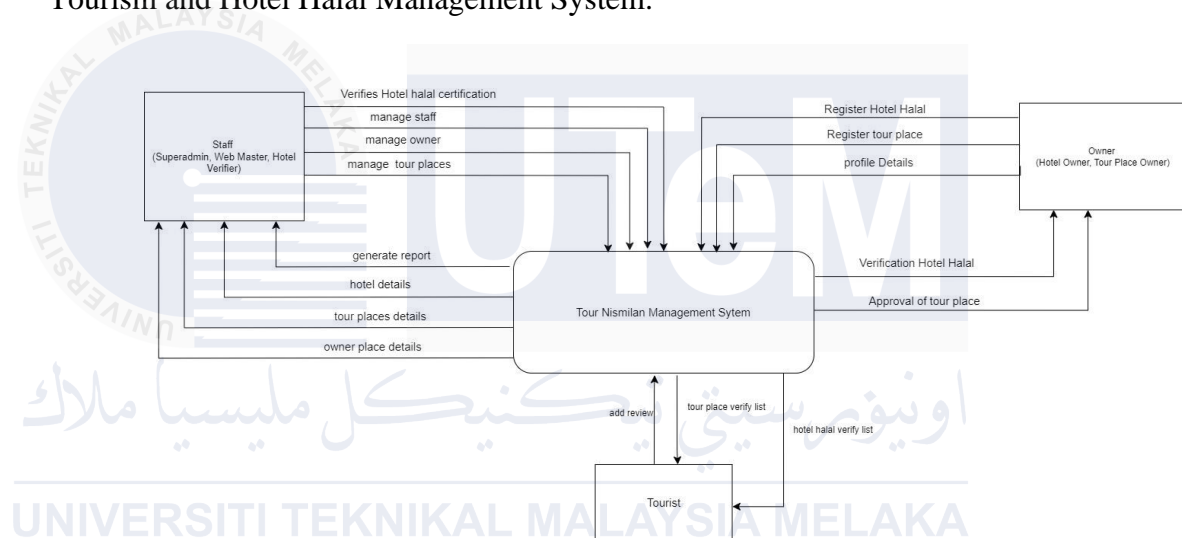


Figure 3.1: Context Diagram

3.3.2 Non-Functional Requirements

Non-functional requirement is a fulfilment in order point of comparison that can be used to comment the process of a system, instead of the details performance. This should be showed up differently in functional that describe specific behavior. The arrangement for implement functional requirement is details in the system design. The appliance of non-functional is specific in system architecture.

3.4 Conclusion

This section clarifies about the investigation that covers issue examination for the present system, data requirement, functional requirement, non-functional requirement and others requirement which is software, hardware and network requirements. The advocacies of usage each of them in this system are detail briefing in this chapter. Issue analysis for the current system is analyzed and from that requirement for new system that will be build can be focus. Information requirement is for figuring out what information need to be in database. Functional requirement specify the function of the system, how it's record, figure, change and transmit data.



CHAPTER 4: DESIGN

4.1 Introduction

This part will explain in detail the design of the system development. Generally, of the system stream will be clarified here. After having all the data from analysis stage in the part III, designer can plan the system in depends on what all fulfilment they have some time recently.

4.2 High Level Design

High level design discusses a general point of view of how something ought to capacity and the top level parts that will include the proposed arrangement. It ought to have exceptionally points of interest on usage and now and again not even subtle elements, for instance database sort and programming dialect and its stage

4.2.1 User Interface Design

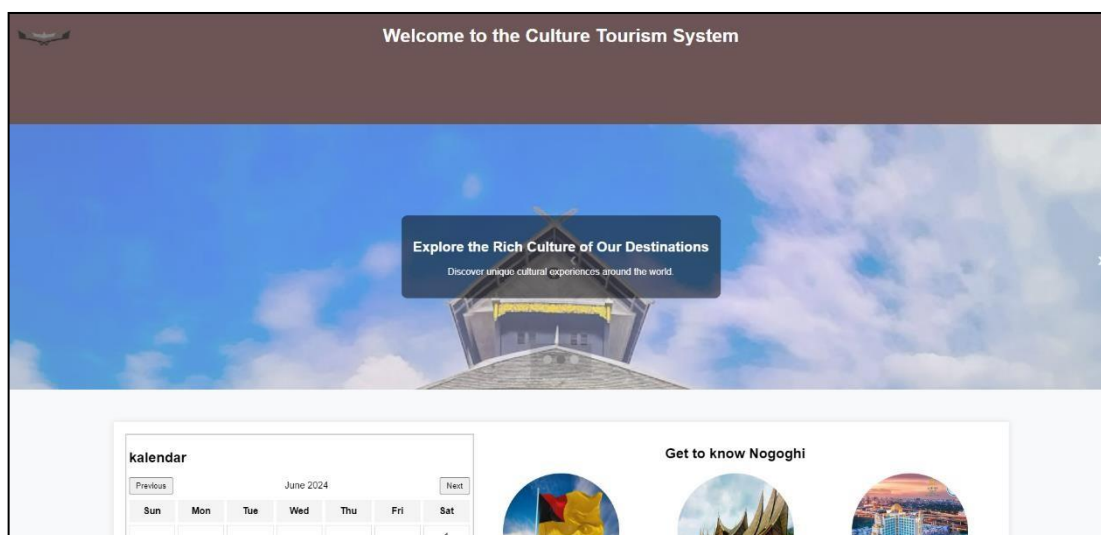


Figure 4.1 Interface homepage of tourist website

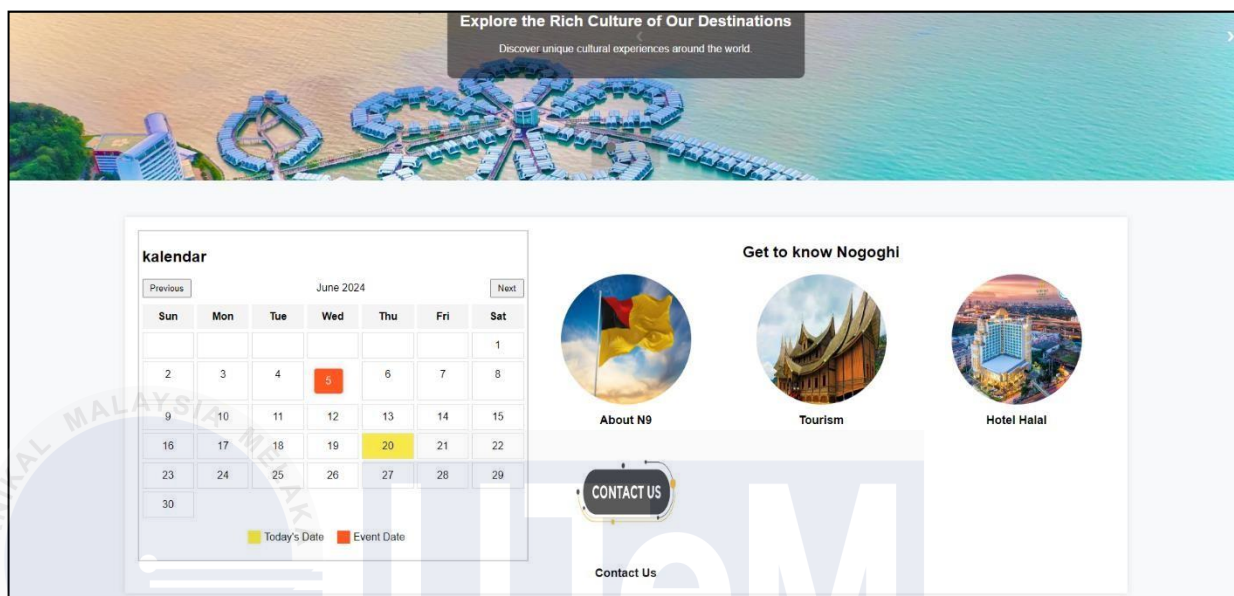


Figure 4.2 Interface Homepage of tourist website

اونیورسیتی تکنیکل ملیسیا ملاک

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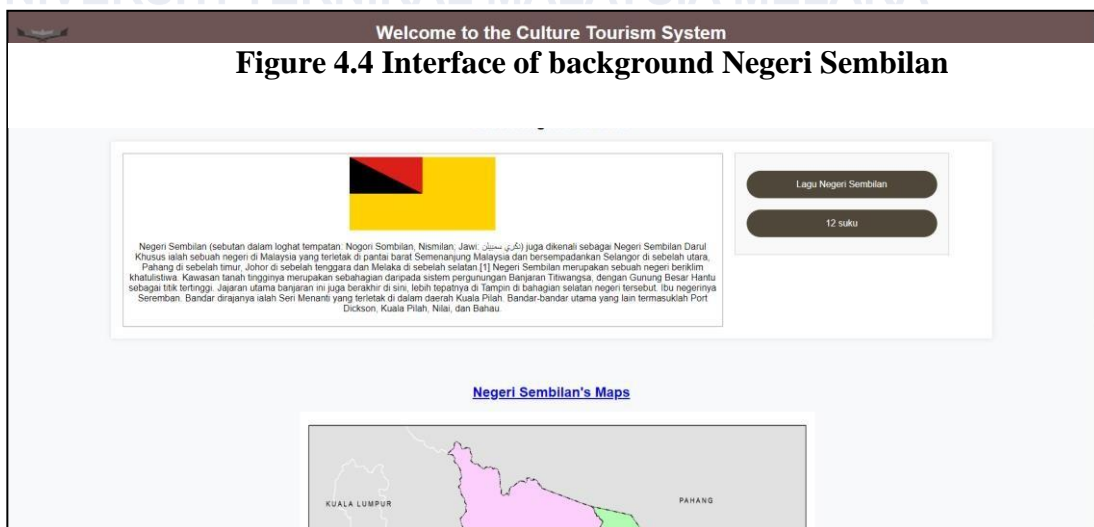


Figure 4.3 Interface homepage of background Negeri Sembilan

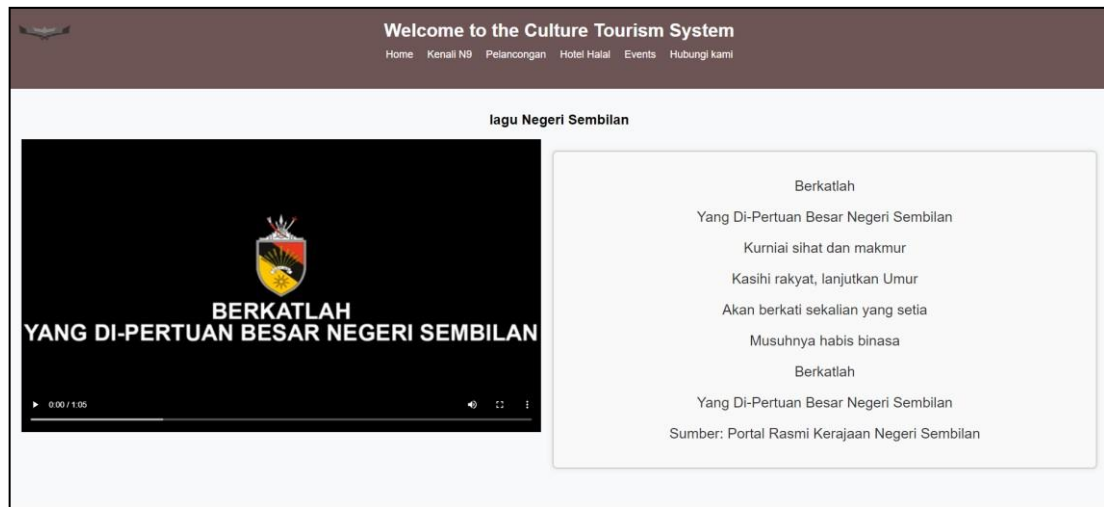


Figure 4.5 Interface of Negeri Sembilan's song



Figure 4.6 interface of list suku in Negeri Sembilan

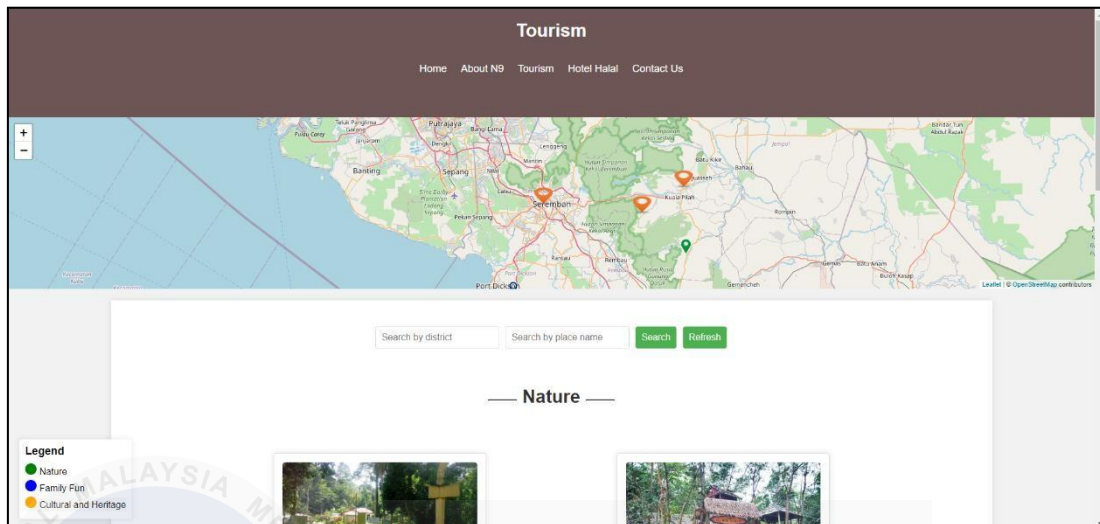


Figure 4.7 Interface of tourism in tourist website

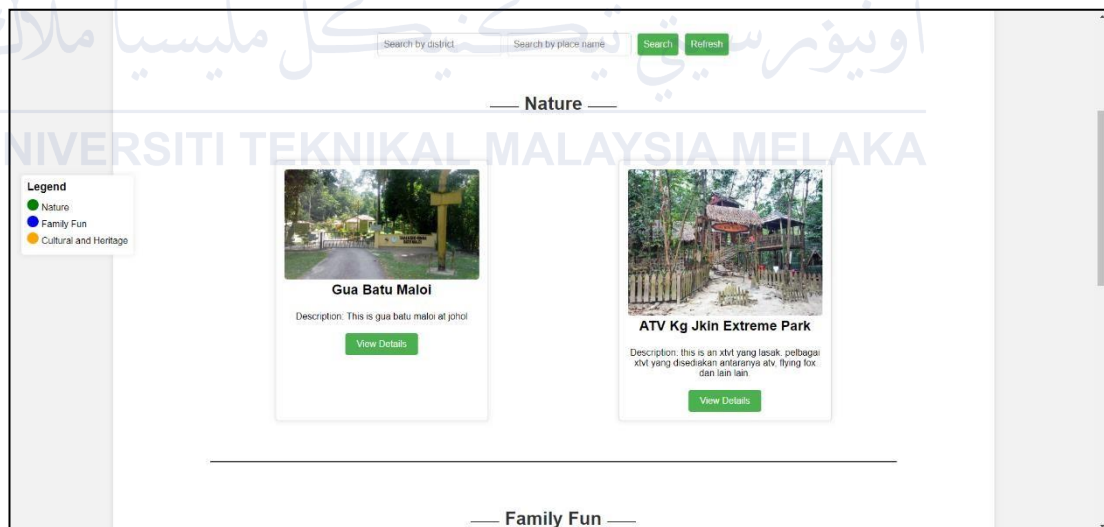


Figure 4.8 Interface of list Attraction place in Negeri Sembilan

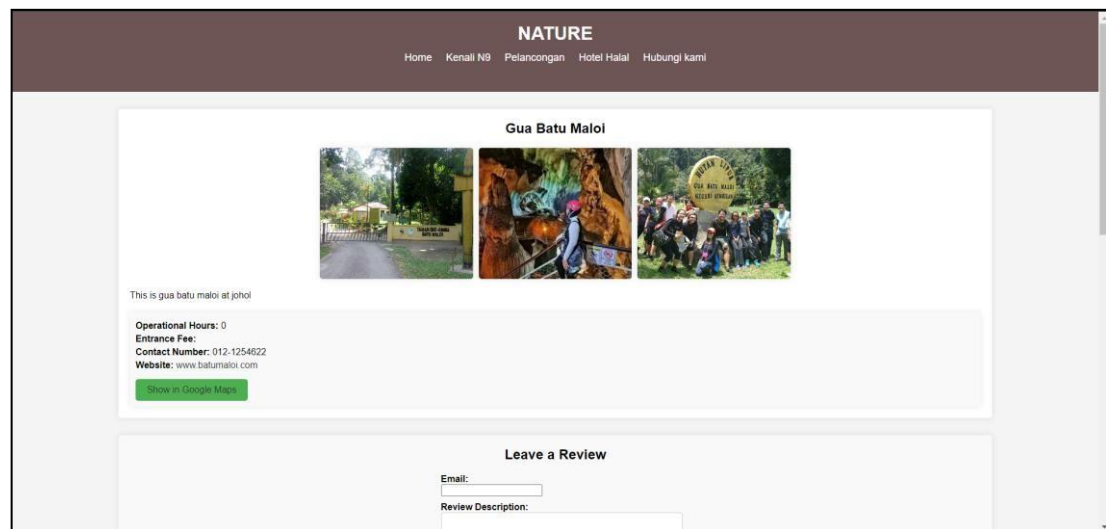


Figure 4.9 Interface of details of attraction place in Negeri Sembilan

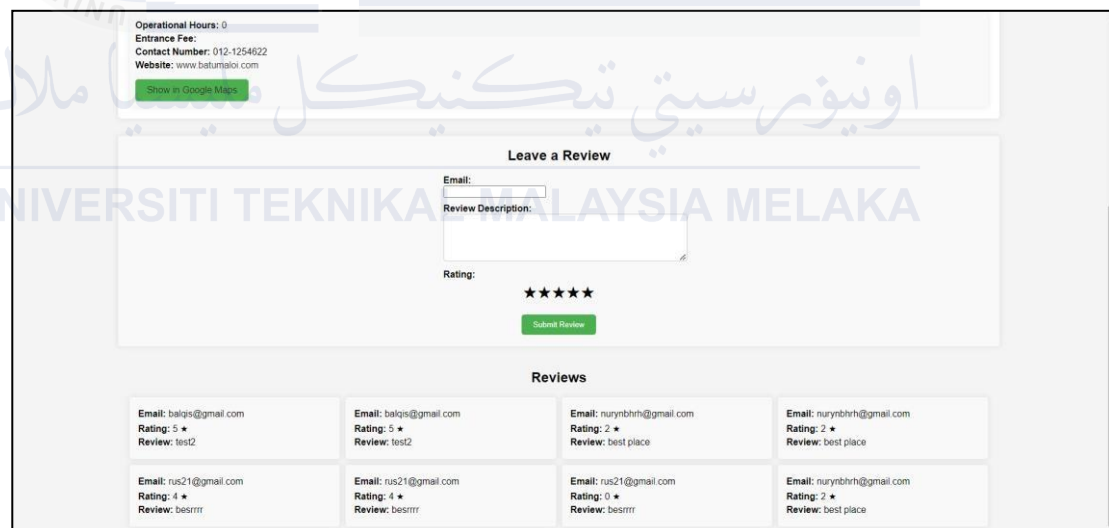


Figure 4.10 Interface of user review in details attraction

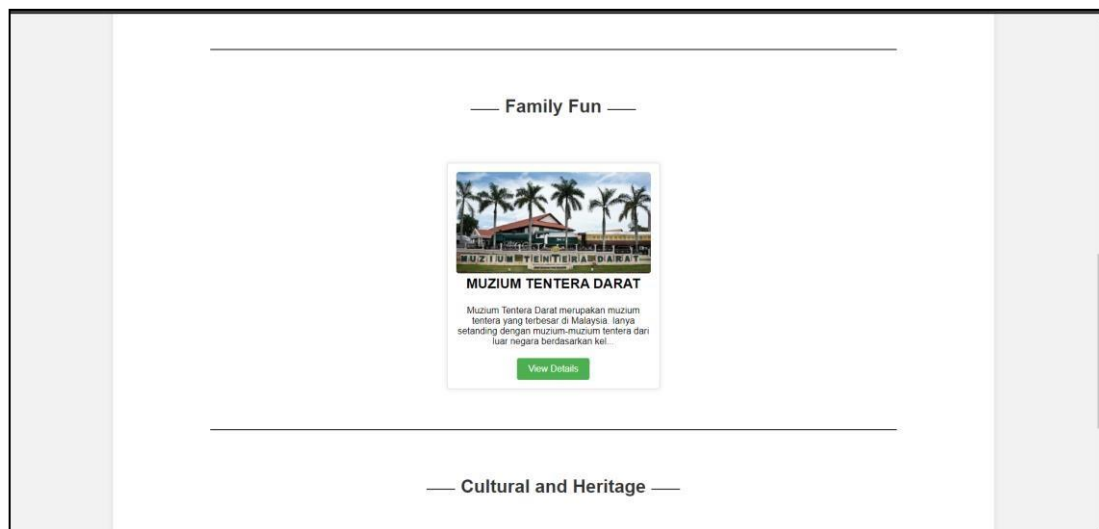


Figure 4.11 The interface of list of attractions place in the Family fun category

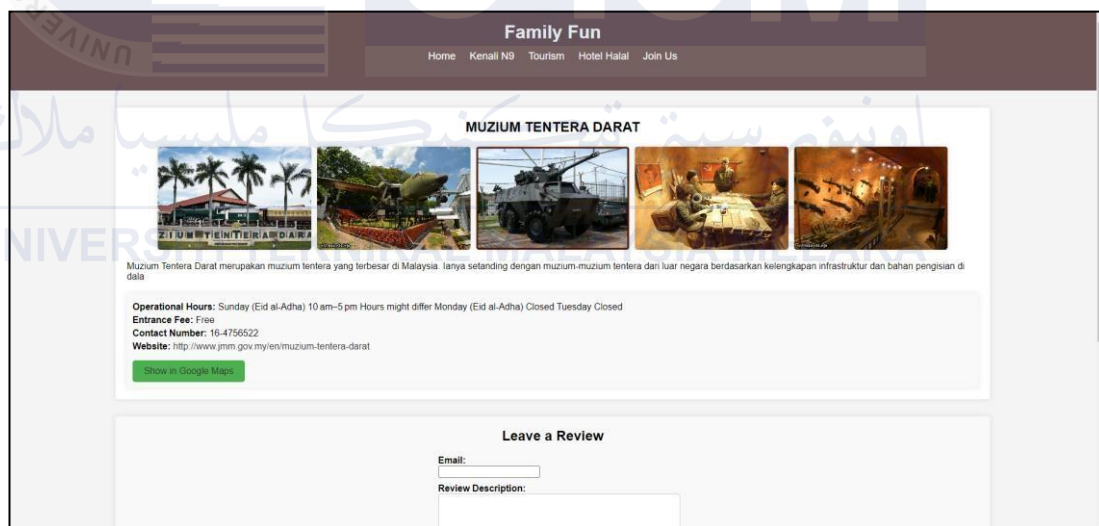


Figure 4.12 Interface of details family fun attraction in Negeri Sembilan

Operational Hours: Sunday (Eid al-Adha) 10 am-5 pm Hours might differ Monday (Eid al-Adha) Closed Tuesday Closed
 Entrance Fee: Free
 Contact Number: 16-4756522
 Website: <http://www.jmm.gov.my/en/muzium-tentera-darat>
[Show in Google Maps](#)

Leave a Review

Email:

Review Description:

Rating: ★★★★★

[Submit Review](#)

Reviews

Email: zack@gmail.com Rating: 5 ★ Review: tempat ini sangat menarik dan sesuai bawa keluarga	Email: kiki@gmail.com Rating: 4 ★ Review: tempat yang menarik	Email: kiki@gmail.com Rating: 4 ★ Review: tempat yang menarik	Email: kiki@gmail.com Rating: 4 ★ Review: tempat yang menarik dan bagus
Email: sya2@gmail.com Rating: 3 ★ Review: baik	Email: sya2@gmail.com Rating: 3 ★ Review: baik	Email: sya2@gmail.com Rating: 3 ★ Review: baik	Email: dsul@gmail.com Rating: 4 ★ Review: nice

Figure 4.13 Interface of review in family fun details

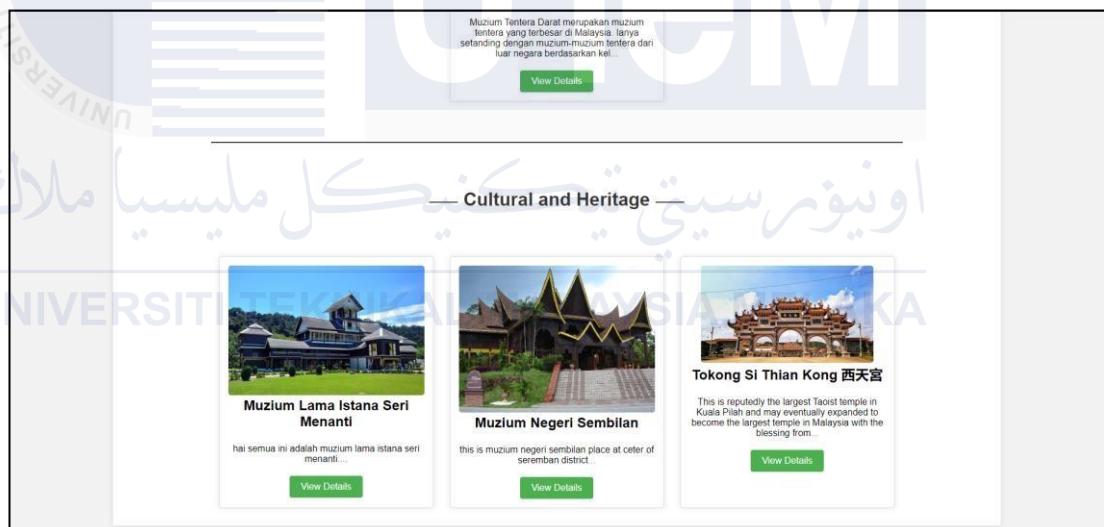


Figure 4.14 Interface list of attraction of cultural and heritage category

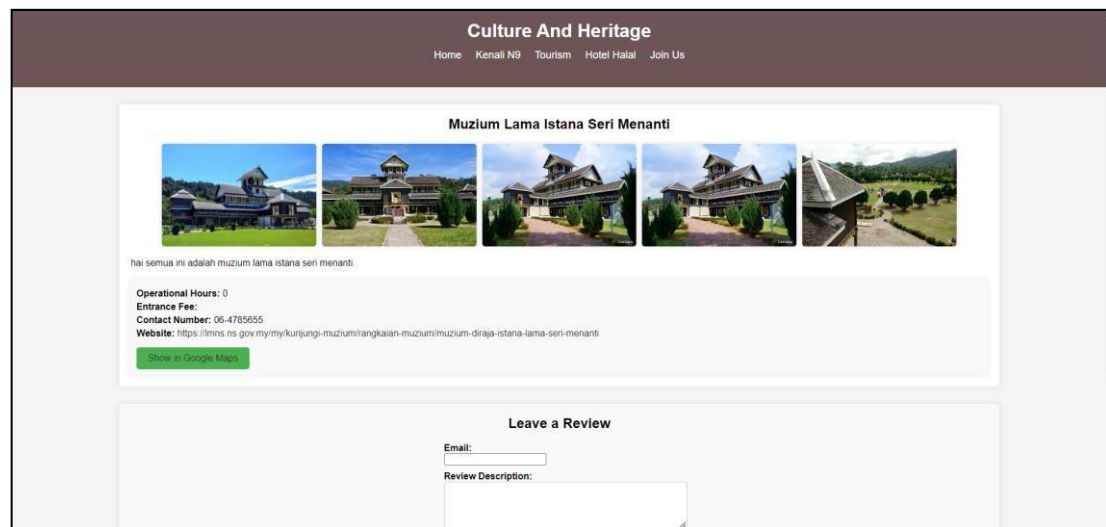


Figure 4.15 Interface of details Muzium Lama Istana Seri Menanti

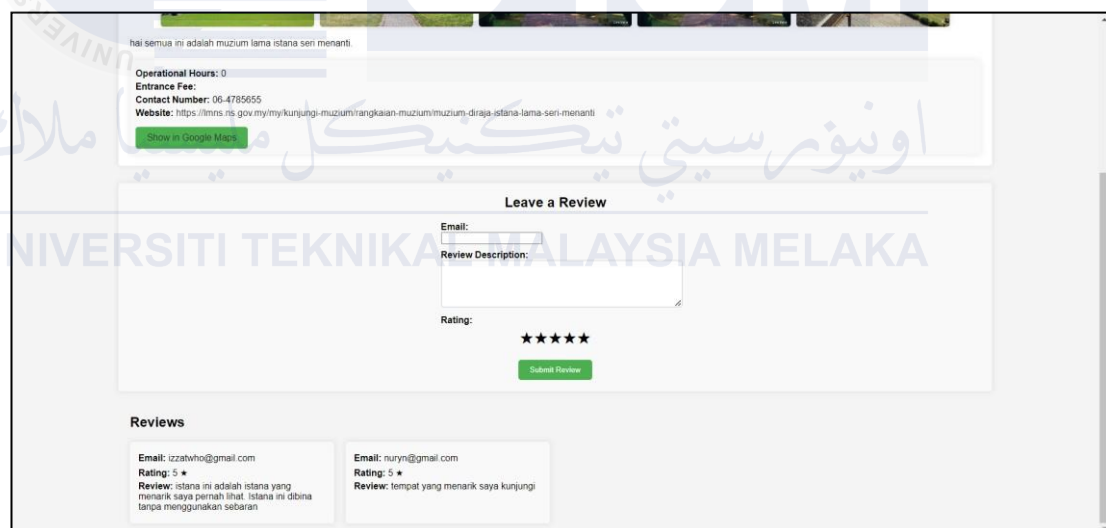


Figure 4.16 Interface of review

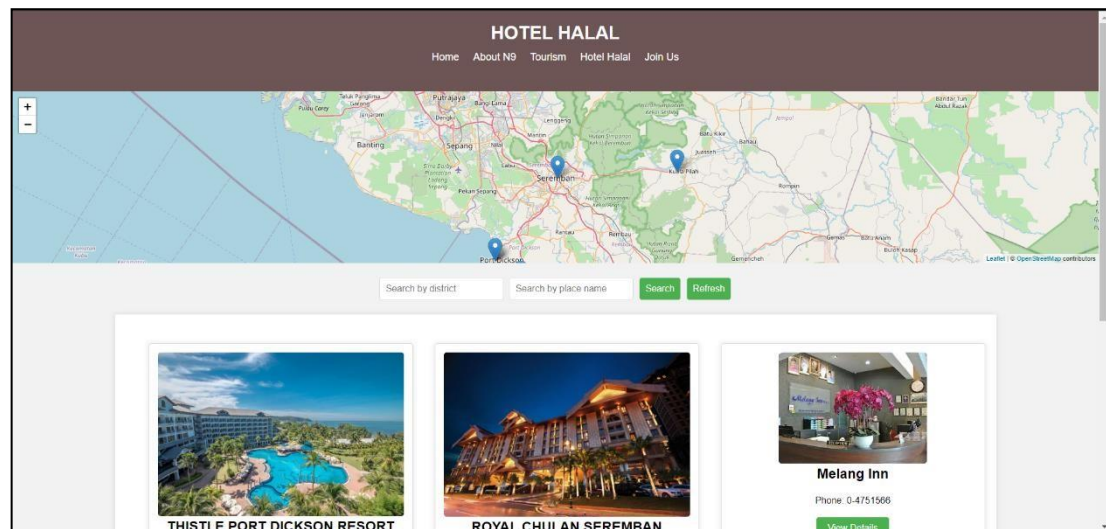


Figure 4.18 Interface of list of hotel halal in Negeri Sembilan

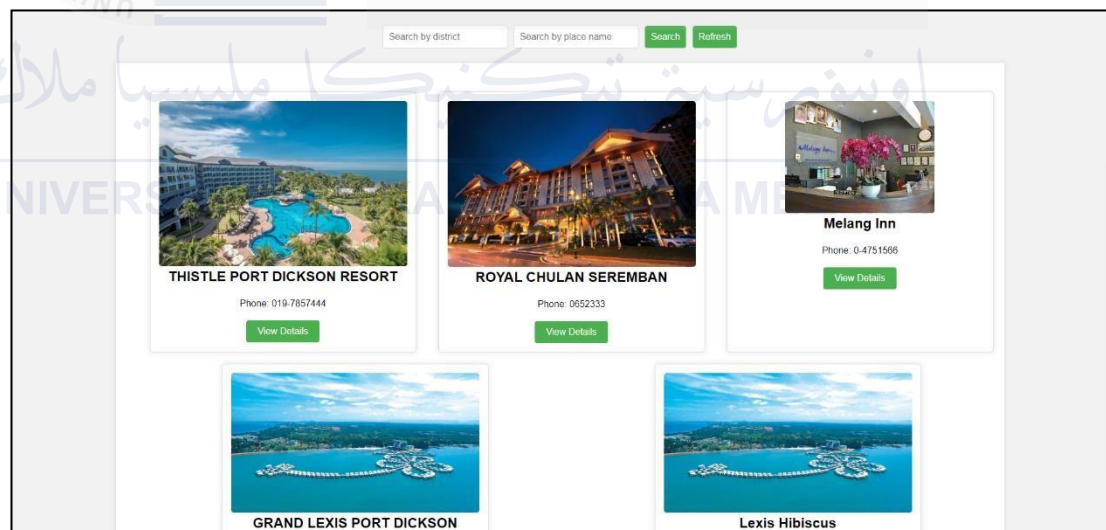


Figure 4.17 interface of list of hotel halal in Negeri Sembilan

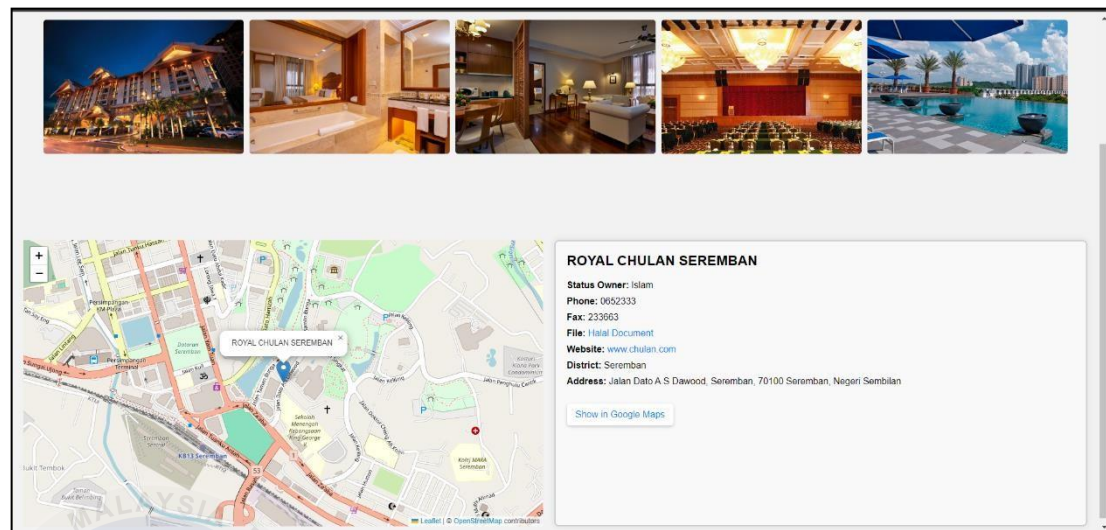


Figure 4.19 Interface of hotel halal details

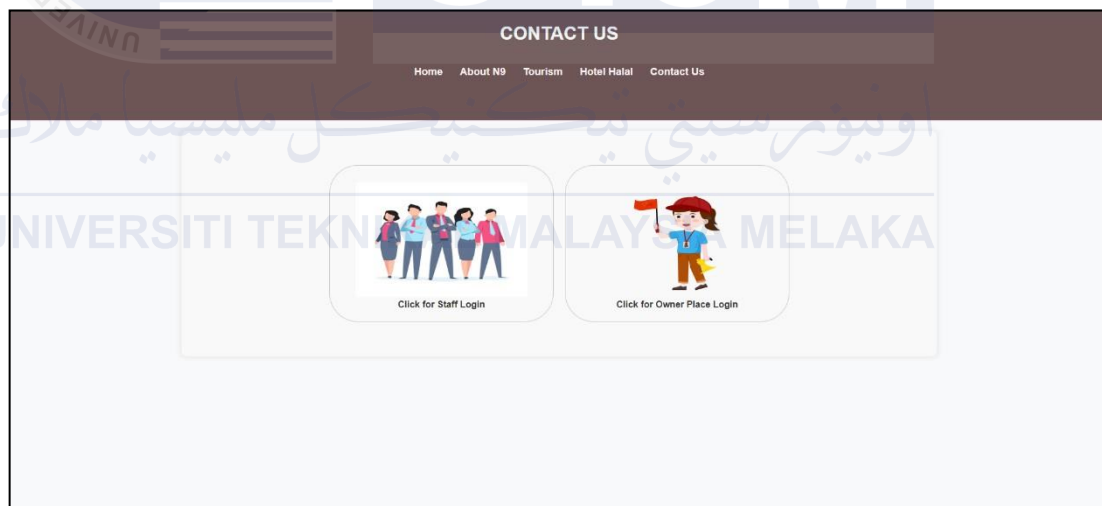
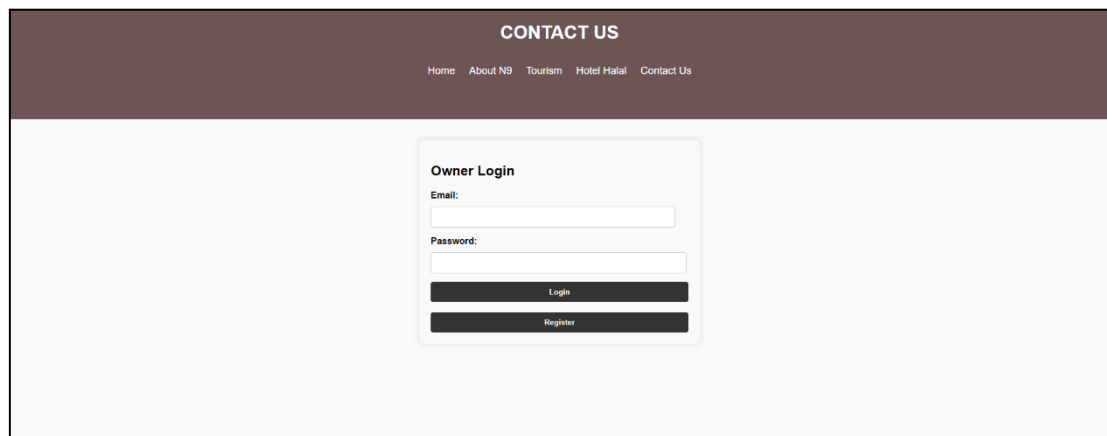
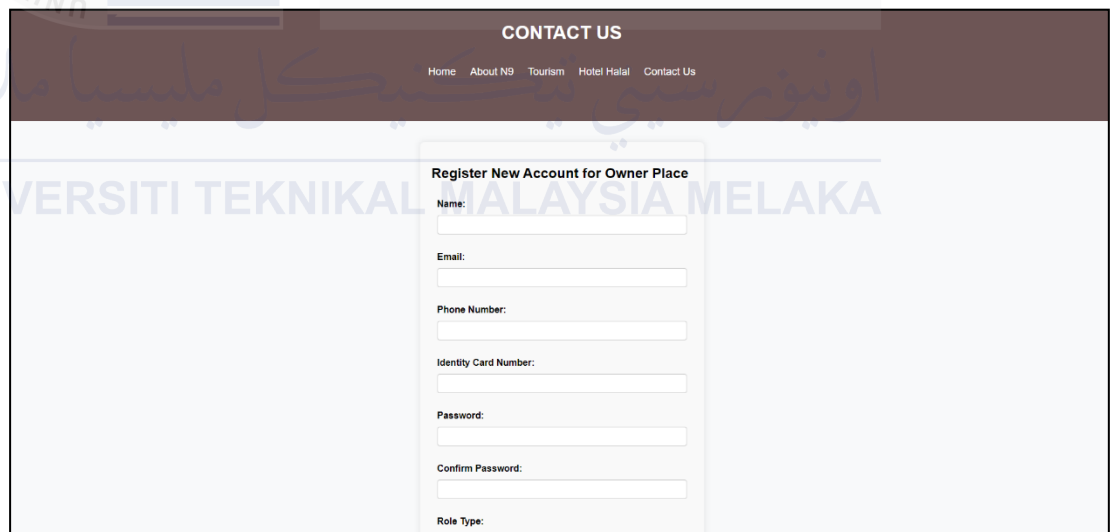


Figure 4.20 Interface of User button to login



The screenshot shows a web page with a dark brown header containing the text "CONTACT US" and a navigation menu with links: Home, About N9, Tourism, Hotel Halal, and Contact Us. The main content area is light gray and features a white box titled "Owner Login". Inside this box, there are two input fields labeled "Email:" and "Password:", followed by two buttons: "Login" and "Register".

Figure 4.21 Interface of Applicant login form website



The screenshot shows a web page with a dark brown header containing the text "CONTACT US" and a navigation menu with links: Home, About N9, Tourism, Hotel Halal, and Contact Us. The main content area is light gray and features a white box titled "Register New Account for Owner Place". Inside this box, there are several input fields: "Name:", "Email:", "Phone Number:", "Identity Card Number:", "Password:", "Confirm Password:", and "Role Type:". There is also a large, faint watermark of the UTeM logo in the background.

Figure 4.22 Interface of Applicant's register form

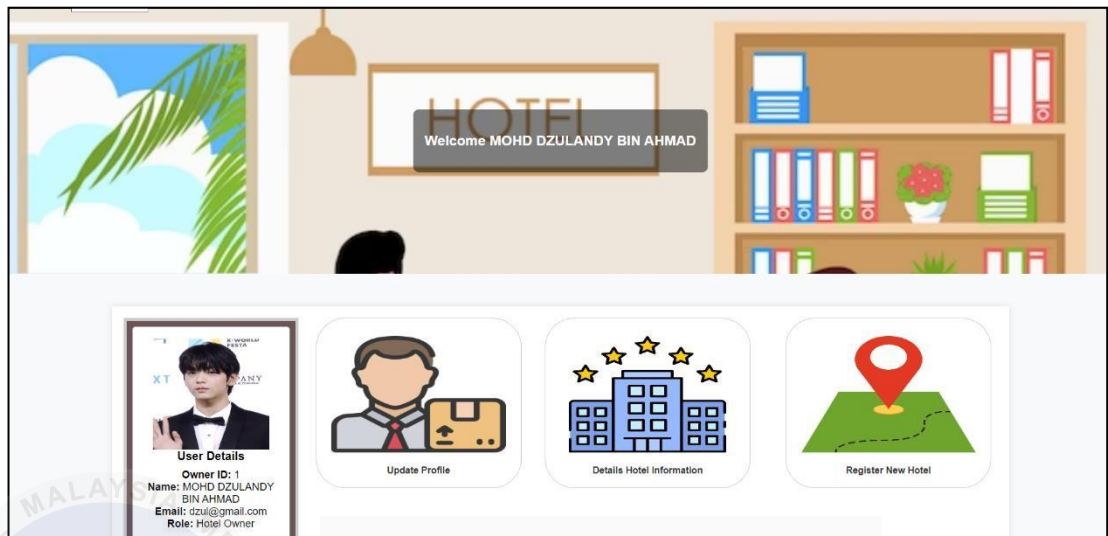


Figure 4.23 Interface of homepage of hotel Applicant

Home Update Owner Details Hotel Details Register Hotel

Update Owner Details

Profile Picture:

No file chosen

Name:

MOHD DZULANDY BIN AHMAD

IC Number:

850514-03-7855

Phone Number:

014-7855622

Email:

dzul@gmail.com

Figure 4.24 Interface of Applicant hotel's detail and update

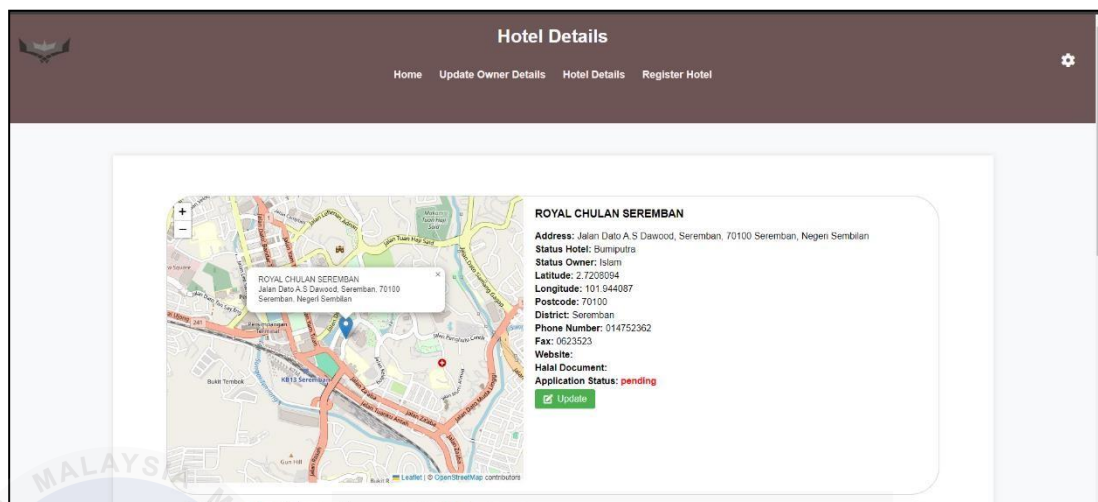


Figure 4.25 Interface of register hotel details

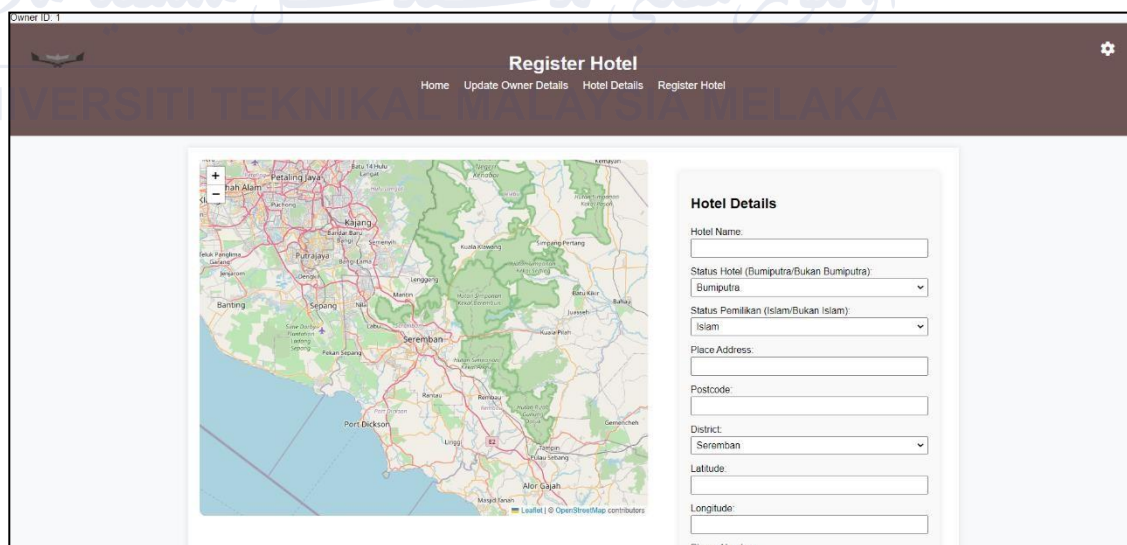


Figure 4.26 Interface of registration hotel halal

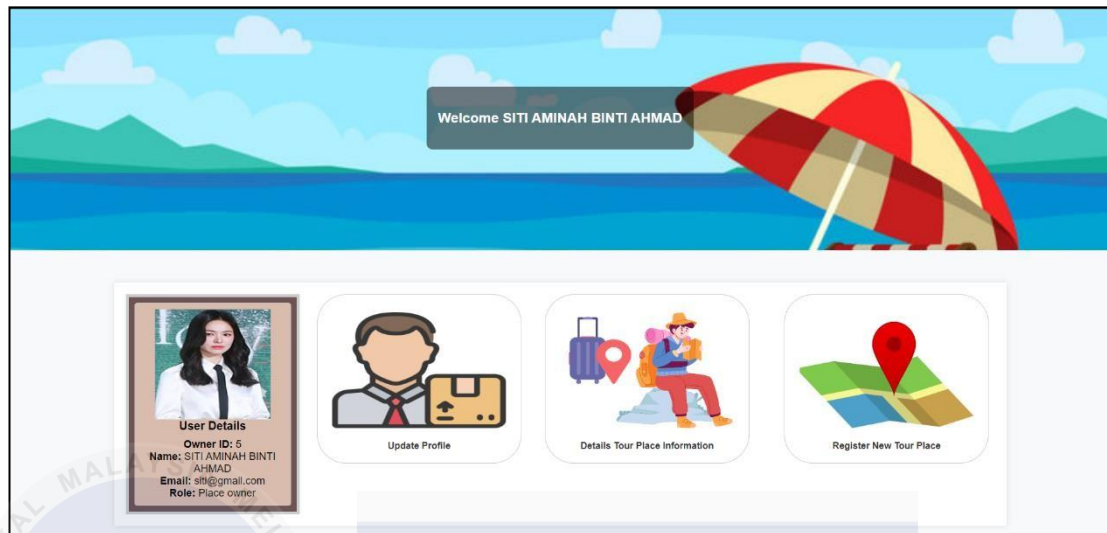


Figure 4.27 Interface of homepage Applicant tour place

The screenshot shows the "Applicant Hotel Homepage" with a dark header bar containing the title and navigation links: "Home", "Manage Hotel", and "Register Hotel". A settings gear icon is in the top right. The main content area is titled "Update Owner Details" and contains a form with the following fields:

- Profile Picture:** A small image of the user, with a "Choose file" button and "No file chosen" text below it.
- Name:** A text input field containing "SITI AMINAH BINTI AHMAD".
- IC Number:** A text input field containing "878103-06-1474".
- Phone Number:** A text input field containing "012-78541243".
- Email:** A text input field containing "siti@gmail.com".

A green "Update Owner" button is located at the bottom of the form.

Figure 4.28 Interface of update applicant details

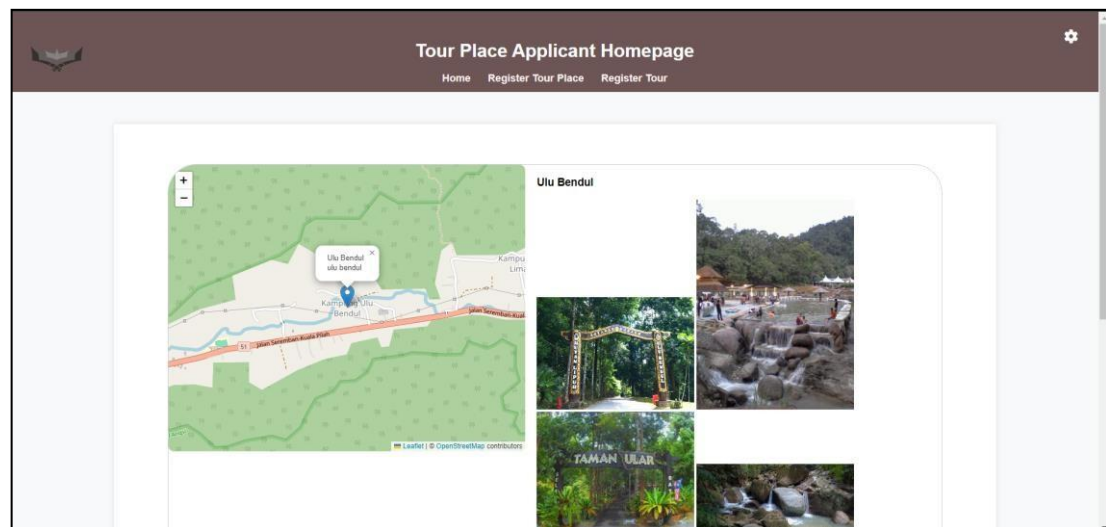


Figure 4.29 interface of list tour place application

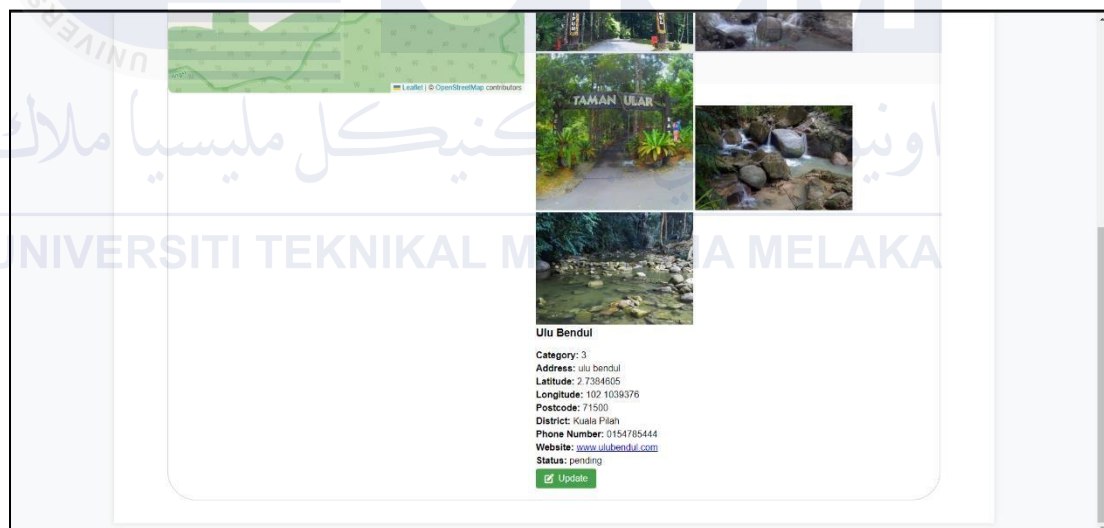


Figure 4.30 Interface of tour place application

Update Tour Place

Home Manage Tour Place Register Tour Place

Update Tour Place Details

Tour Place Name:
Ulu Bendul

Tour Place Address:

Figure 4.32 interface of update tour place details

Update Tour Place Details

Tour Place Name:
Ulu Bendul

Tour Place Address:
ulu bendul

Postcode:
71500

District:
Kuala Pilah

Latitude:
2.7304505

Longitude:
102.1039375

Phone Number:
0154785644

Website:
www.uluibendul.com

Description:
Surrounded by dense forests, this neighborhood's main draw is Ulu Bendul Recreational Park, which has food stands, picnic facilities and

Figure 4.31 Interface of update tour place details

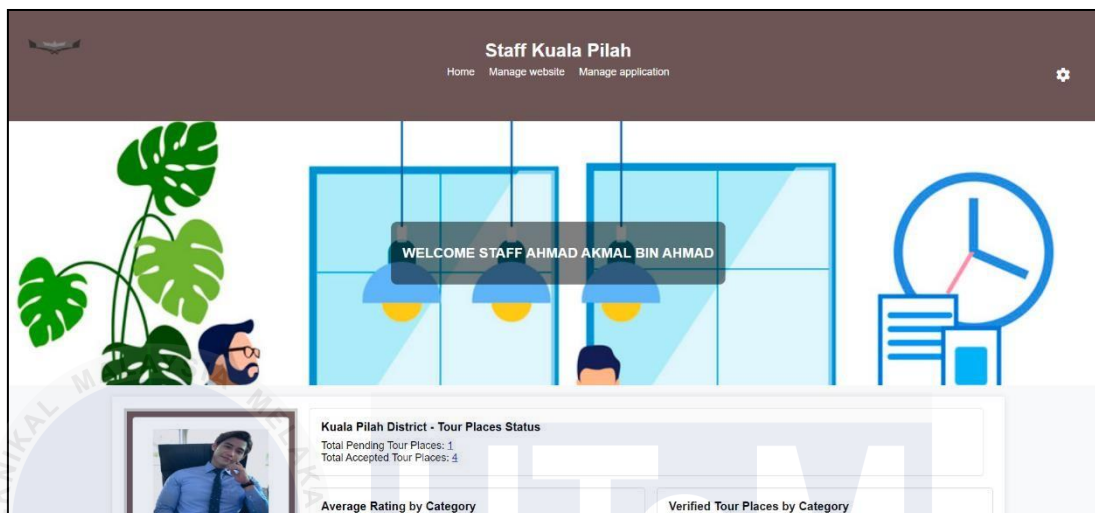


Figure 4.34 Interface of homepage staff Web Master of Kuala Pilah

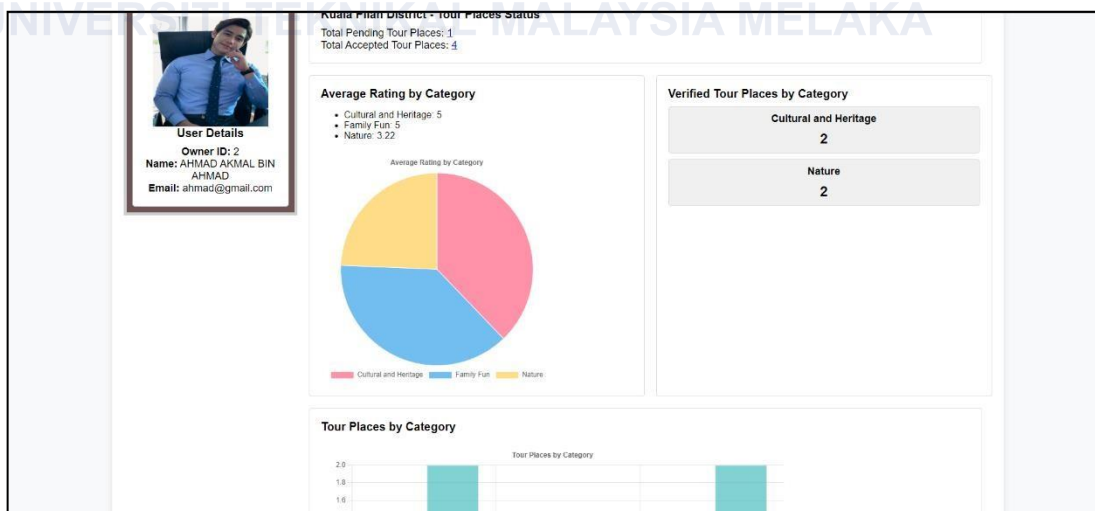


Figure 4.33 Dashboard of Web Master

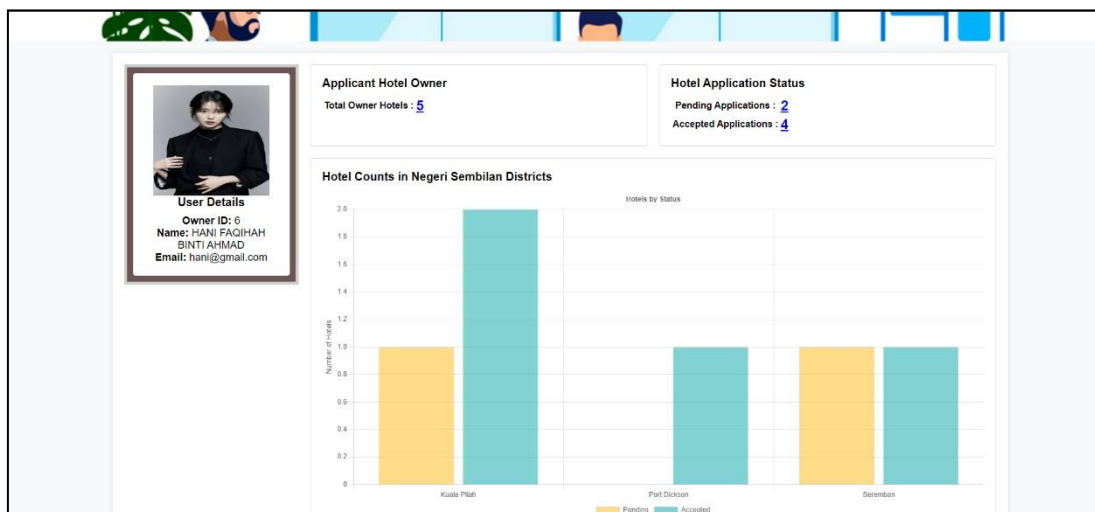
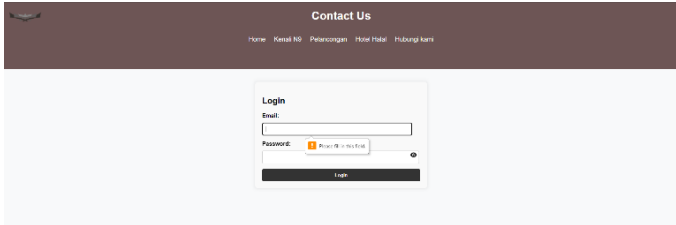
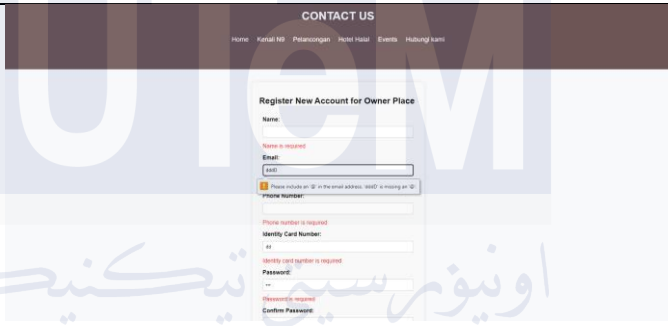


Figure 4.35 Interface of homepage staff Hotel halal Verifier

4.2.1.1 Output design

Output design procedure is what the user needs to see from the system. The output result comes from the info the user gives. Table 4.1 demonstrates the yield outline for this system.

Table 4.1 Output Design

Input	Type	Example
Login from blank	notice	
The email for registration must be follow the email format	notice	

4.2.2 Database Design

Database design is the procedure of making a point of interest information mode. of model of a database. This sensible information model contains everything the required real and physical configuration choices and physical stockpiling parameters anticipated that would create a blueprint in a Data Definition Language (DDL), Which can then be utilized to make a database. A totally credited information model contains subtle elements properties for each element. Conceptual and Logical Database Design

4.2.2.1 Conceptual and database design

In the conceptual design stage, data showing is used to make a structure that identifies with certified article in the most reasonable way that is accessible. The hypothetical model must embody a sensible perception of the business and its helpful locales. The computed system must be customizing and gear self-ruling, so that the system can be set up within any hardware and programming stage picked.

i) Entity Relationship Diagram

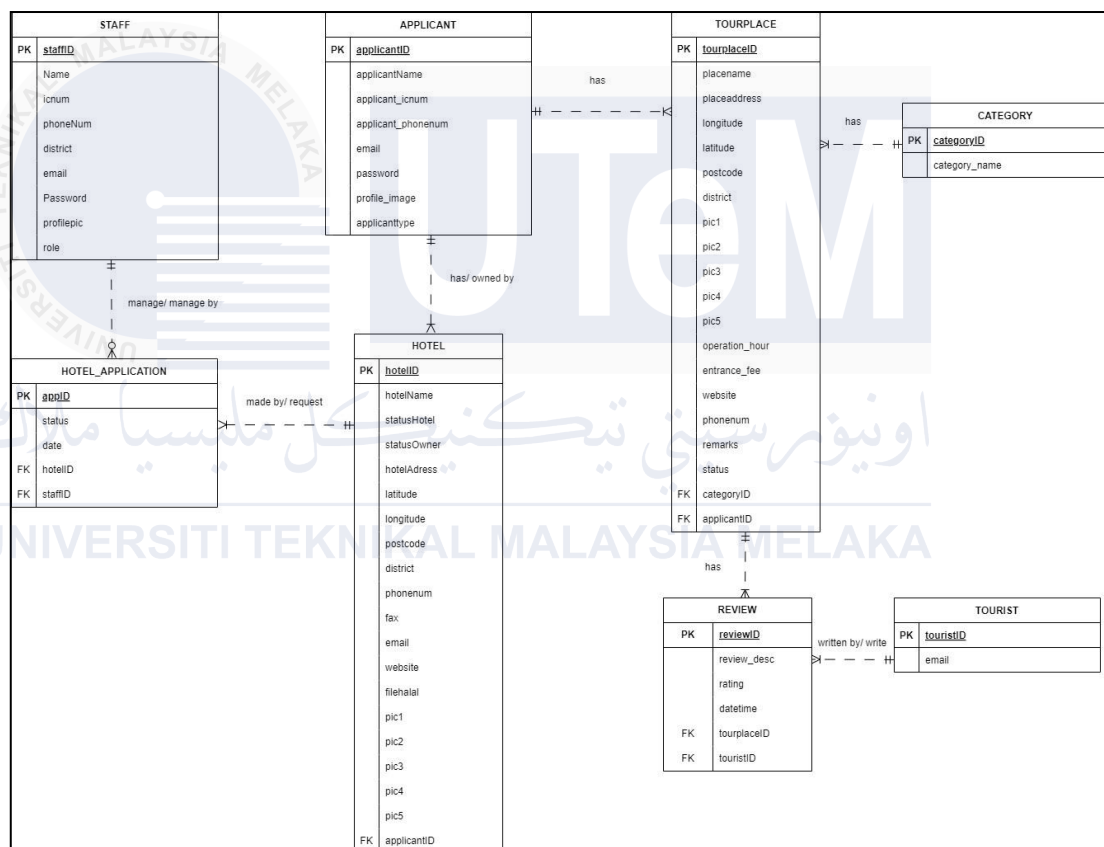


Figure 4.36 ERD of Negeri Sembilan Tourism and Hotel Halal Management System

ii) Business rule

- one staff manage zero or many hotel application
- hotel application is manage by one and only staff
- hotel application was made by one hotel
- one hotel can request one or many hotel application

- one hotel made by one applicant

- one applicant has one or many hotels
- one applicant has one or many tour place
- one tour place has one applicant

- one tour place has one category

- one category has one or many tour place

- one tour place has one or many reviews

- one review has one tour place

- one review was written by a tourists

- one tourist write one or many reviews.

4.2.2.2 Logical Database Design

Table 4.1 Table Category

key	Attribute	Description	Data type and size	FK reference table
PK	categoryID	Category ID	INT (100)	
	Category_name	Name of category	Varchar (100)	

Table 4.2 Table Tourist

key	Attribute	Description	Data type and size	FK reference table
PK	touristID	tourist ID	INT (100)	
	email	Email of tourist	Varchar (100)	

Table 4.3 Table Review

key	Attribute	Description	Data type and size	FK reference table
PK	reviewID	Category ID	INT (100)	
	Review_desc	Description of review	Varchar (100)	
	rating	Rating of tourplace review	Varchar (100)	
	datetime	Date and time of review	Timestamp (6)	
FK	tourplaceID	Tourplace ID	INT (100)	Tourplace
FK	TouristID	Tourist ID	INT (100)	Tourist

Table 4.4 Table Tourplace

key	Attribute	Description	Data type and size	FK reference table
PK	tourplaceID	Tourplace ID	INT (100)	
	placename	Name of tour place	Varchar (100)	
	placeaddress	Address of tour place	Varchar (100)	
	longitude	Longitude of tour place	Varchar (100)	
	latitude	Latitude of tour place	Varchar (100)	
	postcode	Postcode of tour place	Varchar (100)	
	district	District of tour place	Varchar (100)	
	Pic1	First picture of tour place	Varchar (100)	
	Pic2	Second picture of tour place	Varchar (100)	
	Pic3	Third picture of tour place	Varchar (100)	
	Pic4	Forth picture of tour place	Varchar (100)	

	Pic5	Fifth picture of tour place	Varchar (100)	
	Operation_hour	The operation hour of tour places	Varchar (100)	
	Entrance_fee	The entrance fee of tour places	Varchar (100)	
	website	Website of tour place	Varchar (100)	
	phonenum	Phone number of tour places	Varchar (100)	
	remarks	The description of tour place	Varchar (100)	
	status	Status of verification or pending of tour place	Varchar (100)	
FK	categoryID	Category ID	INT (100)	Category
FK	applicantID	Applicant ID	INT (100)	Applicant

Table 4.5 Table Applicant

key	Attribute	Description	Data type and size	FK reference table
PK	applicantID	Applicant ID	INT (100)	
	applicantname	Name of Applicant	Varchar (100)	
	applicant_icnum	Identity card number of applicant	Varchar (100)	
	applicant_phonenum	Phone number of applicant	Varchar (100)	
	email	Email of applicant	Varchar (100)	
	password	Password account of applicant	Varchar (100)	
	Profile_image	Profile picture of applicant	Varchar (100)	
	Applicanttype	Type of applicant	Varchar (100)	

Table 4.6 Table Hotel

key	Attribute	Description	Data type and size	FK reference table
PK	hotelID	Hotel ID	INT (100)	
	hotelname	Name of hotel	Varchar (100)	
	statushotel	The status of hotel	Varchar (100)	
	statusApplicant	The status of Applicant	Varchar (100)	
	hoteladdress	Address of hotel	Varchar (100)	
	longitude	Longitude of hotel	Varchar (100)	
	latitude	Latitude of hotel	Varchar (100)	
	postcode	Postcode of hotel	Varchar (100)	
	district	District of hotel	Varchar (100)	
	Pic1	First picture of hotel	Varchar (100)	
	Pic2	Second picture of hotel	Varchar (100)	
	Pic3	Third picture of hotel	Varchar (100)	

	Pic4	Forth picture of hotel	Varchar (100)	
	Pic5	Fifth picture of hotel	Varchar (100)	
	Fax	Fax number of hotel	Varchar (100)	
	filehalal	The document of halal file hotel	Varchar (100)	
	website	Website of hotel	Varchar (100)	
	phonenum	Phone number of hotel	Varchar (100)	
	email	The email of hotel	Varchar (100)	
FK	applicantID	Applicant ID	INT (100)	Applicant

Table 4.7 Table Hotel_application

key	Attribute	Description	Data type and size	FK reference table
PK	appID	Hotel application ID	INT (100)	
	status	The status of verification hotel	Varchar (100)	
	date	Date time of application	Timestamp (6)	
FK	hotelID	Hotel ID	INT (100)	Hotel
FK	staffID	staff ID	INT (100)	Staff

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Table 4.8 Table Staff

key	Attribute	Description	Data type and size	FK reference table
PK	staffID	Staff ID	INT (100)	
	icnum	Identity card number of staff	Varchar (100)	
	phonenum	Phone number of staff	Varchar (100)	
	district	District that enroll to staff	Varchar (100)	

	email	Email of staff	Varchar (100)	
	password	Password account of staff	Varchar (100)	
	profilepic	Profile picture of staff	Varchar (100)	
	role	Type of role for each staff	Varchar (100)	

4.3 System Architecture

System architecture is the theoretical model that characterizes the structure, conduct and more perspectives of a system. A building design depiction is a formal portrayal and representation of a system, sorted out in a manner linking about the structure of in the middle of them and gives an arrangement from which tens can be secured, and systems add to, that will cooperate to execute the general system.

4.3.1 Data definition Language

A DDL is sentence structure like a PC programming dialect for characterizing unformation structures, particularly database diagram. The DDL is utilized to make, modify and drop database and database objects. These database ens incompone construction, tables, perspectives, groupings and files. This summon is wiled by database manager amid the setup and evacuation periods of databases items. Figure 4.17 until Figure 4.22 demonstrates the inquiry to make table is database

CREATE TABLE

```
CREATE TABLE `category` (
  `categoryID` int(100) NOT NULL,
  `name` varchar(100) NOT NULL
);
```

Figure 4.38 create table Category

```
CREATE TABLE `hotel` (
  `hotelID` int(100) NOT NULL,
  `hotelname` varchar(100) NOT NULL,
  `statushotel` varchar(100) NOT NULL,
  `statusApplicant` varchar(100) NOT NULL,
  `hoteladdress` varchar(100) NOT NULL,
  `latitude` varchar(100) NOT NULL,
  `longitude` varchar(100) NOT NULL,
  `postcode` varchar(100) NOT NULL,
  `district` varchar(100) NOT NULL,
  `phonenum` varchar(100) NOT NULL,
  `fax` varchar(100) NOT NULL,
  `email` varchar(100) NOT NULL,
  `website` varchar(100) NOT NULL,
  `file` varchar(100) NOT NULL,
  `pic1` varchar(100) NOT NULL,
  `pic2` varchar(100) NOT NULL,
  `pic3` varchar(100) NOT NULL,
  `pic4` varchar(100) NOT NULL,
  `pic5` varchar(100) NOT NULL,
  `applicantID` int(100) NOT NULL
);
```

Figure 4.37 create table Hotel


```
CREATE TABLE `hotel_application` (  
  `appID` int(100) NOT NULL,  
  `status` varchar(100) NOT NULL,  
  `date` timestamp(6) NOT NULL DEFAULT current_timestamp(6)  
ON UPDATE current_timestamp(6),  
  `staffID` int(100) NOT NULL,  
  `hotelID` int(100) NOT NULL  
);
```

Figure 4.40 create table hotel_application

```
CREATE TABLE `applicant` (  
  `ApplicantID` int(100) NOT NULL,  
  `applicantname` varchar(100) NOT NULL,  
  `applicant_icnum` varchar(14) NOT NULL,  
  `applicant_phonenum` varchar(12) NOT NULL,  
  `email` varchar(100) NOT NULL,  
  `password` varchar(100) NOT NULL,  
  `profilepic` varchar(200) NOT NULL,  
  `applicanttype` varchar(100) NOT NULL  
);
```

Figure 4.39 create table applicant

```
CREATE TABLE `staff` (
  `staffID` int(100) NOT NULL,
  `name` varchar(100) NOT NULL,
  `icnum` varchar(14) NOT NULL,
  `phonenum` varchar(12) NOT NULL,
  `district` varchar(100) DEFAULT NULL,
  `email` varchar(40) NOT NULL,
  `password` varchar(50) NOT NULL,
  `profilepic` varchar(100) NOT NULL,
  `role` varchar(50) NOT NULL
);
```

Figure 4.42 create table staff

```
CREATE TABLE `review` (
  `reviewID` int(100) NOT NULL,
  `review_desc` varchar(100) NOT NULL,
  `rating` varchar(100) NOT NULL,
  `tourplaceID` int(100) NOT NULL,
  `DATE` timestamp(6) NOT NULL DEFAULT current_timestamp(6)
ON UPDATE current_timestamp(6),
  `touristID` int(100) NOT NULL
);
```

Figure 4.41 create table review

```
CREATE TABLE `tourist` (
  `touristID` int(100) NOT NULL,
  `email` varchar(100) NOT NULL
);
```

Figure 4.44 create table tourist

```
CREATE TABLE `tourplace` (
  `tourplaceID` int(100) NOT NULL,
  `placename` varchar(100) NOT NULL,
  `placeaddress` varchar(100) NOT NULL,
  `longitude` varchar(100) NOT NULL,
  `latitude` varchar(100) NOT NULL,
  `postcode` varchar(100) NOT NULL,
  `district` varchar(100) NOT NULL,
  `pic1` varchar(100) DEFAULT NULL,
  `pic2` varchar(100) DEFAULT NULL,
  `pic3` varchar(100) DEFAULT NULL,
  `pic4` varchar(100) DEFAULT NULL,
  `pic5` varchar(100) DEFAULT NULL,
  `operation_hour` varchar(100) NOT NULL,
  `entrance_fee` varchar(100) NOT NULL,
  `website` varchar(100) NOT NULL,
  `phonenum` varchar(100) NOT NULL,
  `applicantID` int(100) NOT NULL,
  `remarks` varchar(100) NOT NULL,
  `categoryID` int(100) NOT NULL,
  `status` varchar(100) NOT NULL
);
```

Figure 4.43 create table tourplace

CHAPTER 5: IMPLEMENTATION

5.1 Introduction

Chapter 5 will examine insight into the execution of the Negeri Sembilan Tourism and Hotel Halal Management System. This section is separated into two sections which are system advance and Database Improvement. The execution includes the product advancement environment setup which spreads the structural planning of the customer server programming and database that will be utilized for the system improvement. Programming arrangement administrators cover the setup of the product to satisfy system necessities.

The rendition control method is characterized by controlling and overseeing source code adaption for any redesigned code that has been done to the system. It is also like database improvement. The execution status will decrypt all the advancement of the system and the database improvement status for each of the system and database module

5.2 Software Development Environment Setup

This area should be considered the introductory setup for the product improvement setup for Negeri Sembilan Tourism and Hotel Halal Management System venture. It will depict the parts essential for the improvement of the environment. The system has two levels: level one collaboration in the middle of the client and system through a Graphic User Interface (GUI). Level two covers the correspondence in the middle of the system and database which lets the database let the client recover and control the information considering their approval setting.

The product advancement environment setup of Negeri Sembilan Tourism and Hotel Halal Management System is utilizing three-level construction modeling which comprises of customer level, center level, and database level. For customer level, client need utilize a web program to get to the system. At that point, the center point which is application server let utilization to associate with the database server to recover or control the information with it. Each of the levels ought to cooperate in great condition

to guarantee the system can run easily. Three-level building design structures are indicated in **Figure 5.1** below.

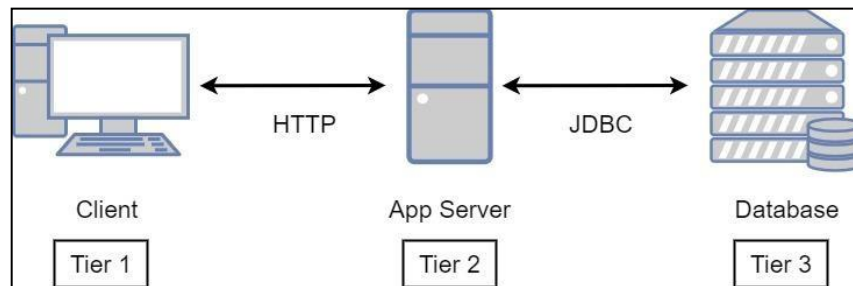


Figure 5.1 Software Development Environment Setup for Negeri Sembilan Tourism and Hotel Halal Management System

5.2.1 Software Environment Setup

This area should be considered as the introductory setup for the product improvement setup for Negeri Sembilan Tourism and Hotel Halal Management System. It will depict the parts essential for the improvement of the environment.

The software environment setup for the Negeri Sembilan Tourism and Hotel Halal Management System involves using XAMPP, a cross-platform web server solution that includes Apache, MySQL, and PHP. Apache serves as the web server, while MySQL manages the system's database, storing critical data in tables like `APPLICANT`, `HOTEL`, and `TOURPLACE`. The project files are placed in the XAMPP `htdocs` directory, enabling the system to be accessed locally via `http://localhost/psmtour`.

PHP scripts, utilizing the `mysqli` extension, handle the database connection and interactions with MySQL. The system is developed and tested using Google Chrome, often in Incognito mode, to ensure a consistent user experience. This setup provides a stable and efficient environment for the development and operation of the system.

5.2.2 Database Environment Setup

The database environment setup for the Negeri Sembilan Tourism and Hotel Halal Management System is a critical component that ensures the proper functioning of the system's backend. This setup utilizes XAMPP, a widely-used local development environment that includes Apache and MySQL. XAMPP allows the developer to run the system on a local server, providing the necessary infrastructure for database operations.

The configuration begins by establishing a connection to the MySQL database using PHP's `mysqli` extension. The connection parameters are defined, including the hostname (`localhost`), username (`root`), and the database name (`psmtour2`). These parameters are essential as they determine where and how the application will connect to the database. The script then attempts to establish a connection using these parameters. If the connection fails, an error message is generated to help identify and resolve the issue. This ensures that any problems with the database connection are detected early in the development process.

The setup is also compatible with modern web browsers like Google Chrome and can be tested in Incognito mode, which helps avoid conflicts with cached data or saved sessions. This flexibility is important for the development and testing phases, ensuring that the system's graphical user interface (GUI) interacts seamlessly with the database. Overall, the database environment setup is crucial for the system's ability to store, retrieve, and manage data, forming the backbone of the application's functionality.

While the database environment is set up, the developer must configure settings for database connection. The database connection is shown in **Figure 5.2**.

```

db.php

1  <?php
2  $conn = mysqli_connect('localhost','root','','database');
3  if(!$conn){
4      echo "Connection Failed: ".mysqli_error($conn);
5      exit;
6  }
7  ?><?php
8  // Database connection parameters
9  $host = "localhost";
10 $username = "root";
11 $password = "";
12 $database = "psmtour2";
13
14 // Create connection
15 $conn = new mysqli($host, $username, $password, $database);
16
17 // Check connection
18 if ($conn->connect_error) {
19     die("Connection failed: " . $conn->connect_error);
20 }
21 ?>
22

```

Figure 5.2 Database connection code in Visual Studio Code

5.2.2.1 Configure Database Connection

i. Google Chrome and Incognito window

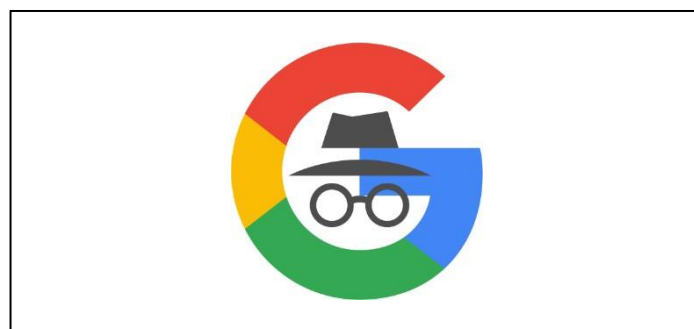


Figure 5.3 Google Chrome and Incognito Window

The developer should start by opening Google Chrome, preferably in an Incognito window, to ensure that there are no cached files or stored sessions that could interfere with the development process. In the Incognito window, the developer navigates to the

local development environment by typing the URL `http://localhost/psmtour`. This URL corresponds to the local site folder located at `C:\xampp\htdocs\psmtour`, which is where the project files are stored on the developer's computer.

To configure the server connection for the "Negeri Sembilan Tourism and Hotel Halal Management System," the developer needs to specify that the connection is made using the 'Local/Network' option, meaning it's hosted locally on the developer's machine. This is facilitated by the XAMPP server, which uses Apache as the webserver to handle requests to `http://localhost/psmtour`.

ii. MySQL Server



Figure 5.4 XAMPP and MySQL Server

Within the XAMPP environment, the MySQL server is used to manage the system's database. The developer begins by creating a new database named `psmtour2`. This database will contain several tables that store the data needed for the system's operation. These tables include:

APPLICANT: Stores information about individuals applying for something within the system.

HOTEL: Contains details about the hotels listed in the system.

HOTEL_APPLICATION: Records applications related to the hotels.

TOURPLACE: Contains information about the tourist attractions in Negeri Sembilan.

STAFF: Stores data on the system's staff members.

REVIEW: Holds reviews left by users or tourists.

TOURIST: Records information about tourists using the system.

The developer will define the structure of each table, specifying the fields (attributes) and data types required to store the relevant information effectively.

5.3 Software Configuration Management

Software Configuration Management (SCM) plays a critical role in the development and maintenance of the Negeri Sembilan Tourism and Hotel Halal Management System. SCM involves the systematic tracking and controlling of changes in the software throughout its lifecycle, ensuring that every modification is documented and managed efficiently. In this system, SCM is crucial for maintaining consistency across different versions of the software, especially as updates and improvements are made. The key objectives of SCM in this context include configuration identification, where all software components are clearly identified; configuration control, which manages changes to these components; and configuration status accounting, which tracks the history of changes.

For the Negeri Sembilan Tourism and Hotel Halal Management System, version control is essential to manage the different stages of development, from initial setup to deployment and beyond. This ensures that any changes, such as adding new tourist attractions or updating hotel information, are recorded and can be traced back if needed. Process management within SCM also helps in coordinating the development activities among the team members, ensuring that all are working on the correct version of the system. Environment management ensures that the system operates consistently across different environments, such as development, testing, and production. The SCM practices adopted in this project help maintain the integrity and reliability of the system, which is vital for delivering a robust and user-friendly platform to the end-users.

5.3.1 Configuration Environment Setup

The Configuration Environment Setup involves the installation and configuration of the necessary software to build and maintain the Negeri Sembilan Tourism and Hotel Halal Management System. The system utilizes XAMPP, which

includes Apache as the web server and MySQL as the database server. MySQL Server is the primary database used for storing and managing the system's data. The development process is carried out using web browsers such as Google Chrome, with the option to use Incognito mode for testing and development purposes. This environment is crucial for developing the Graphical User Interface (GUI) and ensuring that the system runs smoothly on various setups, providing a consistent user experience across different platforms.

5.3.2 Version Control Procedure

Version Control is for the most part utilized by programming designers to put source code in one focal place and track diverse variant code, which are produced alongside everyday work. Most form control systems can be coordinated with autonomous advancement environment (IDE).

Basic version control methodology is expected to make or include an undertaking in the source control system introduction for the form control. After that, designer can simply recover the venture from the server to a nearby machine, which as of now contains the adaptation control data due to begin the following or administrator of the variant. Figure 5.4 shows how the rendition controls functions. Beginning from rendition 1, the adaptation will be altered, and the outcome will create the next form. The adaptation will be altered and will be stopped at the last form, which means the system won't have any upgrades on it any longer.

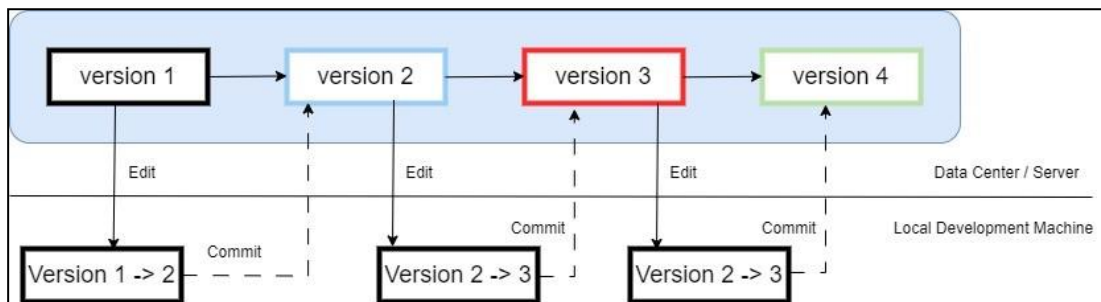


Figure 5.5 Version Control procedure for client/server architecture system

Table 5.1 List of version control procedures for Negeri Sembilan Tourism and Hotel Halal Management System

Version	Description
Negeri Sembilan Tourism and Hotel Halal Management System v.1.0	This is the first version of the system that just have the system route stream and the interface of the system. The reasons for existing client exemption are the system route stream and the interface to meet client necessities.
Negeri Sembilan Tourism and Hotel Halal Management System v.1.1	This version covered several parts of the system including adding, updating, deleting, and deleting data with authentication.
Negeri Sembilan Tourism and Hotel Halal Management System v.2.0	This version is the upgrade of the past version and the whole system module is now created. Every one of the mistakes is adjusted and the system completely working
Negeri Sembilan Tourism and Hotel Halal Management System v.2.1	Full complete version of the system

5.4 Implementation Status

The implementation status lets the developer know how much advancement of the system is for every module or segment. From it, the designer can compute the rate of the system to be finished. Table 5.2 demonstrates the execution of the Negeri Sembilan Tourism and Hotel Halal Management System.

Table 5.2 Implementation status of Negeri Sembilan Tourism and Hotel Halal Management System

Module name/component	Description	Duration	status
Login	Authentication of the system access	1 week	Complete
Registration	Staff and applicant Registration	1 week	Complete
Hotel Halal Management	Management of hotel details, including adding and updating hotel halal status	2 weeks	Complete
Tourist Attraction management	Management of tourist attraction information	2 weeks	Complete
Review Management	Management of tourist reviews	1 week	Complete
Application Management	Handling application for register halal hotel	1 week	Complete

5.5 Conclusion

This part clarifies the implementation of the system, and it covers about the product advancement environment setup, database usage, and programming design administration. All these can give designers a clear vision of their system to satisfy system requirements and client fulfilment while utilizing it.



CHAPTER 6: TESTING

6.1 Introduction

Chapter 6 will discuss all the testing phases of the Negeri Sembilan Tourism and Hotel Halal Management System. The goal is to assess the ability of a system and verify that it is suitable for every fulfillment. The reason for testing is to discover any bugs or failures in the system and the developer can troubleshoot and solve its problem. Given this system development System Development Life Cycle (SDLC) strategy, the testing should be complete for each complete system module.

Another in-order intention that will be discussed in this chapter is the test plan which contains classes of tests, test environments, and test schedules. After that, the test strategy includes classes of tests. Now test design contains test descriptions and test data. After that, the tests result and analysis even if the system test is achieved or failed and the fulfillment of the user while testing this system will be accomplished.

6.2 Test Plan

A test plan can be prescribed as a report that defines the scope, approach, resource, and timetable of proposed testing activities. It recognizes test items, the component feature to be tried, the testing task, who will do each of the works, and any possibilities involving a crisis plan.

6.2.1 Test Organization

A test organization is a gathering of individuals whose assignment is to do the testing exercise all through the testing procedure. They originated from different foundations, qualities, and data innovation experiences to deliver distinctive beliefs that will be valuable; data for system testing results. The helpful data incorporates system quality, shortcomings, requirements, and access for diverse levels for the system chairman (Project Supervisor) and (clients). The system will be tested by the System Developer, Project Supervisor, and clients.

System Developer is the individual who controls the building of the Negeri Sembilan Tourism and Hotel Halal Management System. The Project Supervisor is the individual who administers the System Developer's work, and she will run the client acknowledgment test. At that point, clients (administrators) are the individuals who utilize the system at will make enlistment, include, overhaul, and erase course and include, redesign erase stop. The Venture Supervisor and clients will go about the end utilization of the system. **Table 6.1** shows a rundown of clients who will run the system and their individual undertakings.

Table 6.1 List of the user and their responsibility

Tester ID	Title /Post	No. of tester	Test type	Responsibility
Tester 1	System Developer	2	White-box testing	Include developing, documenting, managing, and testing the system. The system Developer will guarantee that the system will run easily considering prerequisites and targets before conveyed to the end client
Tester 2	Project Supervisor	1	Black-box testing	Act as end client for Negeri Sembilan Tourism and Hotel Halal Management System as manager of the system. Test the system module and give input. Her criticism can be as manual for upgrading the system.
Tester 3	Tourist	11	Black-box testing	Represents the typical end-user of the system. Tests the user interface and features from a tourist's perspective to ensure ease of use, functionality, and relevance.
Tester 4	Clients	3	Black-box testing	Represents the hotel operators or tourism service providers. Tests the system's functionalities related to hotel and tourist attraction management to ensure the system meets business needs.

6.2.2 Test Environment

A testing environment is a setup of a soft and software on which the testing group is going to perform the testing on the Negeri Sembilan Tourism and Hotel Halal Management System. This setup comprises the physical setup which incorporates equipment, and sensible setup that incorporates the Server Operating System, customer working system, database server, front-end running environment, program, or some other programming segments needed to run this product item. This testing setup is to be based on both the end, which is the server, and the customer client.

6.2.2.1 Environment Setup

Environment setup is to design and manage the stage for the Negeri Sembilan Tourism and Hotel Halal Management System to guarantee the system can run effectively. **Table 6.2** demonstrates the application workspace for the Negeri Sembilan Tourism and Hotel Halal Management System.

Table 6.2 Environment Setup Specification

Environment Specification	Description
Operating System	Window 11
Processor	Intel(R) Core(TM) i3-8145U CPU @ 2.10GHz 2.30 GHz
Random Access Memory (RAM)	4.00 GB
Database	phpMyAdmin Version 5.2.0
Server Scripting	MySQL

6.2.2.2 Software Application

Software application defines about every one of the substances or applications inside the Negeri Sembilan Tourism and Hotel Halal Management System. **Table 6.3** demonstrates all the applications which is relevant to this system.

Table 6.3 Negeri Sembilan Tourism and Hotel Halal Management System

System Application	<ol style="list-style-type: none"> 1. System login 2. System Registration 3. Add, update delete, and search in each form or data grid view for users
--------------------	---

6.2.2.3 System Software

System Software consists of tools that have been implemented in the Negeri Sembilan Tourism and Hotel Halal Management System. **Table 6.4** shows all the software involved in this system development.

Table 6.4 System Software

System Software	<ol style="list-style-type: none"> 1. Window 11 2. Google Chrome 3. Incognito
-----------------	--

6.2.2.4 System Hardware

System hardware is the hardware that is involved in this system development. Table 6.5 shows the related hardware for the development of the Negeri Sembilan Tourism and Hotel Halal Management System.

Table 6.5 System Hardware Tools

System Hardware	<ol style="list-style-type: none"> 1. Personal computer with hard disk, RAM, and processor 2. Pen Drive
-----------------	---

6.2.3 Test Schedule

The purpose of the test schedule is to define when and by whom testing activities will be performed. The information gathered for the body of the test game plan is used as a piece of blend with the available asset pool to centre the test schedule. The schedule will give a manual for the planner to do the testing at a certain time accurately along the term of endeavor change. Table 6.6 until Table 6.11 exhibits the test calendar for the customer executive of the system

Table 6.6 Test schedule for Basic System Functionality For all Roles

Module/Component	Activity	Duration	Start Date	End Date
Login	Test login functionality for all roles	1 day	1/7/2024	1/7/2024
Navigation and UI	test system navigation and UI responsiveness	1 day	1/7/2024	1/7/2024
Profile Management	Test profile management across all roles	1 day	1/7/2024	1/7/2024

Table 6.7 Test Schedule for Superadmin of Negeri Sembilan Tourism and Hotel Halal Management System

Module/Component	Activity	Duration	Start Date	End Date
View Reports	Test report generation, filtering, and data accuracy	4 days	1/7/2024	4/7/2024
Manage Staff	Test adding, updating, and removing staff	5 days	5/7/2024	9/7/2024
Manage Applicant	Test applicant registration and profile management	5 days	10/7/2024	14/7/2024

Profile Management	Test updating Super admin profile	3 days	15/7/2024	17/7/2024
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Table 6.8 Test Schedule for Hotel Verifier of Negeri Sembilan Tourism and Hotel Halal Management System

Module/Component	Activity	Duration	Start Date	End Date
Verify Hotels	Test hotel verification process and compliance check	4 days	18/7/2024	21/7/2024
Manage Verification Documents	Test approval/rejection of halal certificates	3 days	22/7/2024	24/7/2024
Profile Management	Test updating Hotel Verifier profile	3 days	25/7/2024	27/7/2024

Table 6.9 Test Schedule for Web Master of Negeri Sembilan Tourism and Hotel Halal Management System

Module/Component	Activity	Duration	Start Date	End Date
Verify Hotels	Test hotel verification process and compliance check	4 days	18/7/2024	21/7/2024
Manage Verification Documents	Test approval/rejection of halal certificates	3 days	22/7/2024	24/7/2024
Profile Management	Test updating Hotel Verifier profile	3 days	25/7/2024	27/7/2024

Table 6.10 Test Schedule for Applicant Features (Hotel Applicant, Tour place Applicant) of Negeri Sembilan Tourism and Hotel Halal Management System

Module/Component	Activity	Duration	Start Date	End Date
------------------	----------	----------	------------	----------

Hotel Registration	Register hotels and manage details (Hotel Applicant)	2 Days	28/7/2024	29/7/2024
Tour Place Registration	Register tour places (Tour Place Applicant)	2 Days	30/7/2024	1/8/2024
Profile Management	Manage profiles (Hotel & Tour Place Applicant)	2 Days	2/8/2024	3/8/2024
Content Management	Manage content for hotels and tour places	2 Days	4/8/2024	5/8/2024

Table 6.11 Test Schedule for Tourists of Negeri Sembilan Tourism and Hotel Management System

Module/Component	Activity	Duration	Start Date	End Date
Tour Place Viewing	View tour places and details	2 Days	6/8/2024	7/8/2024
Hotel Halal Viewing	View hotel halal and details	2 Days	8/8/2024	9/8/2024
Reviews & Ratings	Submit reviews and ratings of tour places	2 Days	10/8/2024	11/8/2024

6.3 Test Strategy

A test strategy achieved is a high-level state report ordinarily created by the project manager. This report characterized the “Testing Approach” to accomplish testing goals. The test methodology is regularly obtained from the Business Requirement Specification report.

The test strategy document is static and defines that it is not updated repeatedly. It sets the norms for testing procedures and exercises and different records, for example, the test arrangement draws its substance from those benchmarks set in The Test Strategy Document. There are two sorts of test systems which are:

i. Top-down Test Strategy

A top-down approach is essentially the breaking down of a system to gain insight into its compositional sub-systems. In a top-down approach an overview of the system is formulated, specifying but not detailing any first-level subsystem. Each subsystem levels, until the specification is reduced to base elements.

ii. Bottom-up Test Strategy

A bottom-up approach is the piecing together of the system to give rise to a grander system, thus making the original system sub-system if the emergent system. Bottom-up processing is a type of information processing based on incoming data from the environment to form a perception.

6.3.1 Classes of Test

Classes of test are divided into security test, and error handling test.

i. Error Handling Test

This test is to confirm that The Negeri Sembilan Tourism and Hotel Halal Management System will acknowledge the right data from the clients. The mistake message will show up if users or clients enter wrong address or esteem configuration or fulfil obliged structure.

6.3.2 Testing technique

Testing techniques are specific approaches used in software testing to achieve different objectives. These techniques define how the tests are conducted, what is tested, and what the tester focuses on. Below is a more detailed explanation of the main testing techniques:

i. Black Box Testing

Black Box Testing focuses on evaluating the functionality of the system without considering its internal code structure. Testers use this technique to verify if the software behaves as expected by providing input and observing the output. The goal is to ensure that the system meets the specified requirements.

Black Box Testing is typically applied in functional, system, and user acceptance testing. In the context of the Negeri Sembilan Tourism and Hotel Halal Management System, Black Box Testing would involve validating user roles like tourists, hotel applicants, tour place applicant, and superadmins by interacting with the user interface, testing activities such as hotel registration and review submission, and verifying that the system responds correctly to various inputs.

ii. White Box Testing

White Box Testing involves testing the internal workings of the software. The tester examines the system's code, logic flow, and structure to ensure that all code paths and functions work correctly. This type of testing is often performed by developers during unit and integration testing. In the system mentioned, White Box Testing could be used to verify individual functions, such as those that handle database interactions or user authentication, by ensuring that the underlying code behaves as expected and handles edge cases properly.

6.4 Test Design

Test Design in the demonstration of making and composing test suites for testing programming. There are two sorts of test configuration which are test description and test information.

6.4.1 Test Description

Test Description contains the outlined and achieved that complete to recognize the experiment and expected result. An experiment is a record set of the information and working condition needed to run a test thing for expected result. Table 6.12 until Table 6.21 demonstrates the experiments and expected result for every system module or part.

Table 6.12 System Login Module

Test Case ID	TC_01
Test Case Name	Login
Actor	Super admin, Web Master, Hotel Verifier, Hotel Applicant, Tour Place Applicant
Description	<p>This test case allows the tester or user to demonstrate the registration user module by following a few test cases and steps. This testing aims for the system to function well with all the possibilities that users might have while logging in.</p> <p>To start the testing, tester or user needs to:</p> <ol style="list-style-type: none"> 1. Click “Join us” button at homepage 2. Choose to login as staff or owner place login <p>Then proceed with the following test case.</p>

Test Case	Description	Step	Expected Result
TC_01-1	Test LOGIN with valid credentials (correct email and password)	<ol style="list-style-type: none"> 1. Insert Email: <email> 2. Insert Password: <password> 3. Click “Login ” button 	Users with valid credentials should be successfully logged into the system.
TC_01-2	Test login with invalid credentials (incorrect email).	<ol style="list-style-type: none"> 1. Insert Email: <email> 2. Insert Password: <password> 3. Click “Login” button 	Users with invalid credentials should be denied access and shown an appropriate error message.
TC_01-3	Test login with invalid credentials (incorrect password).	<ol style="list-style-type: none"> 1. Insert Email: <email> 2. Insert Password: <password> 3. Click “Login” button 	Users with invalid credentials should be denied access and shown an appropriate error message.
TC_01-4	Test login with empty fields.	<ol style="list-style-type: none"> 1. Click “Login” button 	The system should prompt users to fill in both email and password fields if they are empty.

Table 6.13 Registration Module (Applicant)

Test Case ID	TC_02
Test Case Name	Applicant Registration
Actor	Hotel Applicant, Tour Place Applicant
Description	<p>This test case allows the tester or user to demonstrate the registration user module by following a few test cases and steps. This testing aims for the system to function well with all the possibilities that users might have while registering as applicant.</p> <p>To start the testing, the tester or user needs to:</p> <ol style="list-style-type: none"> 3. Click “Join Us” at the navigation menu bar 4. Click the “Click for Applicant Page login” button 5. Click “Register” button <p>Then proceed with the following test case.</p>

Test Case	Description	Step	Expected Result
TC_02-1	Test registration with all required fields filled correctly.	<ol style="list-style-type: none"> 1. Fill in all required field that has an asterisk (*) symbol 2. Click “Register” button 	Users should be able to register successfully when all required information is provided correctly.
TC_02-2	Test the system's response to	<ol style="list-style-type: none"> 1. Fill in all required field that has an asterisk (*) symbol 	Duplicate registrations should be prevented with

	duplicate registrations by entering existing email or identity card numbers.	<ol style="list-style-type: none"> 2. Fill in the email or identity card number that has been registered 3. Click the “Register” button 	proper validation. “An account with this email or identity card number already exists.” Prompt will appear
TC_02-3	Test login with empty fields.	<ol style="list-style-type: none"> 1. Click the “Register” button 	The system should prompt users to fill in the ‘Name’ field. “Please fill in this field” required field message will appear
TC_02-4	Test the email without ‘@’	<ol style="list-style-type: none"> 1. Fill in all required field that has an asterisk (*) symbol 2. Insert the email field without the symbol ‘@’ 3. Click “Register” button 	“Please include an ‘@’ in the email address” required field message will appear
TC_02-5	Test with wrong format email	<ol style="list-style-type: none"> 1. Fill in all required field that has an asterisk (*) symbol 2. Insert the email field without the ‘.com’ format 3. Click the “Register” button 	“Invalid email format” warning will be appear
TC_02-6	Test password with all alphabet or numeric	<ol style="list-style-type: none"> 1. Fill in all required field that has an asterisk (*) 	“Password must be at least 8 characters long and include at

		<p>symbol except password</p> <p>2. Fill in the password field with all alphabet or numeric format.</p> <p>3. Click the “Register” button</p>	<p>least one letter, one number, and one special character.”</p> <p>Warning will appear</p>
TC_02-7	Test registration with mismatched password and confirmation password fields.	<p>1. Fill in all required field that has an asterisk (*) symbol</p> <p>2. Fill in the password field</p> <p>3. Fill the confirm password field with a different password than the password field.</p> <p>4. Click the “Register” button</p>	<p>“Passwords do not match” warning will appear.</p>
TC_02-8	Test registration with a short password (less than 8 characters).	<p>1. Fill in all required field that has an asterisk (*) symbol</p> <p>2. Fill in the password below than 8 characters</p> <p>3. Click the “Register” button</p>	<p>“Password must be at least 8 characters long” warning will appear.</p>
TC_02-9	Test the profile picture by uploading ‘.pdf.’ file	<p>1. Fill in all required field that has an asterisk (*) symbol</p> <p>2. Upload the Profile picture form with ‘.pdf’ file.</p>	<p>"Sorry, only JPG, JPEG, PNG & GIF files are allowed."</p> <p>A warning will appear.</p>

		3. Click the “Register” button	
TC_02-10	Test the registration applicant by entering name less than 6 alphabet	<ol style="list-style-type: none"> 1. Fill in all required field that has an asterisk (*) symbol 2. Insert the name field with less than 6 alphabet 3. Click the “Register” button 	An alert will popup to indicate user to fill in name with more than 6 alphabet
TC_02-11	Test the registration applicant by entering a name more than 30 alphabet	<ol style="list-style-type: none"> 1. Fill in all required field that has an asterisk (*) symbol 2. Insert the name field with more than 30 alphabet 3. Click the “Register” button 	An alert will pop up to indicate that the user to fill in the name with less than 30 alphabet
TC_02-12	Test the registration applicant by uploading a JPG file as a profile picture.	<ol style="list-style-type: none"> 1. Fill in all required field that has an asterisk (*) symbol 2. upload JPG files in the profile picture field. 3. Click the “Register” button 	The register of applicants will be successfully registered into the system.
TC_02-13	Test the registration applicant by uploading a JPEG file as a profile picture.	<ol style="list-style-type: none"> 1. Fill in all required field that has an asterisk (*) symbol 2. upload JPEG files in the profile picture field. 3. Click the “Register” button 	The register of applicants will be successfully registered into the system.

TC_02-14	Test the registration applicant by uploading a PNG file as a profile picture.	<ol style="list-style-type: none"> 1. Fill in all required field that has an asterisk (*) symbol 2. upload PNG files in the profile picture field. 3. Click the “Register” button 	The register of applicants will be successfully registered into the system.
TC_02-15	Test the registration applicant by uploading a GIF file as a profile picture.	<ol style="list-style-type: none"> 1. Fill in all required field that has an asterisk (*) symbol 2. upload GIF files in the profile picture field. 3. Click the “Register” button 	The register of applicants will be successfully registered into the system.

Table 6.14 Registration Hotel Module (Applicant)

Test Case ID	TC_03
Test Case Name	Registration Hotel Halal
Actor	Hotel Applicant
Description	<p>This test case allows the tester or user to demonstrate the registration of the Hotel Halal module by following a few test cases and steps. This testing aims for the system to function well with all the possibilities that users might have while Hotel applicants register the hotel halal in the system.</p> <p>To start the testing, the tester or user needs to:</p> <ol style="list-style-type: none"> 1. Login as hotel Applicant 2. Homepage of Applicant Hotel display. 3. Click the “Register new hotel” button <p>Then proceed with the following test case.</p>

Test Case	Description	Step	Expected Result
TC_03-01	Test hotel registration with all required fields filled correctly.	<ol style="list-style-type: none"> 1. Fill in all the fields correctly (e.g.: correct format) 2. Click “add hotel” button. 	The hotel should be registered successfully when all required information is provided correctly.
TC_03-2	Test hotel registration with	<ol style="list-style-type: none"> 1. Fill in all the fields correctly (e.g.: correct format) 	An alert message "The hotel is already registered!"

	duplicate hotel name.	<ol style="list-style-type: none"> 2. Insert hotel name field that has been registered 3. Click “add hotel” button. 	should be displayed, and the registration should fail.
TC_03-3	Test hotel registration with an empty hotel name field.	<ol style="list-style-type: none"> 1. Fill in all field correctly 2. Leave Hotel name field empty. 3. Click the “add hotel” button. 	The system should prompt users to fill in the 'Hotel Name' field with a message: “Please fill in this field.”
TC_03-04	Test hotel registration with an invalid email format (e.g., missing '@').	<ol style="list-style-type: none"> 1. Fill in all the fields correctly except the email 2. Insert the email without '@' 3. Click the “add hotel” button. 	The system should display an error message: “Please include an '@' in the email address.”
TC_03-05	Test hotel registration with incorrect hotel address.	<ol style="list-style-type: none"> 1. Fill in all the fields correctly except hotel address field. 2. Insert the address hotel field with random place address. 3. Click “add hotel” button. 	The system should prompt users with a message: “Please provide a valid address.”
TC_03-06	Test hotel registration with no image upload to upload picture field	<ol style="list-style-type: none"> 1. Fill in all fields except upload image 1 until image 5 2. Leave the “upload picture 1” util 	A prompt message will appear to fill in the blank

		<p>“upload picture 5” fields empty</p> <ol style="list-style-type: none"> 1. Click “add hotel” button. 	
TC_03-7	Test hotel registration with no upload pdf file of halal details	<ol style="list-style-type: none"> 1. Fill in all field except upload pdf file field 2. Leave the pdf file empty 3. Click the “add hotel” button 	A prompt message will appear to fill in the blank and the user needs to fill in all blank field
TC_03-8	Test hotel halal registration by only upload one picture	<ol style="list-style-type: none"> 1. Fill in all fields except picture 1 field 2. Leave the picture 1 field empty 3. Click the “add hotel” button 	A prompt message will appear to fill in the blank and the user needs to fill in all blank field
TC_03-9	Test register hotel halal by uploading a JPG file as the picture of the hotel	<ol style="list-style-type: none"> 1. Fill in all fields except picture 1 field 2. Upload JPG files at the upload picture field 3. Click the “add hotel” button 	The hotel registration is successful and the user will be directed to the list of hotel registration pages.
TC_03-10	Test register hotel halal by uploading a JPEG file as the picture of the hotel	<ol style="list-style-type: none"> 1. Fill in all fields except picture 1 field 2. Upload JPEG files at the upload picture field 3. Click the “add hotel” button 	The hotel registration is successful and the user will be directed to the list of hotel registration pages.
TC_03-11	Test register hotel halal by uploading a PNG	<ol style="list-style-type: none"> 1. Fill in all fields except picture 1 field 	The hotel registration is successful, and the

	file as the picture of the hotel	<ol style="list-style-type: none"> 2. Upload PNG files at the upload picture field 3. Click the “add hotel” button 	user will be directed to the list of hotel registration pages.
TC_03-12	Test the registered application by entering a hotel name of less than 5 character	<ol style="list-style-type: none"> 1. Fill in all fields except the hotel name field 2. Insert hotel name less than 5 characters in the hotel name field 3. Click the “add hotel” button 	an alert will show to indicate user to fill in name more than 5 alphabets
TC_03-13	Test the registration hotel by entering the hotel name of more than 50 words	<ol style="list-style-type: none"> 1. Fill in all fields except the hotel name field 2. Insert hotel name more than 50 characters in the hotel name field 3. Click the “add hotel” button 	An alert will show to indicate user to fill in the name less than 50 words

Table 6.15 Update Applicant details Module

Test Case ID	TC_04
Test Case Name	Update Applicant details
Actor	Hotel Applicant, Tour Place Applicant
Description	<p>This test case allows the tester or user to demonstrate the updated applicant details module by following a few test cases and steps. This testing aims for the system to function well with all the possibilities that users might have while updating the applicant's details.</p> <p>To start the testing, the tester or user needs to:</p> <ol style="list-style-type: none"> 1. Login as a hotel Applicant or tour place applicant 2. Homepage of Applicant display. 3. Click the "Update profile" button <p>Then proceed with the following test case.</p>

Test Case	Description	Steps	Expected Result
TC_04-1	Test update the user details by inserting all fields correctly	<ol style="list-style-type: none"> 1. Insert and upload all the fields correctly. 2. Click the "Update Applicant" button 	The Applicant details will be successfully updated in the database.
TC_04-2	Test upload the profile picture with a file size larger than 5Mb.	<ol style="list-style-type: none"> 1. Upload a profile picture image that has size of more than 5Mb 	The system should show an alert "the file is too large!"

		2. Click the “Update Applicant” button	that will appear on the screen.
TC_04-3	Test Insert the email with the wrong format (e.g.,: missing ‘@’)	<ol style="list-style-type: none"> 1. Insert the email field with the wrong email format. 2. Click the “Update Applicant” button 	The form submission should fail with an error message that indicates the user to fill in the correct email format.
TC_04-4	Test with empty one of the fields.	<ol style="list-style-type: none"> 1. Leave the phone number or email field empty. 2. Click the “Update Applicant” button 	The form submission should fail with an error message that indicates the user to fill in the empty field.
TC_04-5	Test update the profile picture by uploading a JPG file	<ol style="list-style-type: none"> 1. Upload a jpg file as a new profile picture 2. Click the “update applicant” button 	The Applicant details will be successfully updated in the database.
TC_04-6	Test update the profile picture by uploading JPEG file	<ol style="list-style-type: none"> 1. Upload a jpg file as a new profile picture 2. Click the “update applicant” button 	The Applicant details will be successfully updated in the database.
TC_04-7	Test update the profile picture by uploading PNG file	<ol style="list-style-type: none"> 1. Upload a jpg file as a new profile picture 2. Click the “update applicant” button 	The Applicant details will be successfully updated in the database.

Table 6.16 Update hotel details Module

Test Case ID	TC_05
Test Case Name	Update Hotel details
Actor	Hotel Applicant
Description	<p>This test case allows the tester or user to demonstrate the update hotel details module by following a few tests case and step. To start the testing, tester or user needs to:</p> <ol style="list-style-type: none"> 1. Login as hotel Applicant 2. Homepage of Applicant display. 3. Click the “hotel details” button 4. Click the “update” button <p>Then proceed with the following test case.</p>

Test Case	Description	Step	Expected Result
TC_05-1	Test insert new hotel address in the hotel address field correctly	<ol style="list-style-type: none"> 1. Update the field correctly 2. Click the “Update Hotel” button 	The user should directly go to the list of registered hotels pages and see the update
TC_05-2	Test the system by leaving an empty field	<ol style="list-style-type: none"> 1. Delete or remove one of the fields to be empty 2. Click the “Update Hotel” button 	The user will notice an alert message that shows to fill in the form.
TC_05-3	Test update details with an image file	<ol style="list-style-type: none"> 1. Upload an image file with a size larger than 5Mb 	The form submission should fail with an error message

	exceeding the maximum allowed size which is 5Mb.	2. Click the “add hotel” button.	indicating the image file size exceeds the limit.
TC_05-4	Test hotel update with a no-image upload	1. Leave the “upload picture 1” until the “upload picture 5” fields are empty 2. Click the “add hotel” button.	The hotel will successfully update
TC_05-5	Test hotel update with only one image upload	1. Only upload 1 picture in image field 2. Click the “update hotel” button	The hotel will successfully update
TC_05-6	Test hotel updates with using the wrong email format (e.g.: missing ‘@’)	1. Insert a new email but with the wrong format email 2. Click the “add hotel button”	An alert will show to indicate that the user to filled in the right email format

Table 6.17 Search staff Module

Test Case ID	TC_06
Test Case Name	Search staff module
Actor	Superadmin
Description	<p>This test case allows the tester or user to demonstrate the Search staff module by following a few tests case and step. To start the testing, tester or user needs to:</p> <ol style="list-style-type: none"> 1. Login as Superadmin 2. The superadmin page displayed 3. Click the “manage staff” at navigation bar menu <p>Then proceed with the following test case.</p>

Test Case	Description	Steps	Expected Result
TC_06-1	Test search by Staff ID	<ol style="list-style-type: none"> 1. Insert number or staff ID to search staff at the search bar. 2. Click the “search” button 	The list of staff that have same number as the search ID will appear
TC_06-2	Test the search by entering alphabet or staff name	<ol style="list-style-type: none"> 1. Insert the alphabet or staff name at the search bar. 2. Click the “search” button 	No list of staff appears
TC_06-3	Test with an empty search bar	<ol style="list-style-type: none"> 1. Click the “search” button 	There will be no action

Table 6.18 add new staff module

Test Case ID	TC_07
Test Case Name	Add new staff module
Actor	Superadmin
Description	<p>This test case allows the tester or user to demonstrate the add new staff member module by following a few tests case and step. To start the testing, tester or user needs to:</p> <ol style="list-style-type: none"> 1. Login as superadmin 2. The superadmin page will appear 3. Click the “Manage staff” at navigation bar menu 4. Click the “add staff” button <p>Then proceed with the following test case.</p>

Test Case	Description	Step	Expected Result
TC_07-1	Test registration of new staff with all required fields filled correctly.	<ol style="list-style-type: none"> 1. Fill in all fields correctly 2. Click “add staff” button 	There will be an alert message that shows “new staff successfully register!” and directs to the list of staff page
TC_07-2	Test the system’s response to duplicate registrations by	<ol style="list-style-type: none"> 1. Fill in all required fields correctly 2. Fill in the email or identity card number 	“An account with this email or identity card number already

	entering existing email or identity card numbers.	that has been registered 3. Click the “Add staff” button	exists.” Prompt will appear
TC_07-3	Test add staff with empty fields.	1. Fill all and leave one of the fields empty 2. Click “add staff” button	The system should prompt users to fill in the ‘Name’ field. “Please fill in this field” required field message will appear
TC_07-4	Test the email without ‘@’	1. Fill all field correctly except email field. 2. Insert email field without ‘@’ 3. Click “add staff” button	“Please include an ‘@’ in the email address” required field message will appear
TC_07-5	Test registration with mismatched password and confirmation password fields.	1. Fill all field correctly except password field. 2. Insert confirm password field which is not the same with password field 3. Click “add staff” button	“Passwords do not match” warning will appear.
TC_07-6	Test registration with a short password (less than 8 characters).	1. Fill all field correctly except password field. 2. Insert password that less than 8 characters 3. Click “add staff” button	An alert will show “the new staff successfully registered!” and direct to list of staff

TC_07-7	Test with empty profile picture	<ol style="list-style-type: none"> 1. Fill all fields correctly except the profile picture field. 2. Leave the profile picture empty 3. Click “add staff” button 	An alert will show to indicate that the user to filled in the missing field
TC_07-8	Test with insert the name field with less than 5 alphabet	<ol style="list-style-type: none"> 1. Fill all fields correctly except the name field 2. Insert name less than 5 alphabet 3. Click “add staff” button 	An alert will show “Please enter name with more than 5 alphabet”
TC_07-9	Test adding staff member with insert the name field with more than 20 alphabet	<ol style="list-style-type: none"> 1. Fill all fields correctly except the name field 2. Insert the name more than 20 alphabet 3. Click “add staff” button 	An alert will show “Please enter name with less than 20 alphabet”
TC_07-10	Test upload image with a PNG file as a profile picture	<ol style="list-style-type: none"> 1. Fill all the fields correctly except the profile picture field. 2. Upload PNG files in the profile picture field 3. Click the “add staff” button 	There will be an alert message that shows “new staff successfully register!” and directs to the list of staff page
TC_07-11	Test upload image with a JPG file as a profile picture	<ol style="list-style-type: none"> 1. Fill all the fields correctly except the profile picture field. 2. Upload JPG files in the profile picture field 3. Click the “add staff” button 	There will be an alert message that shows “new staff successfully register!” and directs to the list of staff page

TC_07-12	Test upload image with a JPEG file as a profile picture	<ol style="list-style-type: none"> 1. Fill all the fields correctly except the profile picture field. 2. Upload JPEG files in the profile picture field 3. Click the “add staff” button 	There will be an alert message that shows “new staff successfully register!” and directs to the list of staff page
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Table 6.19 update status hotel registration module

Test Case ID	TC_08
Test Case Name	update status hotel registration
Actor	Hotel Verifier
Description	<p>This test case allows the tester or user to demonstrate the update hotel status registration module by following a few tests case and step. To start the testing, tester or user needs to:</p> <ol style="list-style-type: none"> 1. Login as Hotel Verifier staff 2. The Hotel verifier page will appear 3. Click one of the number of hotel application statuses on dashboard homepage 4. The list of hotel status based on status will shown <p>Then proceed with the following test case.</p>

Test Case	Description	Step	Expected Result
TC_08-1	Test update status by choosing “pending”	<ol style="list-style-type: none"> 1. Click the dropdown and choose “pending” 2. Click the “update” button 	Alert message “The application hotel status has updated!” will shown
TC_08-2	Test update status by choosing “accepted”	<ol style="list-style-type: none"> 1. Click the dropdown and choose “accepted” 2. Click the “update” button 	Alert message “The application hotel status has updated!” will shown
TC_08-3	Test update status by choosing “rejected” and fill the remark	<ol style="list-style-type: none"> 1. Click the dropdown and choose “rejected” 2. Fill in the remark field 3. Click the “update” button 	Alert message “The application hotel status has updated!” will shown
TC_08-4	Test update status by choosing “rejected” and leaving the remark field empty	<ol style="list-style-type: none"> 1. Click the dropdown and choose “rejected” 2. Fill in the remark field 3. Click the “update” button 	An alert message will pop up for user to fill in the remarks

Table 6.20 review module

Test Case ID	TC_09
Test Case Name	review module
Actor	Tourist
Description	<p>This test case allows the tester or user to demonstrate the review module by following a few test cases and steps. To start the testing, the tester or user needs to:</p> <ol style="list-style-type: none"> 1. At homepage, click the “Tourism” button 2. The list of attraction place will shown 3. Click the “view details” <p>Then proceed with the following test case.</p>

Test Case	Description	Step	Expected Result
TC_09-1	Test the review by insert all field correctly	<ol style="list-style-type: none"> 1. Insert all field correctly 2. Click the “submit review” button 	The review was successful and will shown at the page
TC_09-2	Test the review by leave the email empty	<ol style="list-style-type: none"> 1. Insert all fields correctly except email field 2. Leave the email field empty 3. Click the “submit review” button 	An alert will popup to user to fill in the form
TC_09-3	Test the review by inserting	<ol style="list-style-type: none"> 1. Insert all fields correctly except the email field 	An alert will show to user to insert the

	wrong email format	<ol style="list-style-type: none"> 2. Insert the email field with the wrong email format 3. Click the “submit review” button 	correct email format
TC_09-4	Leave the review description field empty	<ol style="list-style-type: none"> 1. Insert all fields correctly 2. Leave the review description blank 3. Click the “submit review” button 	An alert will popup to user to fill in the form
TC_09-5	Leave the rating blank	<ol style="list-style-type: none"> 1. Insert all fields correctly 2. Leave the rating blank 3. Click the “submit review” button 	The review was successful and will shown at the page

Table 6.21 Register tour place module

Test Case ID	TC_10
Test Case Name	Register tour place module
Actor	Tour place applicant
Description	<p>This test case allows the tester or user to demonstrate register tour place module made by tour place applicant by following a few test cases and steps. To start the testing, the tester or user needs to:</p> <ol style="list-style-type: none"> 1. Login as tour place applicant 2. Homepage tour place displayed 3. Click the “register tour place” button

	Then proceed with the following test case.
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Test Case	Description	Step	Expected Result
TC_10-01	Test tour place application with all required fields filled correctly.	1. Fill in all the fields correctly (e.g.: correct format) Click “add tour place” button.	The tour place should be registered successfully when all required information is provided correctly.
TC_10-02	Test tour place registration with duplicate tour place name.	1. Fill in all the fields correctly (e.g.: correct format) 2. Insert tour place name field that has been registered 3. Click “add tour place” button.	An alert message "The tour place is already registered!" should be displayed, and the registration should fail.
TC_10-03	Test tour place registration with an empty tour place name field.	1. Fill in all field correctly 2. Leave Hotel name field empty. 3. Click the “add hotel” button.	The system should prompt users to fill in the tour place field with a message: “Please fill in this field.”
TC_10-04	Test tour place registration with an invalid email format (e.g., missing '@').	1. Fill in all the fields correctly except the email 2. Insert the email without '@' 3. Click the “add tour place” button.	The system should display an error message: “Please include an '@' in the email address.”

TC_10-05	Test hotel registration with incorrect tour place address.	<ol style="list-style-type: none"> 1. Fill in all the fields correctly except tour place address field. 2. Insert the address tour place field with random place address. 3. Click “add tour place” button. 	The system should prompt users with a message: “Please provide a valid address.”
TC_10-06	Test tour place registration with no image upload to upload picture field	<ol style="list-style-type: none"> 1. Fill in all fields except upload image 1 until image 5 2. Leave the “upload picture 1” until “upload picture 5” fields empty 3. Click “add tour place” button. 	A prompt message will appear to fill in the blank
TC_10-7	Test tour place registration by only uploading one picture	<ol style="list-style-type: none"> 1. Fill in all fields except picture 1 field 2. Leave the picture 1 field empty 3. Click the “add tour place” button 	A prompt message will appear to fill in the blank and the user needs to fill in all blank field
TC_10-8	Test register tour place by uploading a JPG file as the picture of the tour place	<ol style="list-style-type: none"> 1. Fill in all fields except picture 1 field 2. Upload JPG files at the upload picture field 3. Click the “add tour place” button 	The hotel registration is successful and the user will be directed to the list of tour place registration pages.
TC_10-09	Test register tour place by	<ol style="list-style-type: none"> 1. Fill in all fields except picture 1 field 	The tour place registration is

	uploading a JPEG file as the picture of the tour place	<ol style="list-style-type: none"> 2. Upload JPEG files at the upload picture field 3. Click the “add tour place” button 	successful and the user will be directed to the list of tour place registration pages.
TC_10-10	Test register tour place by uploading a PNG file as the picture of the hotel	<ol style="list-style-type: none"> 1. Fill in all fields except picture 1 field 2. Upload PNG files at the upload picture field 3. Click the “add tour place” button 	The hotel registration is successful, and the user will be directed to the list of tour place registration pages.
TC_10-11	Test the registered application by entering a tour place name of less than 5 character	<ol style="list-style-type: none"> 1. Fill in all fields except the hotel name field 2. Insert tour place name less than 5 characters in the hotel name field 3. Click the “add tour place” button 	An alert will show to indicate user to fill in the name field more than 5 alphabet
TC_10-12	Test the registration tour place by entering the tour place name of more than 50 words	<ol style="list-style-type: none"> 1. Fill in all fields except the tour place name field 2. Insert tour place name more than 50 characters in the tour place name field 3. Click the “add tour place” button 	An alert will show to indicate user to fill in the name less than 50 alphabet
TC_10-13	Test insert less than 10 words in	<ol style="list-style-type: none"> 1. Fill in all fields except the description field 	an alert will show to indicate user to fill

	the description field	2. Insert the description of place in less than 10 words 3. Click the “add tour place” button”	in more than 10 words
TC_10-14	Test insert the description field more than 100 words	1. Fill in all the fields correctly except the description field 2. Insert the description of place more than 100 words.	an alert will show to indicate user to fill in less than 100 words

6.4.2 Test Data

The test data is data which has been especially recognized for usage in tests, normally of a PC program. Test data may be recorded for re-use or used once and after that overlooked. Table 6.22 until Table 6.31 shows the test data.

Table 6.22 Test Data Login

Test Data ID	Test Case ID	Test Data	
		Email	Password
TD_01-1	TC_01-1	syu@gmail.com	abc@1234
TD_01-2	TC_01-2	syu	abc@1234
TD_01-3	TC-01_3	syu@gmail.com	abcdefg
TD_01-4	TC-01_4		

Table 6.23 Test Data Registration Module (Applicant)

Test Data ID	Test Case ID	Test Data					
		Name	Email	Identity card	password	Confirm password	Profile picture
TD_02-1	TC_02-1	AISHAH BINTI AHMAD	aishah@gmail.com	010502-05-7899	abc@1234	abc@1234	img.png
TD_02-2	TC_02-2	AISHAH BALQIS BINTI AHMAD	aishah@gmail.com	990121-05-7856	xyz@1234	xyz@1234	Img2.png
TD_02-3	TC_02-3		Kiki@gmail.com	991214-05-9666	abc@1234	abc@1234	Img3.png
TD_02-4	TC_02-4	MUHD BIN AHMAD	muhdgm.ai.com	010314-05-7897	abc@1234	abc@1234	Img4.png
TD_02-5	TC_02-5	MUHD BIN AHMAD	muhd@gmail.com	010314-05-7897	abc@1234	abc@1234	Img4.png
TD_02-6	TC_02-6	MUHD BIN AHMAD	muhd@gmail.com	010314-05-7897	abcdefg	abcdefg	Img4.png
TD_02-7	TC_02-7	MUHD BIN AHMAD	muhd@gmail.com	010314-05-7897	abc@1234	xyz@1234	Img4.png
TD_02-8	TC_02-8	MUHD BIN AHMAD	muhd@gmail.com	010314-05-7897	abc	abc	Img4.png
TD_02-9	TC_02-9	MUHD BIN AHMAD	muhd@gmail.com	010314-05-7897	abc@1234	abc@1234	File.pdf
TD_02-10	TC_02-10	MUHD	muhd@gmail.com	010314-05-7897	abc@1234	abc@1234	Img.png
TD_02-11	TC_02-11	MUHD AIMAN	muhd@gmail.com	010314-05-7897	abc@1234	abc@1234	Img.png

		HAFISZUD DINNNNNN NNNNNNN NNNNNNN NN BIN AHMADDD DDDDDDDD DDDDDDDD DDDDDDDD DDDDDDDD					
TD_02-12	TC_02-12	ADI DIN AHMAD	adi@gm ail.com	010314-05- 4561	abc@123 4	abc@1234	Img.jpg
TD_02-13	TC_02-13	ADI DIN AHMAD	adi@gm ail.com	010314-05- 4561	abc@123 4	abc@1234	Img.jpeg
TD_02-14	TC_02-14	ADI DIN AHMAD	adi@gm ail.com	010314-05- 4561	abc@123 4	abc@1234	Img.png
TD_02-15	TC_02-15	ADI DIN AHMAD	adi@gm ail.com	010314-05- 4561	abc@123 4	abc@1234	Img.gif

Table 6.24 Test Data for Hotel Application

Test Data ID	Test Case ID	Test Data				
		Hotel Name	Place address	email	File	Picture
TD_03-1	TC_03-1	Klana Hotel	Klana hotel, Batu 48, 74500, Port Dickson	Klana@resort.com	Halal.pdf	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png Picture 5: pic5.png
TD_03-2	TC_03-2	Klana Hotel	Klana hotel, Batu 50, 74500, Port Dickson	Klana@resort.com	Halal.pdf	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png Picture 5: pic5.png
TD_03-3	TC_03-3		Klana hotel, Batu 50, 74500, Port Dickson	Klana@resort.com	Halal.pdf	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png

						Picture 5: pic5.png
TD_03-4	TC_03-4	Klana Hotel	Klana hotel, Batu 50, 74500, Port Dickson	Klanaresort.com	Halal.pdf	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png Picture 5: pic5.png
TD_03-5	TC_03-5	Klana Hotel	Klana hotel, Port Dickson	Klana@resort.com	Halal.pdf	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png Picture 5: pic5.png
TD_03-6	TC_03-6	Klana Hotel	Klana hotel, Port Dickson	Klana@resort.com	Halal.pdf	
TD_03-7	TC_03-7	Klana Hotel	Klana hotel, Port Dickson	Klana@resort.com		Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png

						Picture 5: pic5.png
TD_03-8	TC_03-8	Klana Hotel	Klana hotel, Port Dickson	Klana@resort.com	Halal.pdf	Picture 1: pic1.png Picture 2 : Picture 3: Picture 4: Picture 5:
TD_03-9	TC_03-9	Klana Hotel	Klana hotel, Batu 48, 74500, Port Dickson	Klana@resort.com	Halal.pdf	Picture 1: Pic1.jpg Picture 2 : pic2.jpg Picture 3: pic3.jpg Picture 4: pic4.jpg Picture 5: pic5.jpg
TD_03-10	TC_03-10	Klana Hotel	Klana hotel, Batu 48, 74500, Port Dickson	Klana@resort.com	Halal.pdf	Picture 1: Pic1.jpeg Picture 2 : pic2.jpeg Picture 3: pic3.jpeg Picture 4: pic4.jpeg Picture 5: pic5.jpeg
TD_03-11	TC_03-11	Klana Hotel	Klana hotel, Batu 48, 74500, Port Dickson	Klana@resort.com	Halal.pdf	Picture 1: Pic1.png Picture 2 : pic2.png

Table 6.25 Test Data for Update Applicant details

Test Data ID	Test Case ID	Test Data		
		Profile Picture	Phone Number	Email
TD_04-1	TC_04-1	Img.png (4MB)	014-8569566	john@gmail.com
TD_04-2	TC_04-2	Img.png (6MB)		
TD_04-3	TC_04-3	Img.png (4MB)		
TD_04-4	TC_04-4			johngmail.com
TD_04-5	TC_04-5	Img.jpg (4MB)		
TD_04-6	TC_04-6	Img.jpeg (4MB)		
TD_04-7	TC_04-7	Img.png (4MB)		

Table 6.26 Test Data for update hotel details module

Test Data ID	Test Case ID	Test Data					
		Hotel name	Hotel address	email	Phone number	file	Picture
TD_05-1	TC_05-1	Mawar Hotel	Mawar Hotel, sikamat, 71000 seremban, Negeri Sembilan	mawar@gmail.com	0-7895666	Halal.pdf	Picture 1: pic1.png Picture 2: pic2.png Picture 3: pic3.png

							picture 4: pic4.png picture 5: pic5.png
TD_0 5-2	TC_0 5-2	Maw ar Hotel	Mawar Hotel, sikamat,71 000 seremban, Negeri Sembilan	mawar @gmail. com		Halal.p df	Picture 1: pic1.png Picture 2: pic2.png Picture 3: pic3.png picture 4: pic4.png picture 5: pic5.png
TD_0 5-3	TC_0 5-3						Picture 1: pic1.png (6MB) Picture 2: Picture 3: picture 4: picture 5:
TD_0 5-4	TC_0 5-4	Maw ar Hotel	Mawar Hotel, sikamat,71 000 seremban, Negeri Sembilan	mawar @gmail. com	0- 789566 6	Halal.p df	
TD_0 5-5	TC_0 5-5						Picture 1: pic1.png
TD_0 5-6	TC_0 5-6			mawarg mail.co m			

Table 6.27 Test Data for Search Staff

Test Data ID	Test Case ID	Test Data
		Search ID
TD_06-1	TC_06-1	11
TD_06-2	TC_06-2	Ahmad
TD_06-3	TC_06-2	

Table 6.28 Add new staff

Test Data ID	Test Case ID	Test Data					
		Name	Email	Identity card number	Password	Confirm Password	Profile picture
TD_07-1	TC_07-1	SARAH BINTI AHMAD	sarah@gmail.com	010514-05-7898	123456789	123456789	Img.png
TD_07-2	TC_07-2	SITI SARAH BINTI AHMAD	sarah@gmail.com	01017-05-6966	123456789	123456789	Img.png
TC_07-3	TC_07-3	ADI BIN AHMAD		010317-05-9887	123456789	123456789	Img.png
TC_07-4	TC_07-4	ADI BIN AHMAD	Adigmail.com	010317-05-9887	123456789	123456789	Img.png
TC_07-5	TC_07-5	ADI BIN AHMAD	Adi@gmail.com	010317-05-9887	123456789	abcdefg	Img.png

TC_07-6	TC_07-6	ADI BIN AHMAD	Adi@gmail.com	010317-05-9887	1234	1234	Img.png
TC_07-7	TC_07-7	ADI BIN AHMAD	Adi@gmail.com	010317-05-9887	123456789	123456789	
TC_07-8	TC_07-8	ADI	Adi@gmail.com	010317-05-9887	123456789	123456789	Img.png
TC_07-9	TC_07-9	ADII AIMAN IZZAT NASEEM BIN AHMAD HAFISZUD DIN NUQMAN DANIEL	Adi@gmail.com	010317-05-9887	123456789	123456789	Img.png
TC_07-10	TC_07-10	SARAH BINTI AHMAD	sarah@gmail.com	010514-05-7898	123456789	123456789	Img.png
TC_07-11	TC_07-11	SARAH BINTI AHMAD	sarah@gmail.com	010514-05-7898	123456789	123456789	Img.jpg
TC_07-12	TC_07-12	SARAH BINTI AHMAD	sarah@gmail.com	010514-05-7898	123456789	123456789	Img.jpg

Table 6.29 Test data for update hotel application status

Test Data ID	Test case ID	Test Data	
		Status	Remarks
TD_08-1	TC_08-1	Pending	
TD_08-2	TC_08-2	Accepted	
TD_08-3	TC_08-3	Rejected	Invalid Halal file
TD_08-4	TC_08-4	Rejected	

Table 6.30 Test data for review place

Test Data ID	Test Case ID	Test Data		
		Email	Review Description	Rating
TD_09-1	TC_09-1	siti@gmail.com	Best place	5
TD_09-2	TC_09-2		Good	5
TD_09-3	TC_09-3	Adigmail.com	Good	5
TD_09-4	TC_09-4	adi@gmail.com		5
TD_09-5	TC_09-5	adi@gmail.com	good	

Table 6.31 Test data for register tour place

Test Data ID	Test Case ID	Test Data				
		Tour place Name	Place address	email	Description	Picture
TD_10-1	TC_10-1	Klana sanctuary	Klana Sanctuary, Batu 48, 74500, Port Dickson	Klana @gmail.com	Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png

						Picture 5: pic5.png
TD_1 0-2	TC_10- 2	Klana sanctuar y	Klana Sanctuary, Batu 48, 74500, rembau	Klana @gma il.com	Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png Picture 5: pic5.png
TD_1 0-3	TC_10- 3		Klana Sanctuary, Batu 48, 74500, Port Dickson	Klana @gma il.com	Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png Picture 5: pic5.png
TD_1 0-4	TC_10- 4	Klana sanctuar y	Klana Sanctuary, Batu 48, 74500, Port Dickson	Klana gmail. com	Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png Picture 5: pic5.png

TD_1 0-5	TC_10- 5	Klana sanctuar y	sdsdsd	Klana @gma il.com	Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png Picture 5: pic5.png
TD_1 0-6	TC_10- 6	Klana sanctuar y	Klana Sanctuary, Batu 48, 74500, rembau	Klana @gma il.com	Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids	
TD_1 0-7	TC_10- 7	Klana sanctuar y	Klana Sanctuary, Batu 48, 74500, rembau	Klana @gma il.com	Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids	Picture 1: Pic1.png Picture 2 : Picture 3: Picture 4: Picture 5:
TD_1 0-8	TC_10- 8	Klana sanctuar y	Klana Sanctuary, Batu 48, 74500, rembau	Klana @gma il.com	Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids	Picture 1: Pic1.jpg Picture 2 : pic2.jpg Picture 3: pic3.jpg Picture 4: pic4.jpg

						Picture 5: pic5.jpg
TD_1 0-9	TC_10- 9	Klana sanctuar y	Klana Sanctuary, Batu 48, 74500, rembau	Klana @gma il.com	Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids	Picture 1: Pic1.jpeg Picture 2 : pic2.jpeg Picture 3: pic3.jpeg Picture 4: pic4.jpeg Picture 5: pic5.jpeg
TD_1 0-10	TC_10- 10	Klana sanctuar y	Klana Sanctuary, Batu 48, 74500, rembau	Klana @gma il.com	Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png Picture 5: pic5.png
TD_1 0-11	TC_10- 11	Klana sanctuar y	Klana Sanctuary, Batu 48, 74500, rembau	Klana @gma il.com	Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png Picture 5: pic5.png

						Picture 4: pic4.png Picture 5: pic5.png
TD_10-14	TC_10-14	Klana sanctuary	Klana Sanctuary, Batu 48, 74500, rembau	Klana @gmail.com	<p>Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids</p> <p>Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids</p> <p>Klana sanctuary is a place with lots of animal and insect that suitable for every family and kids</p>	Picture 1: Pic1.png Picture 2 : pic2.png Picture 3: pic3.png Picture 4: pic4.png Picture 5: pic5.png

6.4.3 Test Result and Analysis

This area defines the output of every test performed for the Negeri Sembilan Tourism and Hotel Halal Management System. Tests at every level ought to incorporate check of access control and system gauges, usefulness, and slip forms. Table 6.32 until table 6.41 demonstrate the test outcome and investigation.

Table 6.32 Test Result and Analysis for Login Module

Module/Component: Login		Result		
Test Case ID	Test Data ID	Description	Pass	Failed
TC_01-1	TD_01-1	valid username and password	√	
TC_01-2	TD_01-2	invalid incorrect username	√	
TC_01-3	TD_01-3	invalid incorrect username	√	
TC_01-4	TD_01-4	empty fields.	√	

Table 6.33 Test Result and Analysis for Registration Applicant

Module/Component: Registration applicant		Result		
Test Case ID	Test Data ID	Description	Pass	Failed
TC_02-1	TD_02-1	Fill required field correctly.	√	
TC_02-2	TD_02-2	Fill the required field by entering existing email or identity card number.	√	
TC_02-3	TD_02-3	empty fields.	√	
TC_02-4	TD_02-4	Test the email without '@'	√	
TC_02-5	TD_02-5	Fill the email without '.com'	√	
TC_02-6	TD_02-6	Fill password with all alphabet or numeric	√	
TC_02-7	TD_02-7	Test with mismatch password	√	

TC_02-8	TD_02-8	Fill the password with less than 8 characters	√	
TC_02-9	TD_02-9	Upload profile picture with file format	√	
TC_02-10	TD_02-10	Fill in the name form with less than 6 alphabet	√	
TC_02-11	TD_02-11	Enter name more than 30 alphabet	√	
TC_02-12	TD_02-12	Upload JPG file as profile picture	√	
TC_02-13	TD_02-13	Upload JPEG file as profile picture	√	
TC_02-14	TD_02-14	Upload PNG file as profile picture	√	
TC_02-15	TD_02-15	Upload GIF file as profile picture	√	

Table 6.34 Test Result and Analysis for Hotel Registration

Module/Component: Hotel registration		Result		
Test Case ID	Test Data ID	Description	Pass	Failed
TC_03-1	TD_03-1	all required fields were filled correctly.	√	
TC_03-2	TD_03-2	Test hotel registration with duplicate hotel name.	√	
TC_03-3	TD_03-3	Empty hotel name field.	√	
TC_03-4	TD_03-4	invalid email format (e.g., missing '@').	√	
TC_03-5	TD_03-5	Incorrect hotel address	√	
TC_03-6	TD_03-6	No image upload	√	
TC_03-7	TD_03-7	No file halal upload	√	
TC_03-8	TD_03-8	Upload only one picture	√	

TC_03-9	TD_03-9	Upload picture as JPG file	√	
TC_03-10	TD_03-10	Upload picture as JPEG file	√	
TC_03-11	TD_03-11	Upload picture as PNG file	√	
TC_03-12	TD_03-12	Enter hotel name less than 5 character	√	
TC_03-13	TD_03-13	Enter hotel name more than 50 words	√	

Table 6.35 Test Result and Analysis for Update Applicant Details Module

Module/Component: update applicant details		Result		
Test Case ID	Test Data ID	Description	Pass	Failed
TC_04-1	TD_04-1	Insert all fields correctly	√	
TC_04-2	TD_04-2	Upload a file size of more than 5MB as a profile picture.	√	
TC_04-3	TD_04-3	Insert the wrong email format	√	
TC_04-4	TD_04-4	Test with an empty field	√	
TC_04-5	TD_04-5	Upload JPG file as profile picture	√	
TC_04-6	TD_04-6	Upload JPEG file as profile picture	√	
TC_04-7	TD_04-7	Upload PNG file as profile picture	√	

Table 6.36 Test result and analysis for Update hotel details module

Module/Component: update hotel details		Result		
Test Case ID	Test Data ID	Description	Pass	Failed
TC_05-1	TD_05-1	Insert all fields correctly	√	
TC_05-2	TD_05-2	Empty one field.	√	
TC_05-3	TD_05-3	Upload image file more than 5MB size	√	
TC_05-4	TD_05-4	Test with no image upload	√	
TC_05-5	TD_05-5	Upload only one image	√	
TC_05-6	TD_05-6	Use wrong format email	√	

Table 6.37 Test result and analysis for search staff module

Module/Component: Search staff		Result		
Test Case ID	Test Data ID	Description	Pass	Failed
TC_06-1	TD_06-1	Search staff by number or ID	√	
TC_06-2	TD_06-2	Enter alphabet or staff name	√	
TC_06-3	TD_06-3	Test with an empty search bar	√	

Table 6.38 test result and analysis for add new staff module

Module/Component: add new staff		Result		
Test Case ID	Test Data ID	Description	Pass	Failed
TC_07-1	TD_07-1	all required fields were filled correctly.	√	
TC_07-2	TD_07-2	Insert email or identity card number that already exist	√	

TC_07-3	TD_07-3	Test register staff with an empty field	√	
TC_07-4	TD_07-4	invalid email format (e.g., missing '@').	√	
TC_07-5	TD_07-5	Mismatch password and confirmation password field	√	
TC_07-6	TD_07-6	Insert password less than 8 characters	√	
TC_07-7	TD_07-7	Empty profile picture	√	
TC_07-8	TD_07-8	Enter name field less than 5 alphabet	√	
TC_07-9	TD_07-9	Enter name field more than 20 alphabet	√	
TC_07-10	TD_07-10	Upload picture as PNG file	√	
TC_07-11	TD_07-11	Upload picture as PNG file	√	
TC_07-12	TD_07-12	Upload picture as JPEG file	√	

Table 6.39 Test result and analysis of updated status hotel application

Module/Component: update status hotel application		Result		
Test Case ID	Test Data ID	Description	Pass	Failed
TC_08-1	TD_08-1	Choose “pending” status	√	
TC_08-2	TD_08-2	Choose “accepted” status	√	
TC_08-3	TD_08-3	Choose “reject” status and fill in remarks	√	
TC_08-4	TD_08-4	Choose “reject” status and leave blank remarks field	√	

Table 6.40 Test result and analysis of review

Module/Component: review		Result		
Test Case ID	Test Data ID	Description	Pass	Failed
TC_09-1	TD_09-1	Insert all fields correctly	√	
TC_09-2	TD_09-2	Leave the email empty	√	
TC_09-3	TD_09-3	Insert the wrong email format	√	
TC_09-4	TD_09-4	Leave blank the description field	√	
TC_09-5	TD_09-5	Leave the rating blank	√	

Table 6.41 Test result and analysis of register tour place module

Module/Component: register tour place		Result		
Test Case ID	Test Data ID	Description	Pass	Failed
TC_10-1	TD_10-1	all required fields were filled correctly.	√	
TC_10-2	TD_10-2	Test hotel registration with duplicate tour place name.	√	
TC_10-3	TD_10-3	Empty tour place name field.	√	
TC_10-4	TD_10-4	invalid email format (e.g., missing '@').	√	
TC_10-5	TD_10-5	Incorrect tour place address	√	
TC_10-6	TD_10-6	No image upload	√	
TC_10-7	TD_10-7	Upload only one picture	√	
TC_10-8	TD_10-8	Upload picture as JPG file	√	
TC_10-9	TD_10-9	Upload picture as JPEG file	√	
TC_10-10	TD_10-10	Upload picture as PNG file	√	
TC_10-11	TD_10-11	Enter tour place name less than 5 character	√	

TC_10-12	TD_10-12	Enter hotel name more than 50 character	√	
TC_10-13	TD_10-13	Insert description field less than 10 words	√	
TC_10-14	TD_10-14	Insert description field more than 100 words	√	

6.5 Usability Testing

The usability testing approach for the system involved gathering feedback through a Google Form survey, allowing users to share their experiences and insights after interacting with the system. This method is a user-centric approach designed to evaluate the effectiveness, efficiency, and overall satisfaction of users as they navigate the system. By utilizing a Google Form, the feedback collection was streamlined, accessible, and easy for users to participate in.

Users were likely asked to reflect on various aspects of their experience, such as the ease of use, navigation, interface design, and any challenges they encountered. This feedback helps identify potential areas for improvement, ensuring that the system meets the users' needs and expectations. The Google Form provided structured questions, which allowed for both quantitative data (e.g., ratings) and qualitative data (e.g., comments), giving a comprehensive view of user satisfaction and areas that may require enhancement.

This approach helps to gather real-world insights directly from the end-users, providing valuable data to refine and optimize the system. The feedback collected through the form is essential for making data-driven decisions to improve usability and enhance the user experience.

6.5.1 User Acceptance testing

User Acceptance Testing (UAT) is the final phase of the software testing process, where real users test the system to ensure it meets their requirements and functions as expected in real-world scenarios. UAT is conducted after all other testing

phases (like unit, integration, and system testing) have been completed, and it typically involves end-users or stakeholders who will be using the software in their daily operations.

For the Negeri Sembilan Tourism and Hotel Halal Management System, User Acceptance Testing (UAT) would involve evaluating the system from the perspective of its real-world users, which may include administrators, hotel operators, and tourists. This testing phase is crucial to ensure that the system fulfills its intended purpose of managing halal-certified hotels and tourist attractions in Negeri Sembilan.

6.5.1.1 Criteria and Factor

In the User Acceptance Testing (UAT) of the Negeri Sembilan Tourism and Hotel Halal Management System, several key factors have been considered to ensure the system meets the expectations and needs of its users. Here is a general explanation of each factor:

1. Security

Security is a critical factor in ensuring that the system protects user data and sensitive information. For this system, security measures might involve encryption, secure authentication protocols, and role-based access control, ensuring that only authorized users can perform specific actions, such as managing hotel data or user accounts.

2. Ease of use

Ease of use refers to how intuitive and user-friendly the system is for end-users. This involves the design of the interface, the simplicity of navigation, and the overall user experience. A system with high ease of use allows users to accomplish their tasks efficiently without extensive training or frustration. This is essential for a tourism and hotel management system where users might include tourists, hotel staff, and administrators with varying levels of technical expertise.

3. Usefulness

Usefulness measures how well the system meets the practical needs of its users. For a system to be useful, it must provide valuable features and functionalities that align with the objectives of its users. In the context of this system, it could involve effectively listing halal-certified hotels, tourist attractions, and providing relevant information that supports the tourism and hospitality industry in Negeri Sembilan. If the system helps users achieve their goals, it is considered useful

4. Self-efficacy

Self-efficacy relates to the confidence users have in their ability to use the system effectively. It addresses the extent to which users believe they can complete tasks successfully without assistance. A system that promotes self-efficacy empowers users by providing clear instructions, help features, and feedback, allowing them to feel capable and competent while using the system. This can be particularly important in ensuring that users do not feel overwhelmed by the technology.

5. Attitude

Attitude refers to the overall perception and feelings that users have toward the system. Positive attitudes are cultivated by a system that not only works efficiently but also provides a pleasant user experience. Factors that influence attitude include the system's design, responsiveness, reliability, and how it meets user expectations. A positive attitude toward the system can lead to greater user satisfaction, higher adoption rates, and more consistent use.

6.5.2 Questionnaire and result of UAT

The User Acceptance Testing (UAT) for the Negeri Sembilan Tourism and Hotel Halal system involved collecting feedback from end-users to assess the system's effectiveness and gather insights on user experience. To achieve this, a Google Form was used to solicit responses from 15 participants. This approach aimed to evaluate various aspects of the system's performance and user satisfaction.

The questionnaire system was conducted to gather detailed feedback from three distinct user groups: tourists, hotel and tour place applicants, and staff members. Each user group was given a set of tailored questions designed to reflect their specific interactions with the system. For tourists, questions focused on the ease of finding and viewing halal hotels and tourist attractions. Hotel and tour place applicants were asked about the registration process, including the usability of forms and clarity of instructions. Staff members provided feedback on administrative functions such as managing applications and updating statuses.

Figure 6.1 until Figure 6.3 show the summary of the age, gender, and user category of respondent who run the system and give their feedback based on their experience.

The bar chart in Figure 6.1 shows the age distribution of 15 respondents to a questionnaire. The majority of respondents are 23 years old (60%), followed by a small number of respondents in each of the other age groups (19, 23, 24, 26, 30, and 35). This indicates that the questionnaire was completed by a relatively young group of individuals, with a significant concentration in the early twenties. However, the data also suggests a diverse age range among the participants, as there are respondents from several different age groups.

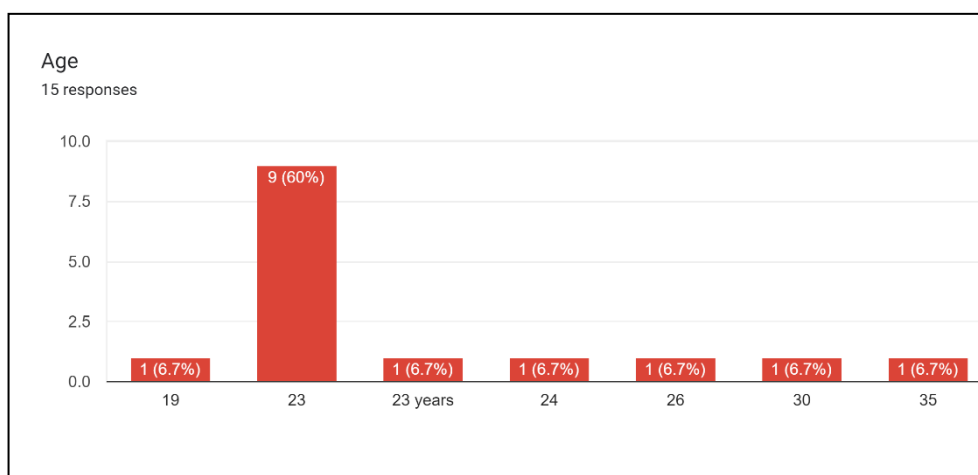


Figure 6.1 Graph of respondents' age

The pie chart in Figure 6.2 illustrates the gender distribution of 15 respondents to a questionnaire. 60% equivalent to 9 people of the respondents identified as female, while 40% or 6 people identified as male. This indicates a slightly higher proportion of female participants compared to male participants in the survey.

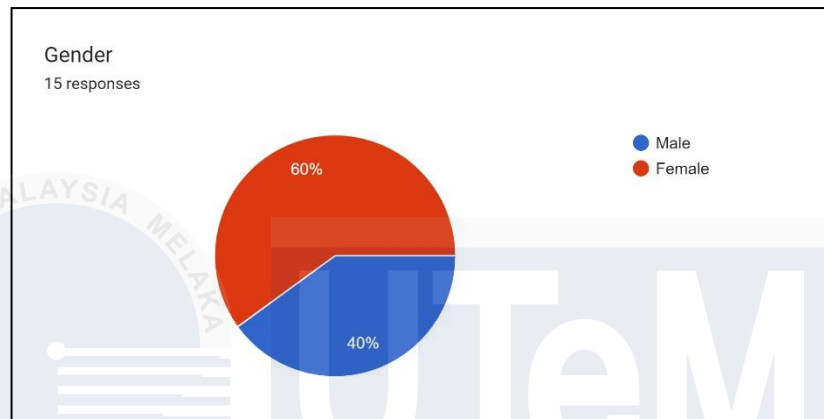


Figure 6.2 Pie chart of Gender

The pie chart in Figure 6.3 represents the distribution of respondents based on their roles in the system's User Acceptance Testing (UAT). Out of 15 total respondents, the majority were tourists, accounting for 73.3% (11 respondents). Applicants or hotel/place owners comprised 20% of the respondents (3 respondents), while staff members made up the smallest group at 6.7% (1 respondent). This data highlights that the primary users of the system are tourists, followed by applicants, with minimal participation from staff members in the testing phase. The feedback gathered from these groups helps ensure that the system meets the needs of its diverse user base effectively.

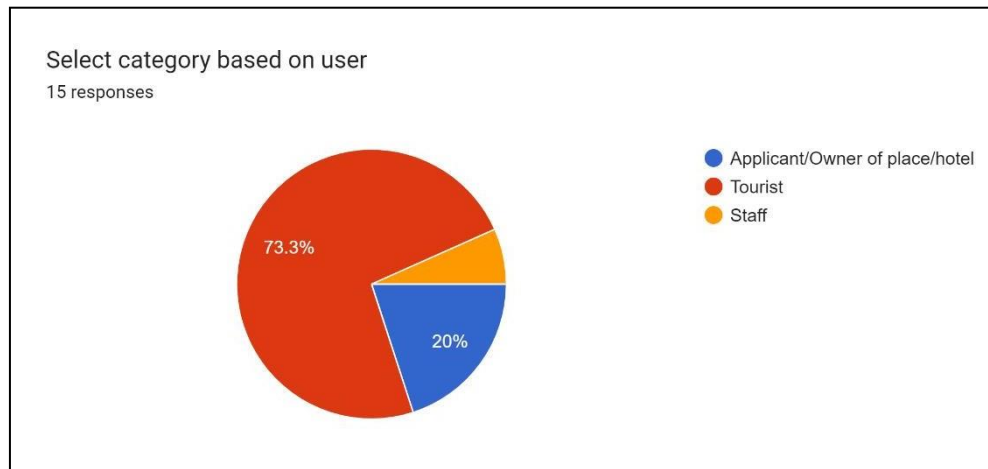


Figure 6.3 pie chart based on category user

6.5.2.1 Tourist

For the tourist questionnaire, there were 5 questions in total. Out of these, 4 were multiple-choice questions, and 1 was an open-ended question requiring a detailed response. The questionnaire received 11 responses specifically from tourists. This survey aimed to gather comprehensive feedback on various aspects of the Negeri Sembilan Tourism and Hotel Halal Management System from the tourist perspective, including ease of use, overall satisfaction, and suggestions for improvement. Figure 6.5 until figure 6.7 are the result from 11 respondents.

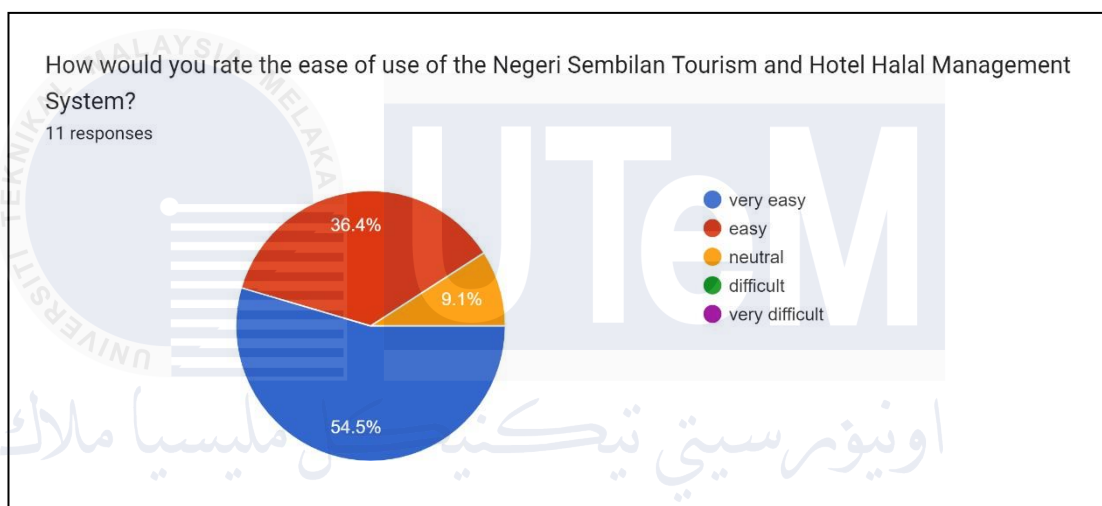


Figure 6.4 pie chart for question 2 tourist

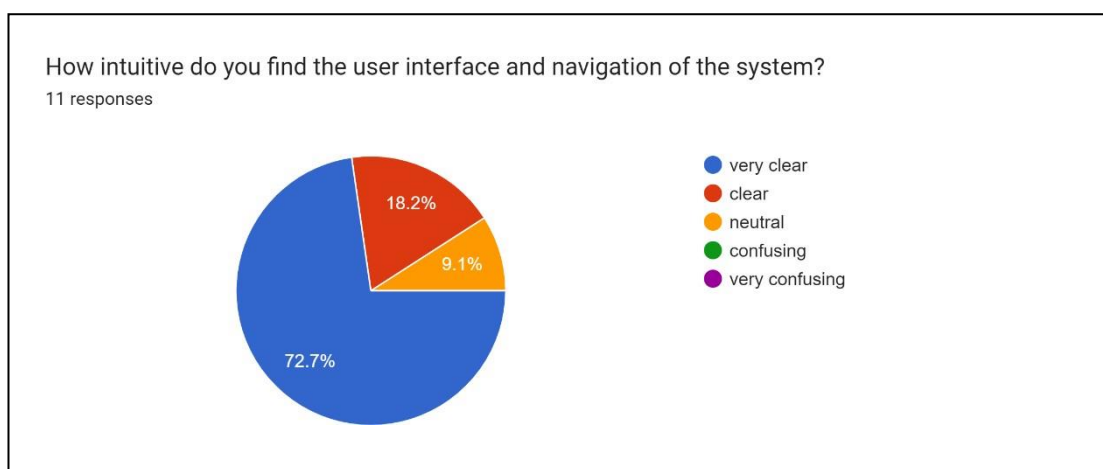


Figure 6.5 Result Question for tourist

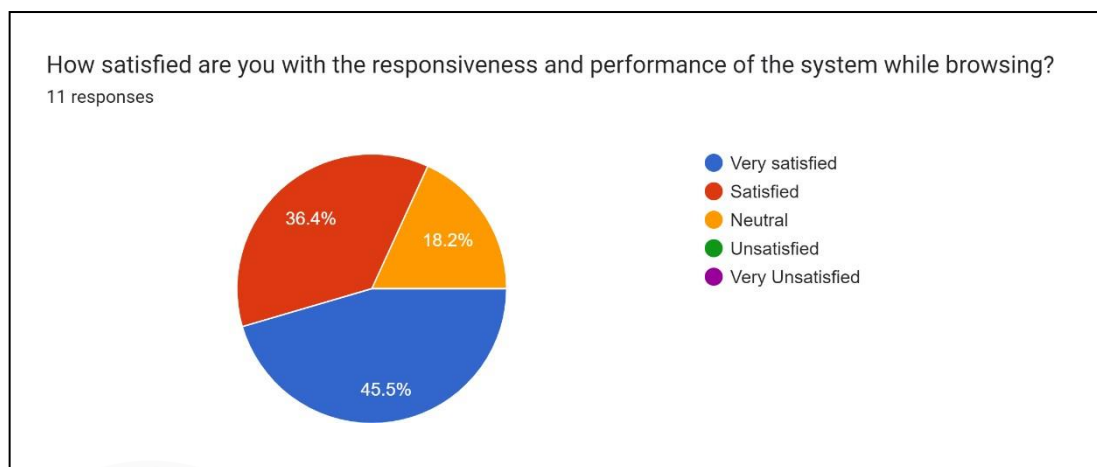


Figure 6.6 pie chart question 3 touris



Figure 6.7 pie chart for question 4 tourist

What features or improvements would you like to see in the system for a better user experience?

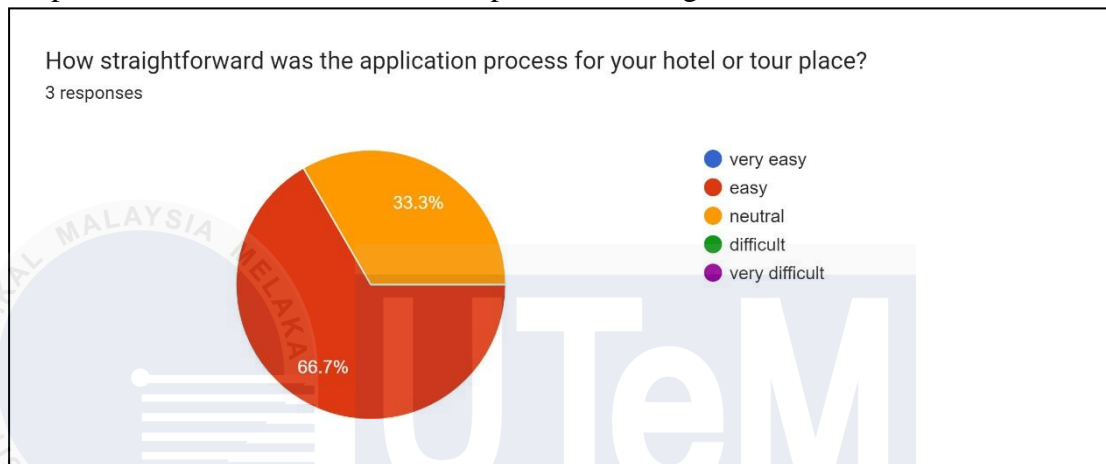
8 responses

- everything okey
- Insert Augmented Reality (AR) elements to introduce the places
- It will be interesting in the future the system show and suggest the best restaurant popular in N9
- maybe Google maps yang 3D tu
- Good
- hope can improve then better
- None
- Update the system

Figure 6.8 open question for tourist

6.5.2.2 Hotel / Tour Place applicant

For the hotel/tour place applicant questionnaire, there were 5 questions in total. Out of these, 4 were multiple-choice questions, and 1 was an open-ended question requiring a detailed response. The questionnaire received 3 responses specifically from hotel/tour place applicant. This survey aimed to gather comprehensive feedback on various aspects of the Negeri Sembilan Tourism and



Hotel Halal Management System from the tourist perspective, including ease of use, overall satisfaction, and suggestions for improvement. Figure 6.9 until Figure 6.13 were the list of question and result of the questionnaire.

Figure 6.9 questionnaire 1 for hotel/tour place applicant

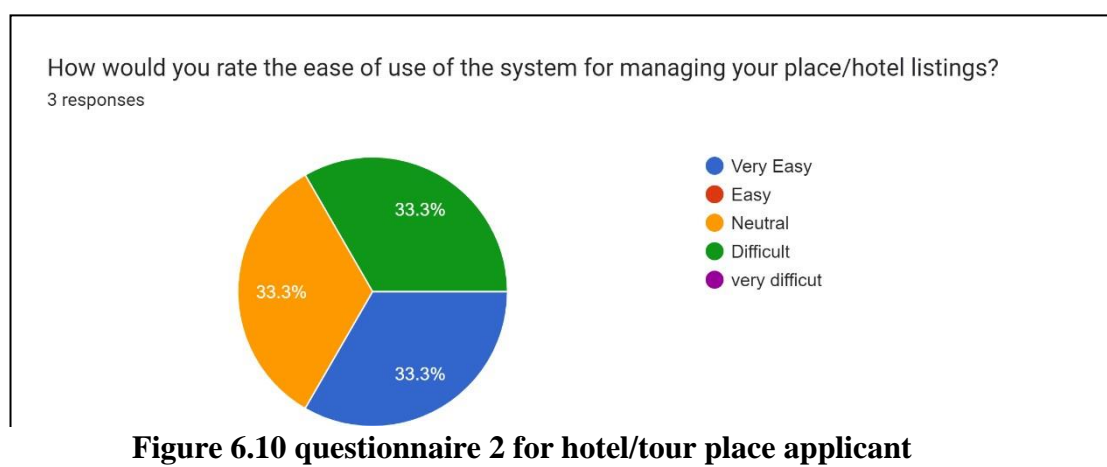


Figure 6.10 questionnaire 2 for hotel/tour place applicant

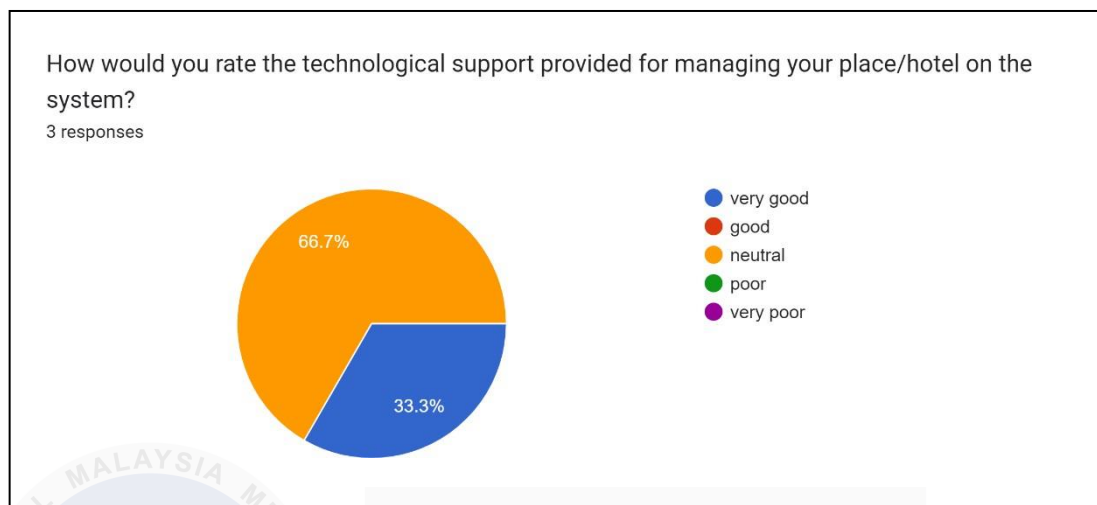


Figure 6.11 questionnaire 3 for hotel/tour place applicant

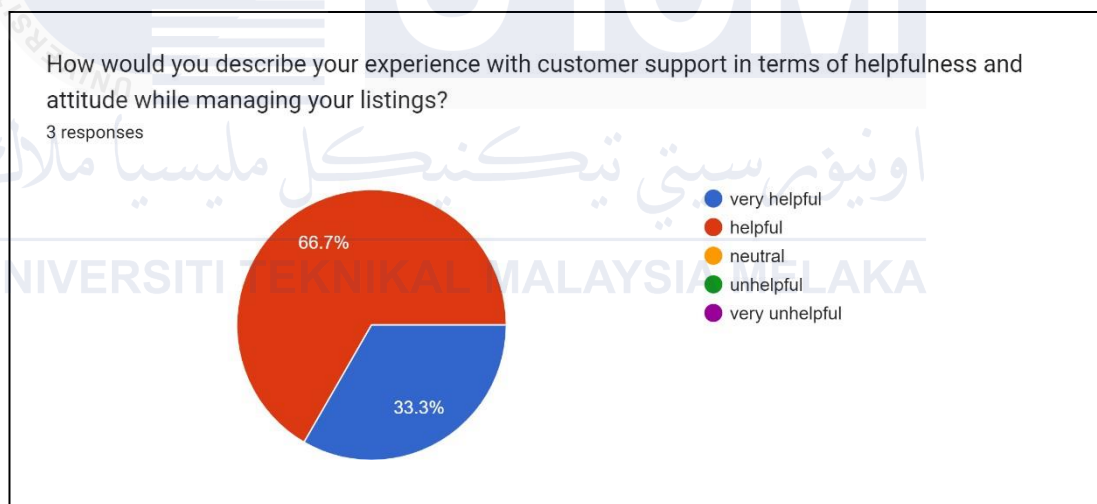


Figure 6.12 questionnaire 4 for hotel/tour place applicant

What features or improvements would you like to see in the system to better manage your place/hotel?

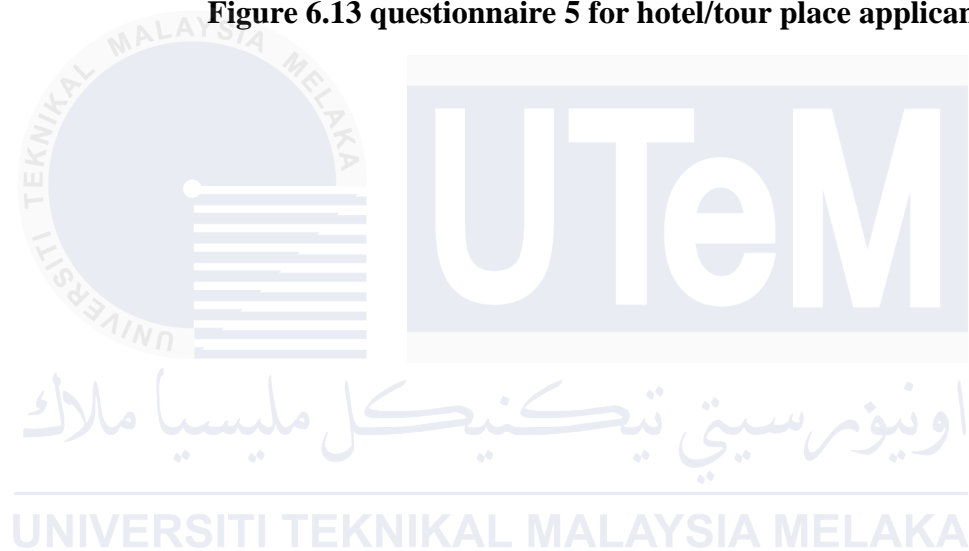
3 responses

no

Seamless Booking Integration which is I'd love a system that automatically syncs bookings from all platforms to our website, OTAs like Booking.com and Expedia, and walk-ins to prevent overbookings and ensure real-time availability updates.

cust can view room availability via online

Figure 6.13 questionnaire 5 for hotel/tour place applicant



6.5.2.3 Staff

For the staff questionnaire, there were 4 questions in total. Out of these, 3 were multiple-choice questions, and 1 was an open-ended question requiring a detailed response. The questionnaire received only one responses specifically from staff. This survey aimed to gather comprehensive feedback on various aspects of the Negeri Sembilan Tourism and Hotel Halal Management System from the staff perspective, including ease of use, overall satisfaction, and suggestions for improvement. Figure 6.14 until Figure 6.16 were the list of question and result of the questionnaire.

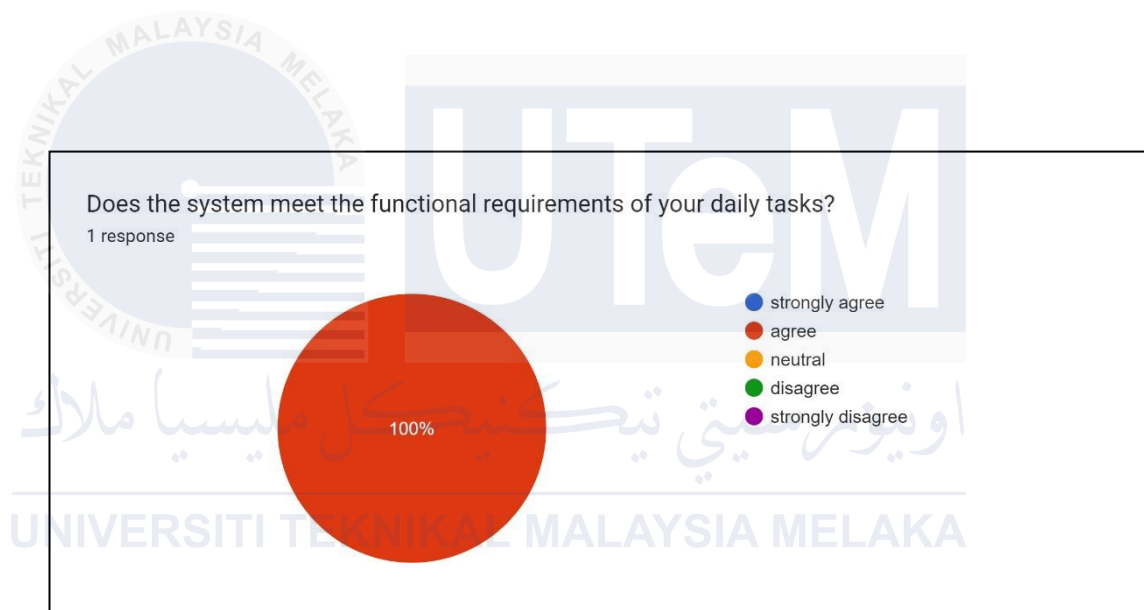


Figure 6.14 Questionnaire 1 for staff

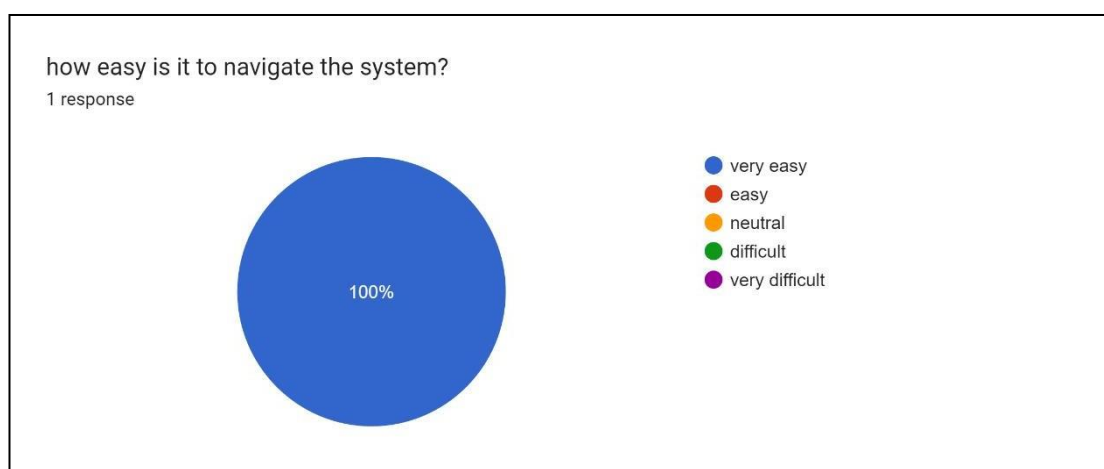


Figure 6.15 Questionnaire 2 for staff



Figure 6.17 Questionnaire 3 for staff

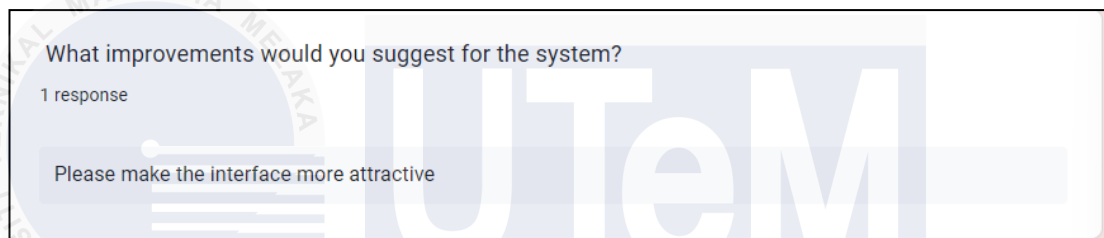


Figure 6.16 open question and answer for staff

6.5.3 Strength and weakness

i. Strength of the system

1. **Focus on Halal Tourism:** The system is tailored specifically for halal tourism, catering to a growing market segment that seeks halal-certified hotels and services. This specialization makes it a valuable tool for Muslim travelers and supports the halal tourism industry in Negeri Sembilan.
2. **Comprehensive Information:** The system provides detailed listings of halal-certified hotels and tourist attractions. This centralized information helps users easily find relevant accommodations and activities without needing to search through multiple sources.

3. **User-Friendly Interface:** The system is designed with ease of use in mind, ensuring that users can navigate through the platform effortlessly. Clear navigation and a straightforward user interface contribute to a positive user experience.

ii. Weakness of the system

1. **Lack of Advanced Features:** The system does not include advanced features like a booking system, payment gateway, or tour guide integration. These are key functionalities that could enhance the overall user experience and make the system more competitive with other tourism platforms.
2. **No Real-Time Data Integration:** The system might not offer real-time data updates, such as hotel availability or live tourist attraction status. This limitation can reduce the effectiveness of the system, especially for users who rely on up-to-date information for planning their trips.
3. **Potential for User Overload:** If the system presents too much information at once or lacks efficient organization, users could become overwhelmed. A cluttered interface or insufficient categorization might lead to difficulties in finding relevant information quickly.

6.6 Conclusion

Software testing is the most essential part in programming improvement in light of the fact that the engineer need to test the structure with the veritable customer to get the outcome of yield whether system is run properly or not. In the occasion that have some slip or disillusionment from customer, the fashioner need to modify that bumble also do the test again in coming up testing method.

Other section is the conclusion. This section wills instructions about perception on shortcomings and quality. In additional, here finishing part will characterize about recommendations for development and commitment.



CHAPTER 7: CONCLUSION

7.1 Observation of Weakness and Strengths

The Negeri Sembilan Tourism and Hotel Halal Management System is a robust platform that focuses on promoting halal tourism within the region. By providing comprehensive information about halal-certified hotels and tourist attractions, it ensures that Muslim travelers can easily find accommodations and places to visit that align with their religious beliefs. The system's emphasis on halal certification enhances trust and credibility, attracting a growing segment of tourists seeking halal-friendly travel options. Additionally, the system's clear categorization and user-friendly interface make it easy for users to navigate and find relevant information quickly, contributing to a positive user experience.

Despite its strengths, the system has some notable limitations. One significant drawback is the absence of a booking system. Without the ability to make reservations directly through the platform, users must visit external websites or contact the hotels and attractions separately, which can be inconvenient and time-consuming. Additionally, the system lacks a tour guide feature, which could provide valuable assistance to tourists seeking organized tours or personalized itineraries. This omission limits the platform's utility for travelers who prefer guided experiences. As a result, while the system serves as a useful directory of halal-friendly options, it falls short in offering a comprehensive travel planning and booking experience.

7.2 Proposition for Improvement

Several key improvements can be considered to enhance the functionality and user experience of the Negeri Sembilan Tourism and Hotel Halal Management System. Firstly, integrating a booking system would significantly improve the platform's utility, allowing users to make reservations for hotels and attractions directly through the website. This integration would streamline the booking process, making it more convenient for users and potentially increasing overall user engagement and satisfaction.

Adding a tour guide feature would provide users with the option to book guided tours, offering detailed itineraries and packages covering various tourist attractions within Negeri Sembilan. This feature would cater to tourists seeking structured and informative travel experiences, thus enriching their visit. Additionally, improving the search functionality by adding advanced filters would help users find specific hotels or attractions based on their preferences, such as price range, location, amenities, and user ratings, making it easier for them to locate exactly what they are looking for.

Implementing a user review and rating system would provide valuable insights to prospective tourists, allowing users to share their experiences and rate the hotels and attractions they visit. This can build a community of trust and offer practical information to future visitors. Developing a mobile application could greatly increase accessibility and convenience for users, allowing them to access information and make bookings on the go. Features such as offline access to saved information and GPS-based navigation to attractions could further enhance the app's utility.

7.3 Contribution

The Negeri Sembilan Tourism and Hotel Halal Management System offers significant contributions to its users, hotel administrators, and the local tourism industry. For users, the system enhances their experience by providing easy access to halal tourism information, such as halal-certified hotels and tourist attractions. Its user-friendly interface ensures that both locals and tourists can navigate the system with ease, enabling them to make informed decisions effortlessly. The system also streamlines the hotel registration process for hotel owners, allowing them to register and update their listings with minimal effort.

Moreover, the system ensures that users have access to reliable and up-to-date information. Transparency in halal certification builds trust among users, particularly those who prioritize halal services, while detailed information about tourist attractions helps travelers plan their trips effectively. All data is verified by the Superadmin, ensuring that only accurate information is displayed. Hotel owners benefit from administrative control over their profiles and hotel listings, with the ability to manage and update their information as needed, creating an efficient communication channel between them and the Superadmin.

The Super admin's role is also enhanced through improved tools for hotel verification and supervision. The system allows for the management of hotel registrations, staff members, and the verification of halal status, maintaining high service standards. Additionally, the Super admin can monitor user activities, ratings, and hotel performance through detailed reports, enabling data-driven decisions to improve tourism services in Negeri Sembilan.

This system also supports the local tourism industry by promoting Negeri Sembilan as a prime destination for halal-conscious travelers, contributing to the growth of local businesses and attracting more visitors. By focusing on halal tourism, the system reinforces the region's position as a leader in this niche market. Verified listings of halal-certified establishments increase user trust, providing a safer environment for travelers. Furthermore, transparent user reviews and ratings allow future travelers to make well-informed decisions based on real experiences. Overall, the system strengthens the halal tourism sector in Negeri Sembilan and positively impacts both the tourism industry and its users.

7.4 Conclusion

In conclusion, the Negeri Sembilan Tourism and Hotel Halal Management System serves as a comprehensive platform that enhances the halal tourism experience in Negeri Sembilan. By providing easy access to verified information on halal-certified hotels and tourist attractions, the system empowers users to make informed decisions while fostering transparency and trust. The system also simplifies the administrative tasks for hotel owners and Superadmins, ensuring efficient management of hotel registrations and user data. Ultimately, this project supports the growth of halal tourism in the region, benefiting both travelers and local businesses.

However, this system still has several lacks or weaknesses in certain parts. Next, even though all objectives were achieved, there are still certain parts that need some improvement for the system in the future.

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