SMART AID FOR SHOPPER

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SMART AID FOR SHOPPER

NURHIDAYAH BINTI MOHD LAZIM

This report is submitted in partial fulfillment of the requirements for the Bachelor of [Computer Science (Software Development)] with Honours.

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2021

DECLARATION

I hereby declare that this project report entitled

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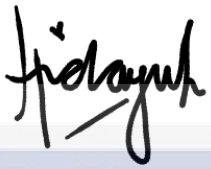

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DEDICATION

In the name of Allah, the Almighty and the most Merciful

Firstly, I would like to express my heartfelt gratitude to my beloved parents, who have always been by my side and have been my backbone from the time I was a child till now, for the endless support and encouragement that both of you have given to me. Last but not least, there is nothing I can do to compensate all of your efforts and sacrifices. But, I hope that the graduation graduate scroll in my hands may make you proud and elevate your dignity as a parents who have tried your best to give the finest towards me.

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ACKNOWLEDGEMENTS

My deepest gratitude goes to my supervisor, Dr. Ummi Rabaah for her guidance, advice and constructive comments on project development process, requirement specification and so forth. She also provides a lot of feedback to me during the report writing which increase the overall quality of this project. I would also like to take this opportunity to say thank you to all my friends who has always been giving me support in anything I'm focusing on and for helping me out in the system design for helping me coding and solve the bugs happened in my system. Their helps are truly appreciated. Lastly and definitely not easily forgotten my sincere gratitude and appreciation go to my beloved parents who have been giving me support and motivation throughout my project. I could not have completed these things effectively without the help of everyone. As everyone is aware, being a degree-seeking student is not an easy process. However, with the presence of a loved one, it could give me the strength and enthusiasm to continue this study successfully.

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ABSTRACT

Smart Aid for Shopper System (SAFSS) is an online system designed to help shoppers identify products location more quickly and correctly in a supermarket. Furthermore, it makes it easy for shoppers to evaluate the expense of a need more sensibly. In addition, compared to the manual method, SAFSS advances the critical products management system in a more ordered, efficient, and systematic manner. This system has two users: administrator and shopper. Consumers can avoid wasting a significant amount of time at the store while also contributing to the congestion of many other shoppers. In addition, the system is responsive which it can fit in any devices.

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ABSTRAK

Smart Aid for Shopper System (SAFSS) adalah sistem dalam talian yang direka untuk membantu pembeli mengenal pasti lokasi produk dengan lebih cepat dan betul di pasar raya. Selain itu, memudahkan pembeli menilai perbelanjaan keperluan dengan lebih bijak. Di samping itu, dibandingkan dengan kaedah manual, SAFSS memajukan sistem pengurusan produk kritikal dengan cara yang lebih teratur, cekap, dan sistematik. Sistem ini mempunyai dua pengguna: pentadbir dan pembeli. Pengguna dapat mengelakkan membuang banyak masa di kedai sambil menyumbang kepada kesesakan banyak pembeli lain. Di samping itu, sistem ini responsif yang dapat dimuat di mana-mana peranti.

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LIST OF ABBREVIATIONS

FYP	**-**	**Final Year Project**
SAFSS	**-**	**Smart Aid for Shopper System**
SCM	**-**	**Software Configuration Management**
UML	**-**	**Unified Modeling Language**

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Chapter 1: INTRODUCTION

1.1 Introduction

Shopping for our daily needs is an essential part of life. Shopping service are one of important things in a store that offering advice or assistance with shopping. Therefore, shopping services becomes one of the crucial part for shopper. Unfortunately, it is an aspect that many shoppers struggle with, and ultimately end up doing poorly in finding the exact location for a certain product item. The purpose of developing the Smart Aid for Shopper system is to ease shopper in their shopping. Which is, this system providing the exact location of the product item to a shopper. It is a straightforward and user-friendly system that users can access via any devices.

1.2 Problem Statements

Problem statements that has been identified are:

- Shopper have problem in finding to detect certain product's location.
- Shoppers have a problem with inadvertently overspending in the supermarket.

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1.3 Objectives

The objectives of this project system are:

- To assist shopper, save time and energy by providing shopper to know the exact location of the product item.
- To assist shopper in budgeting their goods from overspend by providing calculation that will calculate total spending.
- To test developed web-based application.

1.4 Scope

There are totally six modules are being built for this system:

1) Admin Management

- Create, update, add, delete and display the details of product.
- Register for new selected admin.

2) Products Management

- Update the products details.

3) Authentication

- Shopper registration to log into the system.
- Shopper log into the system.
- Admin log in to the system.

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4) Search product location

- Search product location to ease shoppers

5) Shop List

- To add product to a temporary shop list for easy budgeting.
- Adding product can be made by product search.

6) Graph Analysis

- To assist admin, by viewing the monthly product report in a selected category.

There are two target users:

1) Admin

- Able to control overall of the system. Also can create, add, update, and delete products data provided in the system.

2) Shopper

- Able to search product, check product price and calculate total products that have been added into the list.

1.5 Project Significance

This project application is developed to gives a lot benefits to the shopper due to it ease the shopper in shopping things. Where it provides for shoppers to know the exact location of the product, saving time and helps shopper from overspend.

1.6 Expected Output

Smart Aid for Shopper System (SAFSS) will be developed that shopper could locate the exact location of the product item. Also, it allows shopper to add goods in shop list to calculate total budgeting. Admin can add, update and delete product items.

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1.7 Conclusions

In conclusion, this chapter explained briefly about the project system, the scope of this application including project objective, problem statement and the expected output.

CHAPTER 2: LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

Literature reviews were done based on the surveyed of the previous scenario. The review covered on concept and theory which it will be used in generating Smart Aid for Shopper System(SAFSS). Literature review is showing the research that related to the project topic. The meaning of literature review is a critical look of existing research that significant to the works that are carried out. It is one of the crucial part because it shows the project's target.

This chapter contains all the research that has been done on the previous scenario. All weaknesses on the current scenario were identified in order for this project to overcome and the strength of the existing system are identified and studied so that it can be implemented in the system.

The methodology consists of several phases as guidelines that are to be achieved. The project requirements such as software and hardware, for the project development are determined. The project milestone from the start until the delivery phase are also will be brief and list in this chapter. The milestone and Gant chart is important as a guideline to ensure the project can be finishing according to the schedule and plan.

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2.2 Fact and Findings

Basically, fact and finding is a discovery of fact or accurate information. Generally, in terms of fact and findings, there are no further studies or articles related that can be an example to follow when built this system. In this section, it conveys about the fact scenario previously, to find out the strength and weaknesses of the system. There are some drawbacks that can be found by using the questionnaire method with several individuals.

2.2.1 Domain

The Smart Aid for the Shopper System will be used at any supermarket available. The current scenario easily leads to the problem. The SAFSS is one of crucial things in shopping lifestyle due to it assist shopper to find an exact way to the product item.

As we can see, Smart Aid for Shopper is a simple and convenient system that ease the shoppers. The aim of this system to be develop for shopper to help in finding their goods location exactly. Also, allows shopper to budget their goods from overspend in the supermarket. Besides, to help shopper in comparing the price of a certain product with another product. Other than that, the system assist admin to manage their product with efficiently and properly. The development of the system is to expect improvement on the shopping and the product services.

2.2.2 Existing System

In fact, there are no such system like this before has been presented so far. The majority of them are more concerned with the sale of merchandise. However, there are no features available to assist shoppers in finding where the product is placed more accurately and can save shoppers time.

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Looking at the results from questionnaire and previous scenario when shopping, shoppers manually search for product items by following the signboards provided. However, they were unable to locate certain product item accurately. So, they need to ask nearby employees to facilitate and expedite their movement. Therefore, using this system can overcome such problems.

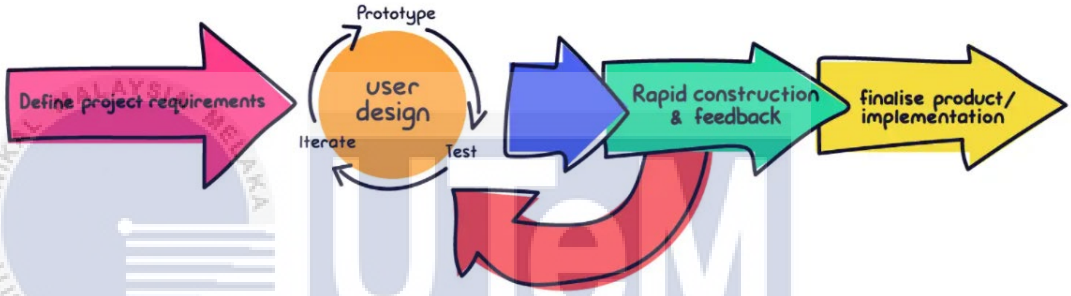
Developing this system will avoid shoppers from wasting time in the supermarket for hours. For example, finding a goods in a supermarket takes time compared to a consumer who already knows where it is. Also, with detailed info about the product such as the price of the product can help the shopper to compare prices between products. Thus, the shopper can determine the items that need to be purchased more quickly. By using this system, it can help shoppers more effectively while reducing congestion caused by a large number of shoppers in supermarkets. Lastly, the

system allows the administrator to handle all product items in a more organized and seamless manner by categorizing the product item in a selected category.

2.2.3 Technique

There are several approaches can be uses in this project. The first approach is observation. The observation is the primary techniques where we observe the scenario before developing the system. In addition, questionnaire is one of techniques that we used for information gathering during system analysis phase of a system development.

2.3 Project Methodology



Generally, Rapid Application Development methodology are used in this project. A rapid application development approach has a plethora of benefits for both software developer and clients. There is an increase in productivity when speed and agility are prioritized, which improves project results and allows for delivery in a matter of days or weeks. Other than that, RAD is the ability to change requirements at any point in the development cycle. It consists of four phase which are define project requirements, where defining a loose set of project requirements, equivalent to what would be accomplished during project scoping in traditional development cycles. This planning stage is brief-emphasizing a higher priority on prototype iterations-but critical to the ultimate success of a project.

Second, is prototype. After a project has been scoped, start to develop the first models and prototypes. The objective is to create a functioning design that can be shown to the client as soon as possible. To guarantee that the client's demands are satisfied, developers collaborate with them until a final product is ready. This phase is

frequently repeated as the project progresses. During the early stages of prototyping, it is typical for developers to cut corners in order to deliver a functional product that is acceptable to the product owner. Through prototyping, the development team can easily evaluate the feasibility of complex components. As a result, software is more resilient, less prone to errors, and more well-structured for future design enhancements.

Third, is rapid construction where application coding, system testing, and unit integration occurs, converting prototype and beta systems into a working model. This phase may be repeated as needed to accommodate additional components and changes. To progress the programmed fast, teams typically utilize low-code or rapid application development technologies.

Lastly is finalize product or implementation where developers handle the technical debt accumulated during early prototyping, optimizing implementation to enhance stability and maintainability as they finalize the product for launch. During the implementation phase, development teams deploy components to a live production environment, where full-scale testing and training may take place. Before confidently turning over a finished product to a shopper, teams produce detailed documentation and execute other essential maintenance activities.

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2.4 Project Requirements

2.4.1 Software Requirement

- Sublime Text 3 Editor
- MySQL phpMyAdmin
- XAMPP
- Star UML
- Microsoft Word