

TESIS STATUS APPROVEL FORM

JUDUL: Manufacturing Service Desk Online With FAQ

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Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

MANUFACTURING SERVICE DESK ONLINE WITH FAQ

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**This report is submitted in partial fulfillment of the requirement for the
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(SOFTWARE DEVELOPMENT)**

**FACULTY OF INFORMATION AND COMMUNICATIONS TECHNOLOGY
KOLEJ UNIVERSITI TEKNIKAL KEBANGSAAN MALAYSIA**

DECLARATION

I here by declare that this project report entitled
MANUFACTURING SERVICE DESK ONLINE WITH FAQ
is written by me and is my own effort and that no part has been plagiarized
Without citations.

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ABSTRACT

The proposed Manufacturing Service Desk Online with FAQ, also known as MSDOFAQ, is the title for the final semester project. MSDOFAQ is a web-based application that allows users to access the web and get information from there. The purpose of this system is to enable the Intel customer to file complaint via web. Apart from this module MSDOFAQ also provide search function, so the user can search solution for the problem by key in the name of the hardware. The user of the system also can view the graph to see performance of the department. Before the system was developed, literature review has been done to determine the scope, technologies, and the approach to be used. For the purpose of development, Rational Unified Process (RUP) was chosen as the methodology because it is not a rigid process but a process framework or meta-model. RUP process help to improve the existing process based on proven software engineering expertise and well supporter by industry leading tools. Minimum software, hardware and network requirements were identified in order for the system to run smoothly. Active Server Pages (ASP) is used to implement the application while Microsoft Access is used as its database. As a conclusion, the system is hoped to ease the task of the staffs at the center besides providing service to the Intel customer.

ABSTRACT

Manufacturing Service Desk Online with FAQ juga dikenali sebagai MSDOFAQ, merupakan tajuk untuk project semester akhir ini. MSDOFAQ merupakan sebuah aplikasi berasaskan web di mana pengguna boleh mendapat akses ke web serta memperoleh maklumat. Tujuan sistem ini adalah untuk membolehkan Intel pengguna mengemukakan aduan melalui web. Selain daripada ini, MSDOFAQ sistem juga membenarkan pengguna menggunakan *search function*, dimana pengguna perlu masukan *hardware name* dan memperoleh keputusan untuk perkataan tersebut. Pengguna juga dapat melihat prestasi MSD jabatan melalui graf. Sebelum sistem ini dibangunkan, *literature review* telah dijalankan untuk mengenalpasti skop, teknologi serta kaedah. Bagi tujuan pembangunan sistem ini, *Rapid Application Development (RAD)* dipilih sebagai metodologi kerana RUP merupakan proses framework. RUP akan memperbaiki proses yang sedia ada melalui penggunaan tools yang baik. . Keperluan perisian, perkakasan, serta rangkaian juga dikenalpasti bagi membolehkan sistem ini berjalan dengan lancar. *Active Server Pages (ASP)* digunakan untuk mengimplimentasikan sistem ini sementara *Microsoft Access* digunakan sebagai pangkalan data. Secara keseluruhan, sistem ini diharap dapat memudahkan tugas staf serta menawarkan perkhidmatan pusat ini kepada orang ramai.

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LIST OF ABBREVIATIONS

1. MSD Manufacturing Service Desk
2. RAM Random Access Memory
3. PSM Project Sarjana Muda.

CHAPTER I

INTRODUCTION

1.1 Project Background

Manufacturing Service Desk Online with FAQ is develop for Intel Company. This is a web-based application. This project is developed for the usage of the staff, Technical Support Engineer and the admin at the Manufacturing Service Desk department (MSD). The function of MSD department is to provide technical support to staff via phone with the right service attitudes. Support covers and not limited to first level call handling, problem solving and timely escalation to technical staff is required and will be responsible to ensure that there are no interruption to factory operations. The purpose of this project is providing service to staff via-email and web.

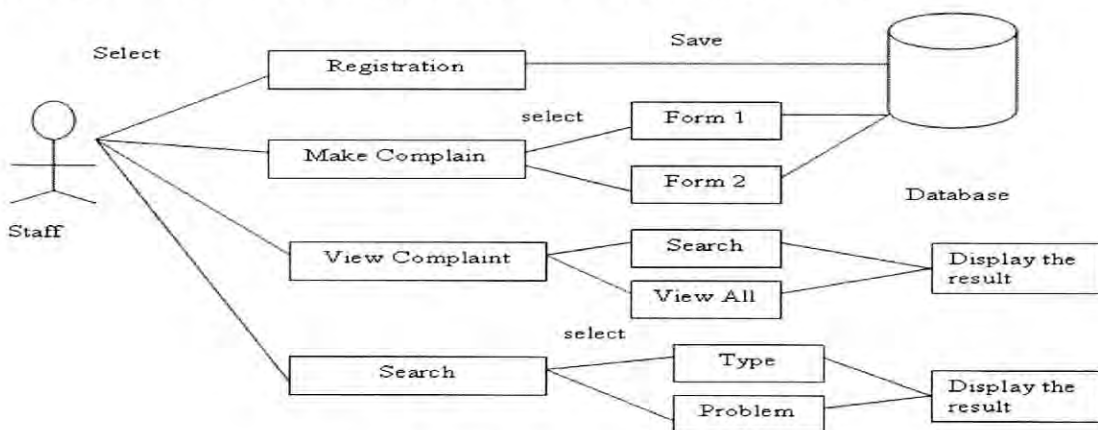


Figure 1.1: The process of the staff

This web helps staff to find the solution for the problem by searching the Type or Problem words. The result will be displayed once the user clicks the search button. The other function is the staff can states the problem in a form and submit to the staff in the MSD department. The web will provide with two type of forms .Form A to complaint about the hardware problem while Form B to request for hardware replacement. When the staffs make complaint in Form A, this page will display all the solution for the problem. If the staff do not satisfied with the solution, the can make New Complaint by click the new complaint button. Beside that staff can checking their complaint status by check the View Complaint. At here the will be provided with two option, whether user want to view all the complaint or search the complaint by the user name or type of the problem.

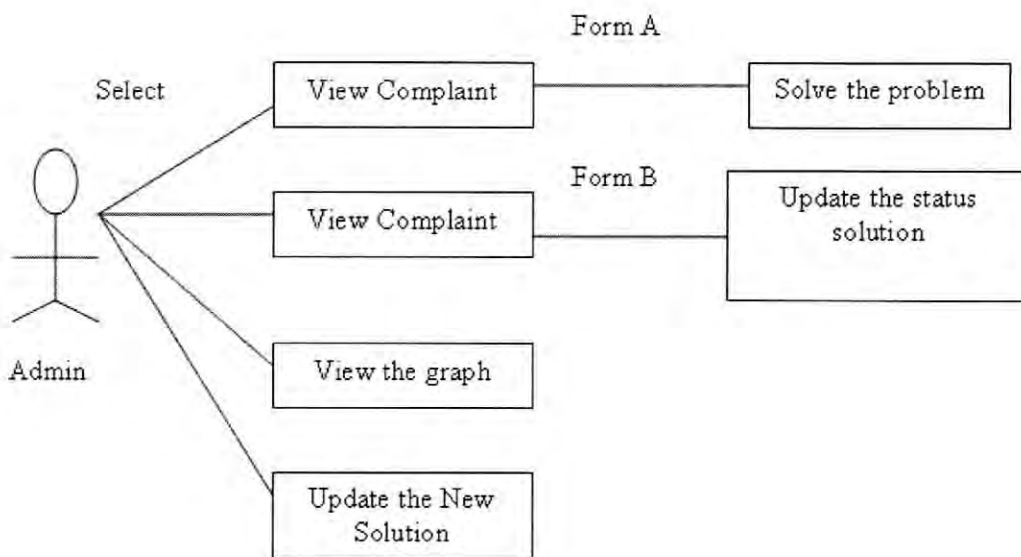


Figure 1.2: The process of the Admin

Figure 1.2 shows the process of the staff in the web site. Once the admin receives a complaint from the staff the admin will analyze the problem and states the solution in the form and update the form. In case the staff requires to change the hardware, so the admin need to update the status solution and submit to the technical support engineer to assign them to change hardware for the staff. The admin can view the graph to see the progress

of the department. Beside that the staff also will update the new solution for the FAQ process.

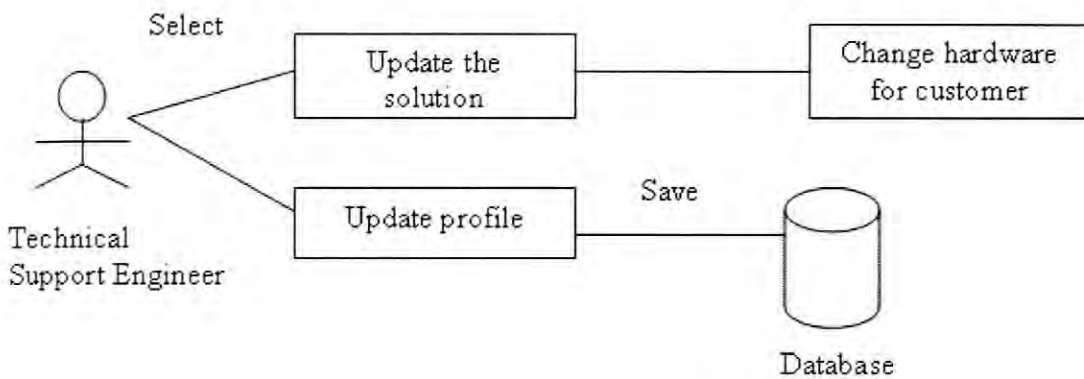


Figure 1.3: The process of the technical support engineer

Figure 1.3 shows the process of the technical support engineer. Through this web site technical support engineer update their personal information and receive the Form B complaints from the staff.

1.2 Problem Statements

The MSD department receive complaints from the customer regarding the system and hardware failure. The staff needs to handle the customer through via-phone. However, they face some problem with the current process to handle the customer.

- i. Very few staff
Difficult to handle customer. Because at one moment staff only able to handle one customer.

- ii. A lot abandon calls
This department getting more abandons calls because MSD staffs are very busy handle customers. When all the staff busy with other work and the staff never answer the calls ,it will record as abandon calls.
- iii. Do not have local database
MSD department doesn't have local database to store the customer and technical support engineer information.
- iv. Very difficult for staff to solve minor problem
The staff need to call the center if the face same problem as last time. This process will waste the time.
- v. No statistical data
Manager and staff find difficulty to see performance of the department because MSD department doesn't have proper indicator to show the performance of the department.

1.3 Objectives

- i. To create an on-line complaint services for the customer.
- ii. To deliver essential services and information to the customer and staffs via web.
- iii. To ease the tasks of processing complaint, extracting information, analyzing data and displaying data for customer, Technical Support Engineer and other staffs.
- iv. To create a FAQ function for the staff to get a quick solution.

1.4 Scope

The two main stakeholders of this custom information system to be developed are the client and the users. The client of this system will be the Intel of Manufacturing service desk. The users of this system are categorized into three types; the staff, technical support engineer and admin. The staff that will be using the service provided by the center, while the admin and technical support engineer will be admin at the center. There are a few functions will be performed by this application:

1) Registration

Before file any complaint the users need to register their particulars to create username and password.

2) Complaint the problem

The complaint will be submitted by the on-line complaint. Users have to login in order to fill in the form. They can decide whether to modify their personal particulars, to view their previous complaint or to file a new complain. The staff must be very careful whilst filling the form because the will be two forms will be provided.

- Form A to request for the hardware replacement.
- Form B to complaint about hardware.

The details of the submitted form will be stored in a database. As an admin, they can view the complaint received, and update its status. After processing the information and taking necessary actions, the admin will analyze the problem and states the solution in a form and update the form.

3) Extract, analyze data and display data through charts

This function can be viewed by the admin. Line graphs will be used to visually represent the data. These charts help the admin to monitor the progress of the MSD department

- 4) Staff who face problem in their hardware can find the solution by searching the type of hardware or problem in MSD web site. The web will display the solution using the provided keywords.
- 5) Technical support engineer must register if there are new employees for the department and update their personal profile .

1.5 Project Significance

The proposed system is developed for Intel staff, technical support engineer and MSD admin.

- i. Staff
 - Intel staff will use the web site to complaint about hardware problem.
 - Able to find solution by key in the word.
 - Easy to find the solution of the problem.
 - This web site will reduce abandon calls.
 - Get response immediately.
- ii. Technical Support Engineer
 - Use the web site to update their personal information.
 - Update the status of Form B.
- iii. Manufacturing Service Desk (MSD) admin
 - View the complaint of the entire customer and solve the problem.
 - Admin able to see performance of the department through the line graph.