



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SECP2523 – DATABASE

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INITIAL SYSTEM PROPOSAL
SPACE SYSTEM MANAGEMENT

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Stakeholder: KOLEJ VOKASIONAL PERDAGANGAN JOHOR BAHRU

Pn Mastura Md Hassan	15 December 2020
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Proposed System Background

1. Introduction

The purpose is to create a new system from the current system that is being used by Kolej Vokasional Perdagangan Johor Bahru. The client representative is Puan Mastura Binti Md Hassan. This new system is similar to the computerized system which is more efficient in record-keeping for staff use. Furthermore, the system is invented to avoid human error. With the built-in database (database user, asset, complaint), the record of complaints from users input can be taken far more quickly compared to manual processing. Users now can easily see the result of the data which is the compilation of complaints in the system. Especially for admin, they can review the data faster if they have any inquiries and to do some actions. The system goals are to satisfy client requirements and be able to solve the client's problems. Thus, the system will be more functional , reliable and more user friendly. In this system, there are 4 types of users that will be explained briefly in the next section.

2. The Existing System

The **current system** being used by the client is a paper document filing system where the Lab PIC should fill in the form in order to make a complaint on certain issues that occur in their room. However, according to the client's representative, nowadays most of the PIC of the room will fill in the complaint form by using google form where the admin will collect the complaints data from both platforms and merge it into one spreadsheet. There are several **problems** that have been faced by the client as they don't have an automated system (electronic filing) that will be proposed in this project. First and foremost, the current system lacks security. Paper document filing can be less secure than electronic filing systems since misplaced documents can easily be placed in the wrong hands. Other than that, the clients want their data of complaint to be placed in an upgraded system that is secure and easy to input any information regarding the complaint.

Moving on to the next issue where their current system used poorly designed data management to keep all of their user information and the complaint's record since they're using a spreadsheet. A spreadsheet seems to have several consequences such as lack of accessibility and speed, did not follow the standardized integrity rules and high risk of data redundancy. On the other hand, using a spreadsheet is very risky for misinterpretation to occur between the PICs and the assistants. This is because the entries are being conducted by humans where there is always room for misunderstanding. Everyone's mind thinks differently and understands things in different ways and the same goes for data entry.

Next, the current system takes up a lot of space. As a famous organization with a large number of employees, manual document filing might take up rooms just to fit the files in and may take up a lot of space to save the data in several hard disks. This also one of the consequences where the user should hunt down a file that piled up with another thousands of files. This is just one big headache that a user doesn't need. It interrupts the organization's productivity levels since the system is conducted by humans.

Last but not least, it's hard for the user to make any changes especially for the PIC on a certain room in undertaking the data entry process. For example, if the PIC has already made a complaint by using the paper filing system and he/she has to make a correction on the complaint,

he/she has to fill another form in order to correct any of the mistakes that has been made. And this problem could affect the assistant technician and engineers since the complaints that they had will be doubled than the real value. Thus, it will create a confusion amongst them while doing the repairing task.

3. The Proposed System

The system that we will be inventing is a system that could help to ease the client in managing especially the complaints and the user. The system consists of 4 users which are Admin, room PICs , Technician Assistant and Engineer Assistant.

The first function that will be included in the system is the **login and logout** function where every user (admin, PIC, Technician Assistant and Engineer Assistant) are able to perform or use the function. Next function is to **manage complaints** where every user (admin, room PICs, Technician Assistant and Engineer Assistant) also can perform this function however each one of them has their boundaries in this function. For example, PIC who will produce the report complaints while Technician Assistant and Engineer Assistant update the status of the complaints in one function instead of updating their work progress in a log book.

In addition, **managing user** functions also will be included in order to facilitate the admin task where admin will create the staff profile that consists of room PICs, assistant technicians, assistant engineers and the admin itself. Admin will also remove the lab PIC in case of the room PICs were transferred to another place or have retired or any other cases. On the other hand, the user such as room PICs, Technician Assistant and Engineer Assistant are able to edit their profile by undergoing the **manage profile** function just in case the user might want or need to change their profile details or password.

Moreover, admins are able to undergo the **manage assets** which is a centralized system that allows the admin of the organization to track important details about each asset in real time. This decreases administrative costs, improves service and gives the client organization greater visibility into asset utilization, costs and maintenance.

Finally yet importantly, the dashboard where it will be displayed on the main page of each user consist of their position, room and name. The dashboard helps the user to perform their task easily without wasting their time to find their task since each of the users (admin, room PICs, assistant technician and assistant engineer) will have different types of dashboard.

4. Glossary

- PIC - Person In Charge
- CRUD - Create, Read ,Update and Delete
- ICT - Information and Communication Technologies

5. Bibliography

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