



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

UNIVERSITI TEKNOLOGI MALAYSIA

FACULTY OF COMPUTING

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PHASE 2 - REPORT

SECD 2613 - SYSTEM ANALYSIS AND DESIGN

SECTION 07

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1.0 Overview of the Project

Universiti Teknologi Malaysia is the 5th best university in Malaysia based on QS World University Rankings that is specialised in engineering and technology. With more than 15000 undergraduates across three different campuses located in Johor Bahru, Kuala Lumpur and Pagoh, it is the top choice for anyone interested to pursue their studies in a wide selection of degree programmes including Computer Science and Engineering.

With such a huge amount of students on campus, there are surely a lot of resources that needs to be managed across multiple parties, including the students, departments and stakeholders. Without a proper system in place to maintain these resources, there would be severe consequences. For instance, miscommunication when reserving facilities for an event can cause higher costs and wasted time.

To prevent such problems from occurring, a centralised platform to manage campus resources should be developed. Therefore, we are proposing a system called Campus Resource Management System. By having a more centralised system, administrative and operational processes are more streamlined and efficiently improves the effectiveness of managing various resources within the campus.

2.0 Problem Statement

1. Disorganisation in Facility Booking

The campus lacks a unified system for facility booking. Currently, students and staff must navigate through multiple platforms to reserve spaces, leading to confusion and inefficiency. For example, booking a classroom requires one system, while reserving a gym or stadium involves separate procedures. This fragmented approach creates barriers to seamless campus resource management, resulting in scheduling conflicts and reduced resource utilisation.

2. Ineffective Event Notification and Reminder System

Students often learn about campus events through the university's central website, UTM.my. However, this platform offers limited customization and doesn't allow users to set reminders for events they are interested in. The absence of a "pin" or "favorite" feature makes it difficult for users to revisit event information, leading to lower event participation and a diminished sense of community engagement.

3. Non-User-Friendly Interface for Academic and Administrative Tasks

Students find the campus management system's user interface challenging to navigate. Accessing academic profiles, registering for courses, or viewing schedules is cumbersome due to poor UI design. This leads to frustration and wasted time as students and administrators struggle to locate the right sections. Administrators also face challenges managing student enrolment, with disorganised data causing delays in processing and administrative tasks.

4. Inadequate Communication Between Students and Faculty

Students often have difficulty reaching faculty members due to a lack of clear communication channels. The existing system does not provide an organised directory for staff contacts, leading to confusion and delays in communication. This problem impedes students from seeking academic guidance or discussing course-related issues, undermining the quality of education and academic support.

5. Insufficient Staff Management Tools.

The campus HR administrators face significant challenges in managing faculty and staff information. Data is spread across multiple systems, resulting in disorganisation and inefficiency. There is no integrated solution for recruitment, scheduling, performance evaluation, and leave management. This lack of centralization leads to errors, time delays, and difficulties in maintaining accurate staff records.

3.0 Proposed Solutions

The Campus Resource Management System (CRMS) is a comprehensive system for streamlining administrative and operational operations at university and college campuses. Its primary goal is to improve efficiency, communication channels, and resource allocation by consolidating several processes onto a single, centralised platform. By combining these responsibilities, the CRMS hopes to create a more efficient, responsive, and dynamic campus management ecosystem.

One of the CRMS' most notable features is its facility booking and administration module. This service streamlines the booking procedure for campus facilities such as classrooms, auditoriums, laboratories, and athletic fields. Users can easily search for availability, check facility information, and make bookings based on their requirements. Facility managers, on the other hand, have powerful tools that allow them to create booking rules, manage bookings, and continuously monitor resource consumption. This ensures that campus assets are used to their greatest extent and avoids scheduling problems.

CRMS' event organising skills are equally comprehensive. The system includes full tools for planning and organising campus events, workshops, lectures, and extracurricular activities. Event organisers can handle all aspects of event management, including registration and promotion, participant logistics, and feedback collecting. This streamlined method not only streamlines the administration process, but it also increases audience involvement and participation, resulting in more effective and meaningful events.

In terms of student administration, the CRMS provides a set of tools that allow administrators to easily handle student enrollment, course registration, academic records, and extracurricular activities. Students have access to their academic profiles, which allow them to manage course registrations, check schedules, and track their academic progress via the integrated CRMS system. This holistic strategy ensures that both students and administrators may move through academic processes with simplicity and efficiency.

CRM systems also excel at enhancing stakeholder communication and notification. Users are sent timely announcements, reminders, and alerts about forthcoming events, bookings, and deadlines via email, texting, and notifications. This function guarantees that essential information is distributed efficiently across campus, hence improving overall communication and collaboration. By keeping all stakeholders informed and up to date, the CRMS promotes a more connected and active campus community.

From a technical aspect, the CRMS is intended to combine various processes into a single system, considerably enhancing overall efficiency, communication, and resource allocation. The platform has a large database, complex sorting methods, and external API integration to support a variety of functionalities. Continuous monitoring and preventive maintenance methods are critical for addressing any issues and ensuring the system runs smoothly. This technical robustness ensures that the CRMS can efficiently address the various needs of campus management.

Operational feasibility is similarly important for the CRMS's effective implementation. Effective operation necessitates strong Information System (IS) support in order to keep the system's different functions running smoothly. With so many features, such as a robust database system, sophisticated sorting methods, and integration with external APIs, careful oversight is required to anticipate and address potential faults or anomalies. Continuous monitoring and preventive maintenance methods are required to guarantee that the CRMS runs smoothly and consistently, enhancing its efficacy in streamlining campus resource management activities.

4.0 Information gathering process

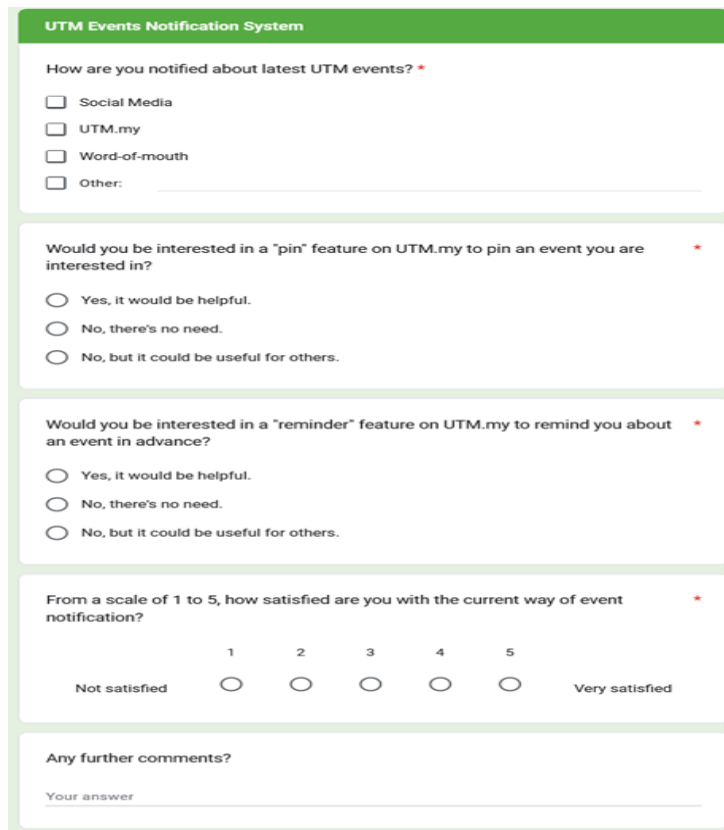
Information gathering is crucial to understand about the AS-IS system. These details regarding the AS-IS system were acquired from Mdm. Rohani binti Mohd Zain, a shareholder in our project based upon the AS-IS System, and 60 students who are users of systems.

4.1 Method used

To understand further about the AS-IS system, we have conducted a survey in the form of a questionnaire using Google Forms and an interview. The questionnaire was conducted on 60 students that are users of the AS-IS systems.

4.1.1 Questionnaire

Below is our Google Form for students that uses current systems in UTM (Questionnaire):



The screenshot shows a Google Form titled "UTM Events Notification System" with a green header. It contains five sections of questions:

- Section 1:** "How are you notified about latest UTM events? *". It has four checkbox options: "Social Media", "UTM.my", "Word-of-mouth", and "Other:" followed by a text input field.
- Section 2:** "Would you be interested in a 'pin' feature on UTM.my to pin an event you are interested in? *". It has three radio button options: "Yes, it would be helpful.", "No, there's no need.", and "No, but it could be useful for others."
- Section 3:** "Would you be interested in a 'reminder' feature on UTM.my to remind you about an event in advance? *". It has three radio button options: "Yes, it would be helpful.", "No, there's no need.", and "No, but it could be useful for others."
- Section 4:** "From a scale of 1 to 5, how satisfied are you with the current way of event notification? *". It features a horizontal scale with five radio buttons labeled 1, 2, 3, 4, and 5. Below the scale, "Not satisfied" is aligned with the first button and "Very satisfied" is aligned with the fifth button.
- Section 5:** "Any further comments?". It includes a text input field with the placeholder "Your answer".

Thoughts on academic.utm.my

As a student, do you find the interface of **academic.utm.my** adequate? *

- ☐ Yes
- ☐ No

When accessing your academic profile and registering for new courses in **academic.utm.my**, do you sometimes find it confusing? *

- ☐ Yes, I find it confusing at times.
- ☐ Yes, but got used to it overtime.
- ☐ No, it is good as is.

From a scale of 1 to 5, how satisfied are you with the current way of accessing your academic profile through **academic.utm.my**? *

	1	2	3	4	5	
Not satisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very satisfied

Any further comments?

Your answer

The communication between students and faculty members

Currently, do you know how to contact any faculty members? *

☐ Yes

☐ No

Do you think it is easy to reach any faculty members if you need academic guidance, especially as a new student? *

☐ Yes

☐ No

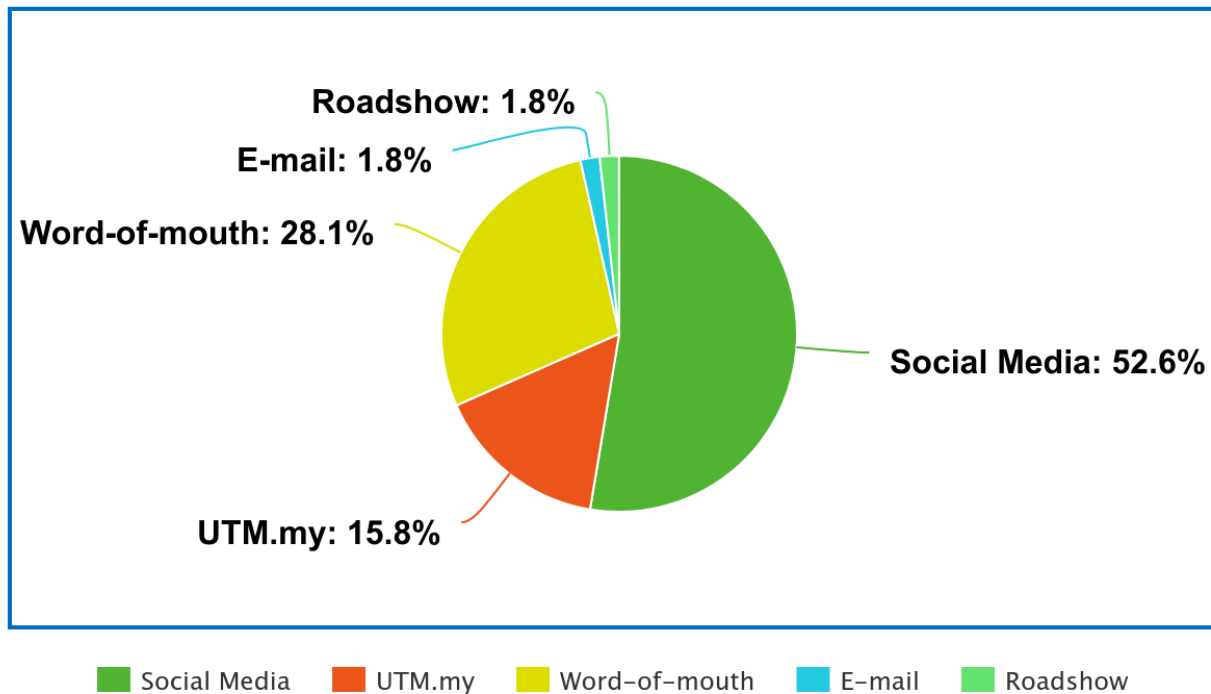
From a scale of 1 to 5, how satisfied are you with the communication between students and faculty? *

	1	2	3	4	5	
Not satisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very satisfied

Any further comments?

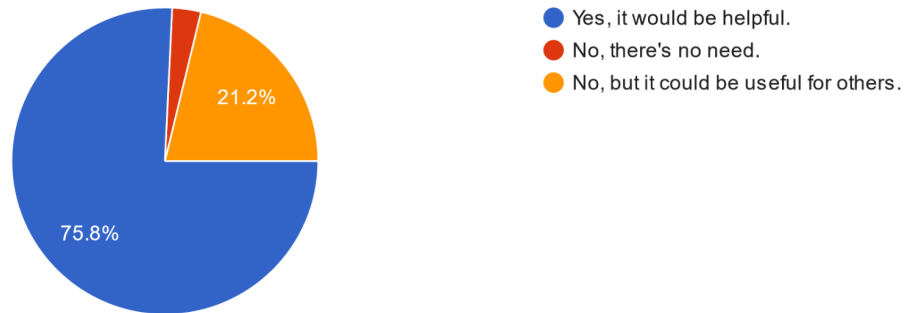
Your answer

1. How are you notified about the latest UTM events?



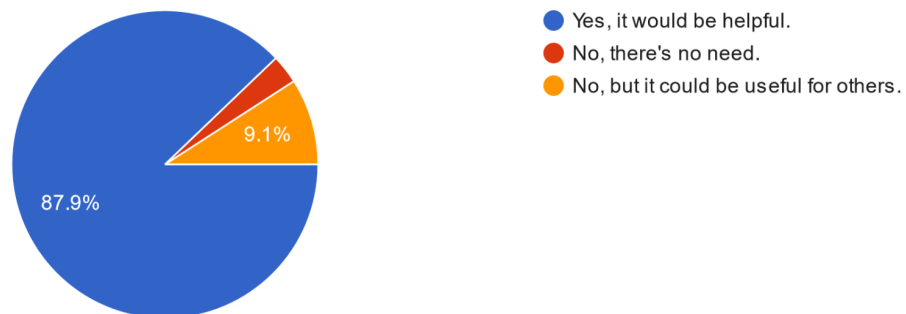
From the question, responders can choose more than one choice and has three main choices, Social Media, UTM.my and Word-of-mouth. There are two additional ways that were given by the students, which are through E-mail and Roadshow conducted in UTM. From the graph, we can see that the majority of students, which represents 52.6%, said they discovered UTM events through social media, followed by Word-of-mouth which represents 28.1% of students. Despite being the main system of UTM, UTM.my does not notify most students regarding events in UTM.

2. **Would you be interested in a "pin" feature on UTM.my to pin an event you are interested in?**



According to the responses on this question, the majority of students would like to have a “pin” feature introduced in UTM.my to pin events they are interested in. By having such a feature, students can see the events at their home screen when opening UTM.my or the app itself.

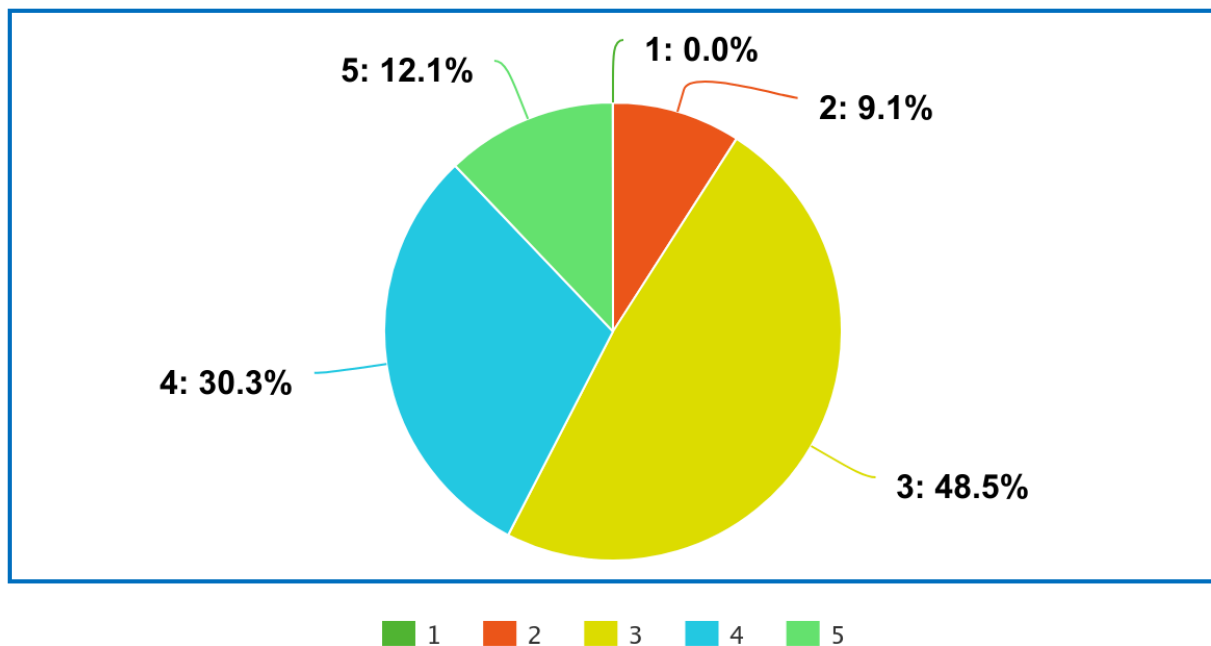
3. **Would you be interested in a "reminder" feature on UTM.my to remind you about an event in advance?**



According to the responses on this question, the majority of students would like to have a “reminder” feature introduced in UTM.my to remind them of events in advance. By having

such features, students won't miss the events they joined thus increasing participation of events. This feature and also the "pin" feature would increase the use of UTM.my regarding event notification.

4. From a scale of 1 to 5, how satisfied are you with the current way of event notification?

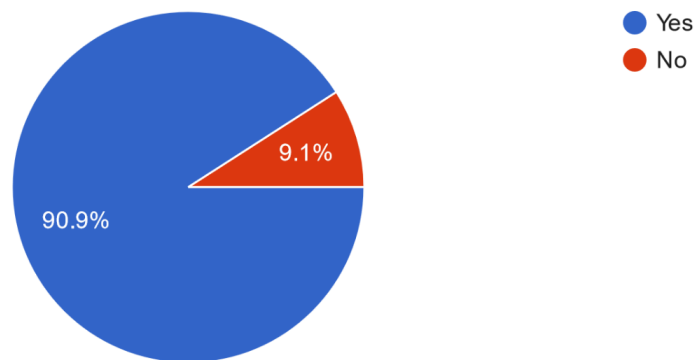


This question uses a scale of 1 to 5, with 1 being "Not Satisfied" and 5 being "Very Satisfied". From the graph, we can see that the majority of students, or about 48.5% chose 3 on how satisfied they are. This shows that most students are neutral about the way event notifications are being handled at the moment, but improvements can certainly be introduced for a better experience on getting to know about current UTM events.

5. Any further comments? (UTM Event Notification)

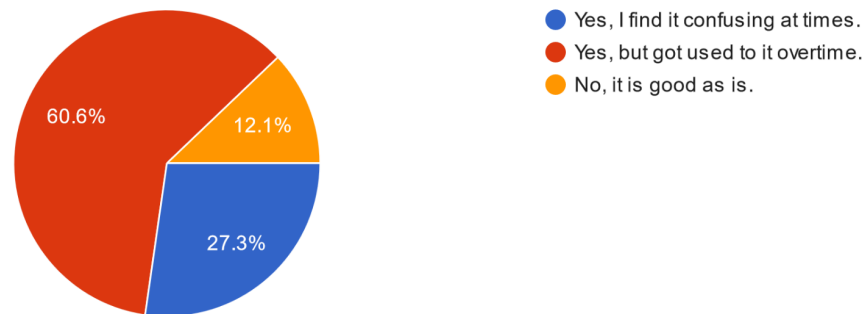
This is an optional question in the survey, where students can express extra comments regarding UTM Event Notification. One of the comments stated “*Make sure to give the correct information*” which could mean that sometimes, events might have wrong information given when notifying students, which could lead to miscommunication and less participation from students.

6. As a student, do you find the interface of *academic.utm.my* adequate?



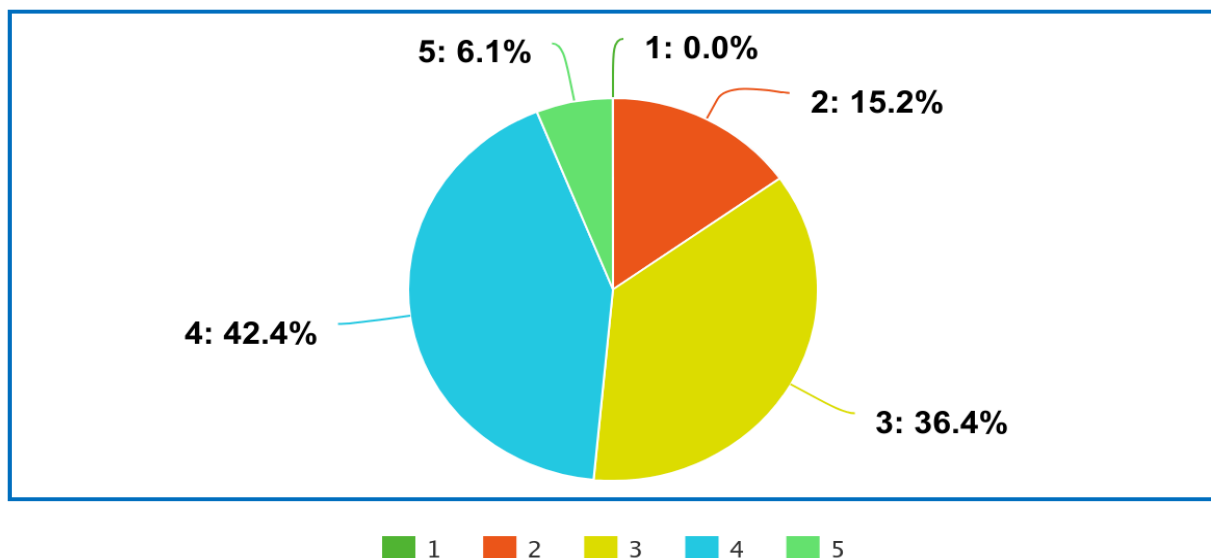
From the question, we can see that the majority of students find the interface of *academic.utm.my* interface adequate for their use case. Despite a simple interface, students find the website good enough regarding academic uses.

7. When accessing your academic profile and registering for new courses in *academic.utm.my*, do you sometimes find it confusing?



According to the graph, we can conclude that at first, *academic.utm.my* was confusing to navigate, but the majority of students got used to it. Some still find it confusing at times, while 12.1% find the website is good as is. This shows that the students found the platform is satisfactory for academic reasons.

8. From a scale of 1 to 5, how satisfied are you with the current way of accessing your academic profile through *academic.utm.my*?

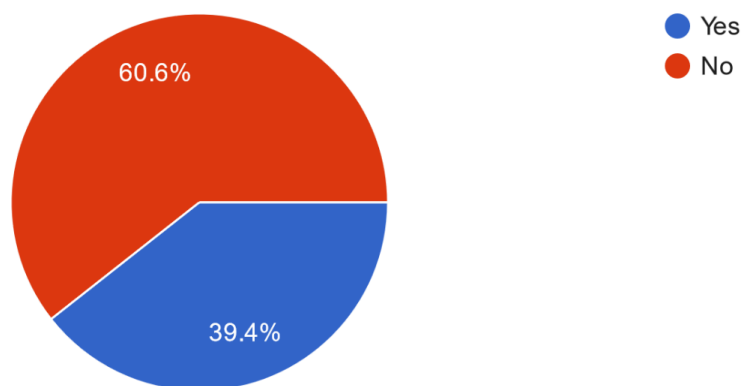


This question uses a scale of 1 to 5, with 1 being “Not Satisfied” and 5 being “Very Satisfied”. According to the graph, we can see that the majority of the students choses 4, which means they are satisfied with the system as is. This shows that *academic.utm.my* successfully does its purpose as an academic platform for students to use daily. Any improvements should not affect the core of the website which could lead to disapproval of students.

9. Any further comments? (*academic.utm.my*)

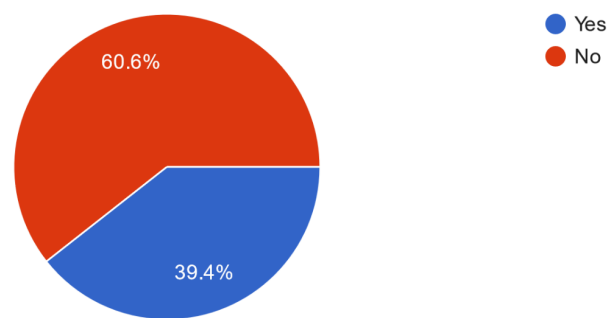
This is an optional question in the survey, where students can express extra comments regarding *academic.utm.my*. Among all positive comments from students, one specific answer was “*Can we be given the maintenance schedule? Cause it always system down when we want to submit assignments.*”. There are times when the system would be unavailable for some time and being reminded about it in advance would be pleasant, however these problems can arise at any given moment, which is harder to predict.

10. Currently, do you know how to contact any faculty members?



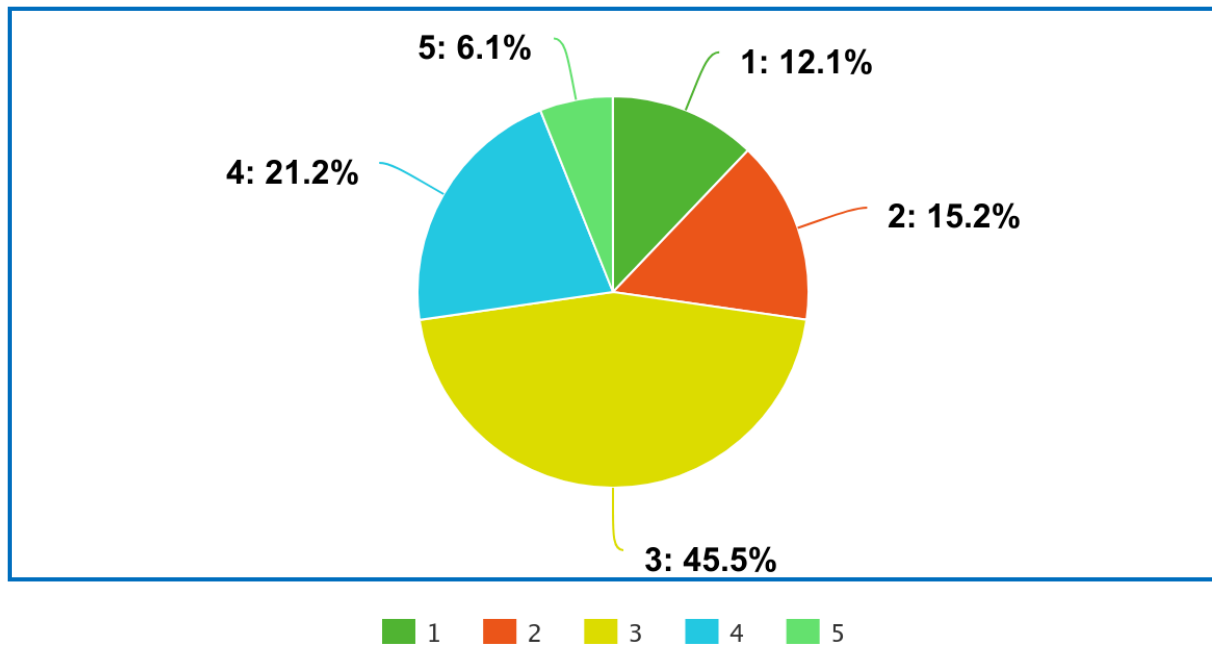
From the responses, we can see that more than half of students, or 60.6% stated that they currently don't know how to contact faculty members. This shows that there is a lack of clear communication channels between faculty members and students.

11. Do you think it is easy to reach any faculty members if you need academic guidance, especially as a new student?



According to the graph, the responses are similar to the last question, in which the majority of students find it hard to reach any faculty members for any academic reasons, especially as a new student. This is proof that the communication channels between faculty members and students must be improved so that students can easily contact faculty members without worry.

12. From a scale of 1 to 5, how satisfied are you with the communication between students and faculty?



This question uses a scale of 1 to 5, with 1 being “Not Satisfied” and 5 being “Very Satisfied”. Based on the graph, the majority of students chose 3, which is neutral regarding the matter of communication between students and faculty. This means that improvements are needed so that students are satisfied with how communication is handled.

13. Any further comments? (Communication between student and faculty)

This is an optional question in the survey, where students can express extra comments regarding the communication channel between students and faculty members. There are comments stating that the faculty staff are easy to communicate with, while some say the staff is impatient and “mysterious”. This means that students’ experiences with faculty members are different from one

another and is a coin toss whether you will have good communication with faculty members or not.

4.1.2 Interview

We have implemented the funnel structure for the interview, which begins with generalised, open-ended questions to close-ended questions. This approach is useful when the interviewee feels emotionally about the topic.

Here's our interview questions.

Type of questions	Interview Questions & Interviewee Answers	
Introduction	Interviewer	A very good morning to Mdm. Rohani binti Mohd Zain. I am Ivor Barrie Jaffery, a first year student from the Faculty of Computing, together with my group members, Jason Joel Johnny, Tan Zheng Yu, and Angie Wong Siaw Thing. First and foremost, I thank you for taking your precious time for us to interview you. We are assigned with a project to study the AS-IS systems of UTM to understand and analyse it to make a new, centralised system.
	Interviewee	Thank you as well for interviewing me. I will do my best to answer any inquiries you may have.
Open-ended	Interviewer	What are the problems you currently face regarding the

		communication between students and faculty members such as yourself?
	Interviewee	Currently, I believe that there are ways for students to communicate to faculty members, however it is not clearly explained to students. Each faculty has its own website where students can search for the email or phone number of a desired faculty member. It takes time for them to reply to any inquiries from students. Getting to the contact you need requires some digging through the website, which is different from faculty to faculty. Students could also e-mail their academic advisor for academic help.
Open-ended	Interviewer	I understand that an organised directory for staff contacts is very much needed. How does a centralized platform for all campus resources, such as facility booking and student administration on one platform benefits both administrators, lecturers and students alike, aside from improving communication?
	Interviewee	I think that having a more centralised platform makes it easier for all parties, since all important information comes from one source. It will also be less confusing for students since all they need is to access the platform and be directed

		to any service they need to. For instance, facility booking would be much simpler and avoid scheduling conflicts since it can show whether or not it has been booked or not. Additionally, I think the interface would need a touch up and improved compared to previous systems so it would be more user-friendly to any user whether I'd be admin, faculty members or students.
Bipolar	Interviewer	You mentioned facility booking would be much simpler in a centralised platform. Have you ever booked facilities in UTM?
	Interviewee	Yes, I do have in the past.
Probe	Interviewer	Do tell your experience doing so.
	Interviewee	My experience with booking facilities is quite complicated. When it works, it works. However, there are times when there would be scheduling conflicts due to miscommunication with the facility owner itself with other people booking as well. Going through multiple platforms just to book one facility is troublesome.
Close-ended	Interviewer	Do you think there are insufficient staff management tools available for administrators?

	Interviewee	Yes, I believe so. It may be sufficient enough for the time being, but having information coming from different sources and not organised have caused delays and difficulties in getting the accurate staff records.
Close-ended	Interviewer	Do you think the more centralised platform will be better for the future?
	Interviewee	The advantages of centralised platforms outweigh the disadvantages, and I believe it is worth it to transfer existing systems to this new platform for the benefit of all UTM staff which increases the efficiency of the system. It may take some time to do so, but it would be a significant quality of life upgrade especially when dealing with lots of information in a university as big as UTM.
Ending	Interviewer	Thank you for taking your time answering our questions. Do you have anything else to add before closing our interview session?
	Interviewee	No, I do not have anything else to add. You're welcome.

4.2 Summary from method used (include example Interview/Questionnaire/Observation)

From our methods of information gathering, we are able to learn further about how the current system functions from the perspective of the faculty members and students of said faculty. This enables us to understand better on how to design a better, more centralised system to manage campus resources more effectively and efficiently, instead of going through multiple platforms for multiple reasons. Based on the responses we received from the survey, we can decide which components we are going to prioritise on this new system, such as a more user-friendly interface, and adding features such as “pin” and “reminder” features for better event notification experience.

5.0 Requirement Analysis (based on AS-IS analysis)

5.1 Current business process (scenarios, workflow)

Here are the scenarios and workflow of current business process for CRMS :

For Students

1. Login to the System
2. Main Menu Options are displayed.
3. Option for Facility Booking
 - 3.1. Select the option for Facility Booking.
 - 3.2. Choose the type of facility (e.g., classroom, gym, stadium).
 - 3.3. Search for available time slots for the chosen facility.
 - 3.4. Book the facility.
 - 3.5. Receive booking confirmation and any further instructions.
4. Option for Academic Information
 - 4.1. Select the option for Checking Academic Information.
 - 4.2. View academic profile, including grades and personal details.
 - 4.3. Register for courses for the upcoming semester.
 - 4.4. View class schedules and timetables.
 - 4.5. Track academic progress and milestones.

5. Option for Event Notification
 - 5.1. Select the option for Event Notification.
 - 5.2. Pin events of interest to have them displayed on the home screen.
 - 5.3. Set reminders for upcoming events to receive notifications in advance.
6. Option for Communication with Faculty
 - 6.1. Select the option for Communication with Faculty.
 - 6.2. Search for faculty contact information in a centralised directory.
 - 6.3. Send emails or make phone calls directly through the system.
 - 6.4. Receive and manage responses from faculty for guidance or support.

For Faculty

1. Login to the System
2. Main Menu Options are displayed.
3. Option for Managing Course Information
 - 3.1. Select the option for Managing Course Information.
 - 3.2. Update course content, such as syllabus and lecture notes.
 - 3.3. Post assignments and grades for students.
 - 3.4. Communicate with students through the system's messaging feature.
4. Option for Scheduling Office Hours
 - 4.1. Select the option for Scheduling Office Hours.
 - 4.2. Set available times for office hours.
 - 4.3. Allow students to book appointments during these times.
 - 4.4. Receive notifications of booked appointments.

5. Option for Accessing Student Records
 - 5.1. Select the option for Accessing Student Records.
 - 5.2. View academic profiles of students.
 - 5.3. Track student progress and performance.
 - 5.4. Provide feedback and support through the system.

For Administrators

1. Login to the System
2. Main Menu Options are displayed.
1. Managing Facility Booking
 - 1.1. Select the option for Managing Facility Booking.
 - 1.2. Oversee all facility bookings made by students and staff.
2. Handling Event Notifications
 - 2.1. Select the option for Handling Event Notifications.
 - 2.2. Post events on UTM.my.
 - 2.3. Send reminders and updates to the campus community.
3. Managing Academic Records
 - 3.1. Select the option for Managing Academic Records.
 - 3.2. Oversee student enrollment and course registration processes.
 - 3.3. Maintain accurate and up-to-date academic records.
4. Faculty and Staff Management
 - 4.1. Select the option for Faculty and Staff Management.
 - 4.2. Manage recruitment processes and new hires.

- 4.3. Schedule duties for faculty and staff.
- 4.4. Evaluate performance and handle leave management.

5.2 Functional Requirement (input, process and output)

5.2.1 Context Diagram

PROCESS	INPUT	OUTPUT
Campus Resource Management System	Personal Information Facility booking information Staff information Staff duties Academic information Event Information Contact Information	Appointment Information Work timetable Academic record Event notification and reminder Contact information Staff performance report

5.2.2 Level 0 Diagram

PROCESS	INPUT	OUTPUT
Book facility	Personal information Facility booking information	Appointment information
Manage faculty and staff	Staff Information Staff duties	Work timetable Staff Information

Manage event	Event information	Event notification and reminder
Manage academic	Personal information Academic information	Academic records
Communicate between students and faculty	Contact information	Contact Information Responses

5.2.3 Level 1 Diagram

Process 1: Book Facility

Process	Input	Output
Fill in details	Personal information	Booking information
Search the facility needed	Booking information Faculty booking information	Facility name
Choose the available time slot and office hours	Facility name	Available time slot of the facility and office hours
Make appointment	Available time slot of the facility and office hours Booker information	Appointment information

Process 2: Manage faculty and staff

Process	Input	Output
Prepare recruitment details	Job description Resume	Successful candidates
Schedule staff duties	Duty list	Work timetable Staff duties
Record leave details	Leave details	Report on staff leave
Evaluate staff performance	Staff duties Staff information Staff leave report	Staff performance report

Process 3: Manage event

Process	Input	Output
Search the event details	Event information	Event name Event time Event location
Schedule the notification and reminder of event	Event details	Event notification and reminder

Process 4: Manage academic

Process	Input	Output
Manage student enrollment	Personal information	Student information
Manage student academic	Student information Academic information	Academic record

Process 5: Communicate between students and faculty

Process	Input	Output
Search faculty contact information	Name of lecturer Contact number of the lecturer Email address of the lecturer	Faculty contact information
Transfer messages	Contact Information Student information Message from students Message from faculty	Responses from faculty Responses from students

5.3 Non-functional Requirement (performance and control)

Website for CRMS system: <https://crmssystem.my.canva.site/>

5.3.1 Performance

- The performance grade for the CRMS system website is 75 which is grade C.
- The page size of the CRMS website is 10.3 Mb.

- The load time of the CRMS website is 8.45s.
- The total requests of the CRMS website are 45 requests.

5.3.2 Security

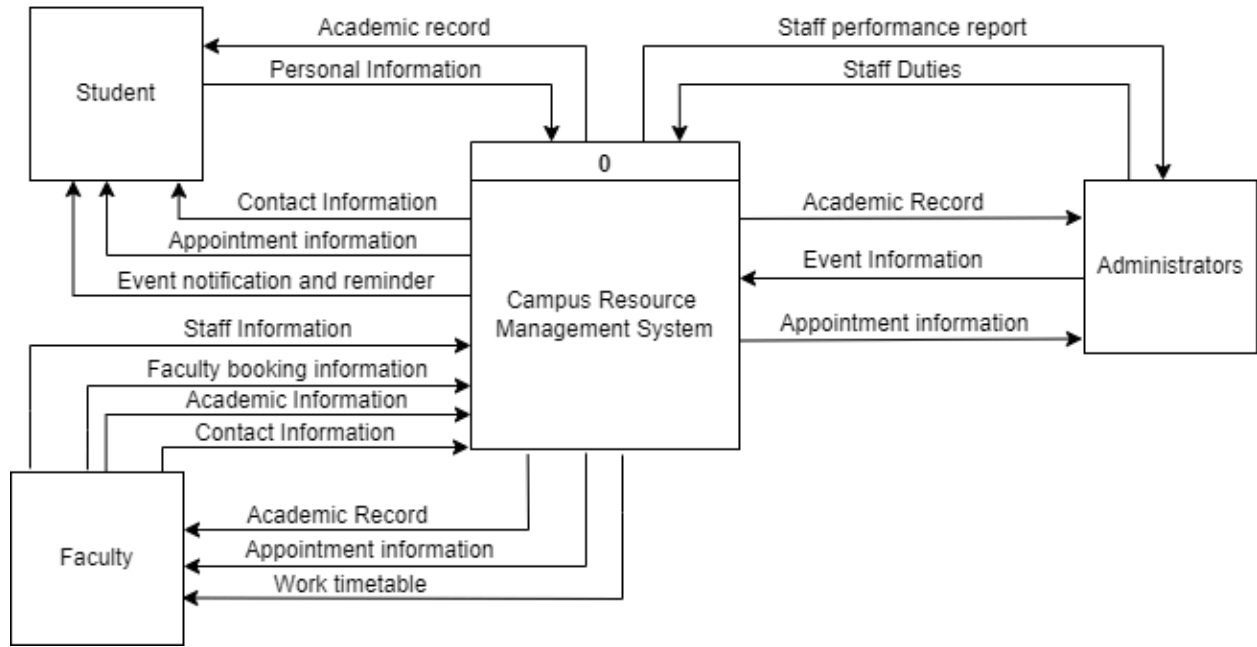
- The academic records must be encrypted both in transit and at rest to prevent unauthorized access.
- The personal information of the students and staff need to be secured.
- Establish and maintain a robust data recovery plan to ensure quick restoration of data in case of data loss.

5.3.3 Compatibility

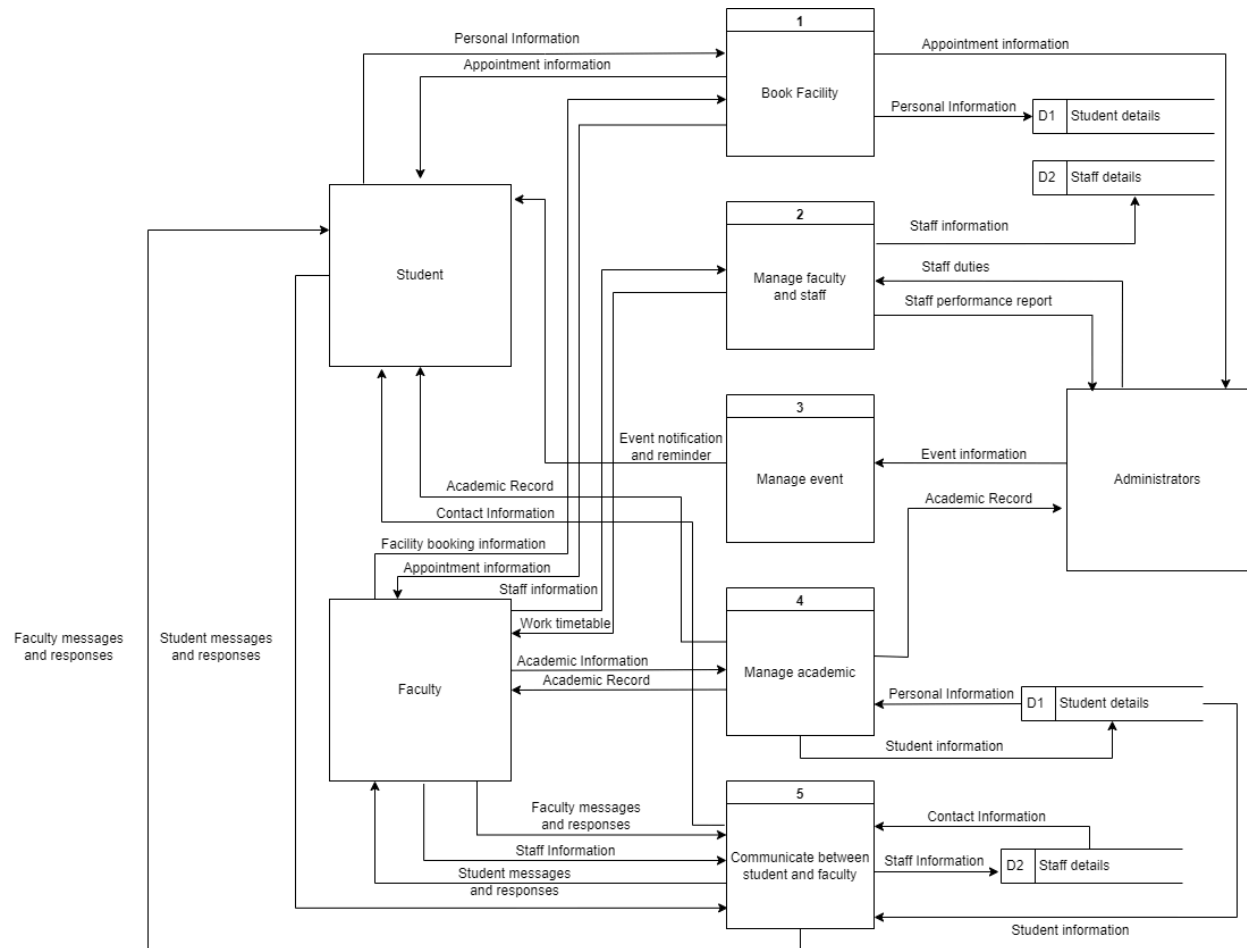
- **Operating System:** The device should run on Windows 8 or later, or macOS High Sierra 10.13 or later.
- **Processor:** The device should have an Intel Pentium 4 processor or later.
- **Memory:** A minimum of 2GB RAM is required.
- **Web Browser:** The website is compatible with the latest versions of major web browsers such as Google Chrome, Mozilla Firefox, Safari, and Microsoft Edge.
- **Internet Connection:** An active internet connection is required for accessing and using the website effectively.

5.4 Logical DFD AS-IS system (Context Diagram, Diagram 0, Child)

5.4.1 Context Diagram

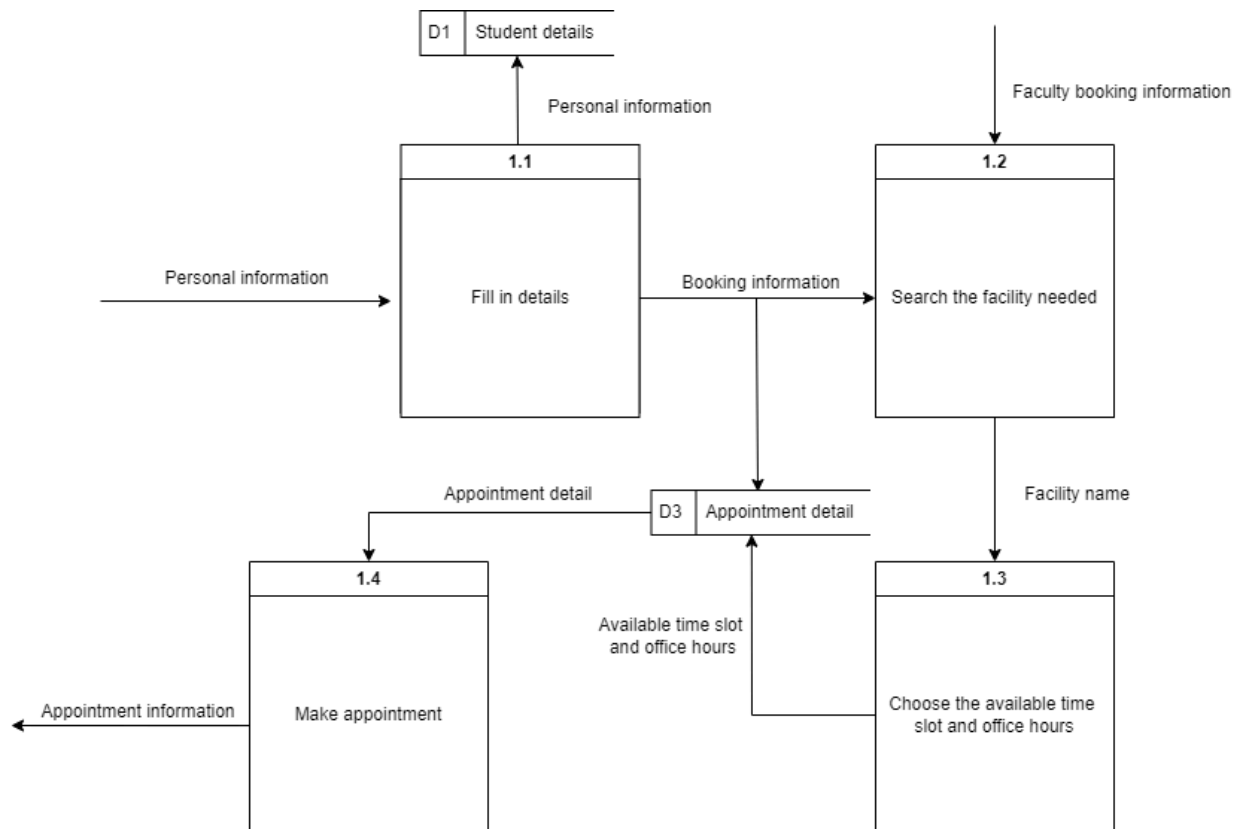


5.4.2 Level 0 Diagram

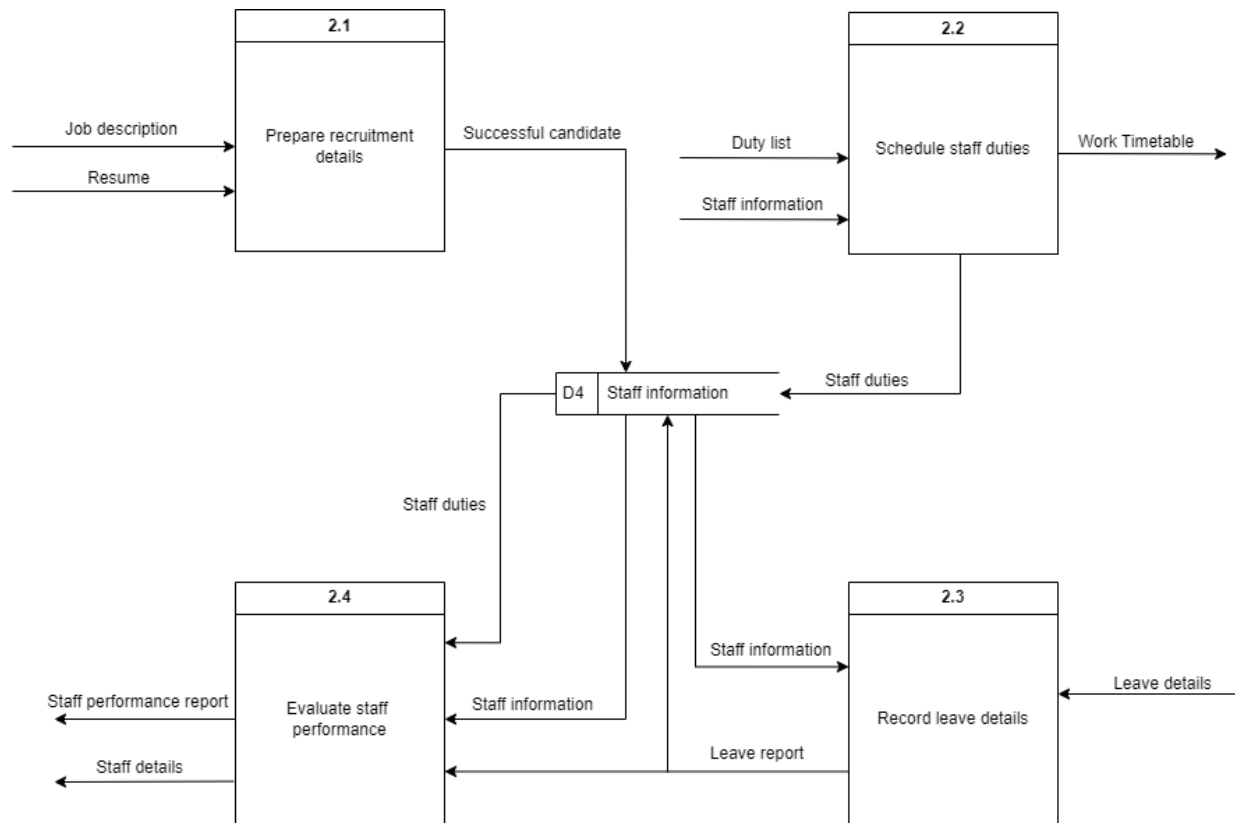


5.4.3 Level 1 Diagram

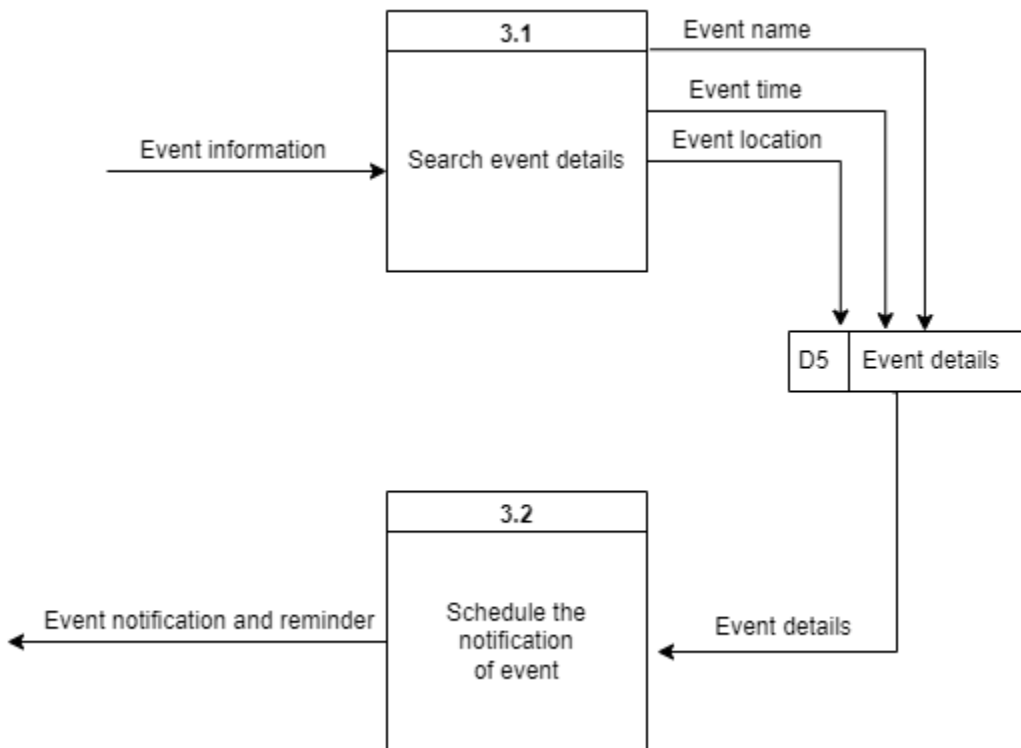
5.4.3.1 Process 1 : Book Facility



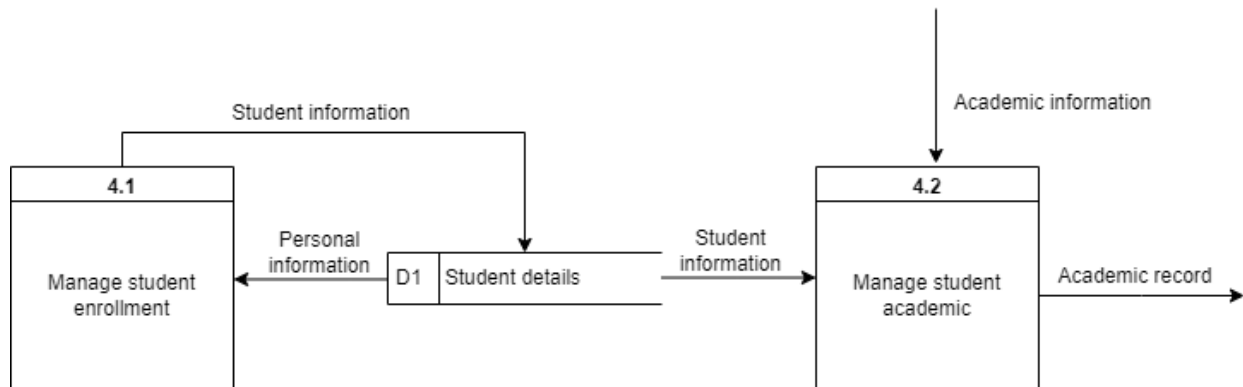
5.4.3.2 Process 2: Manage faculty and staff



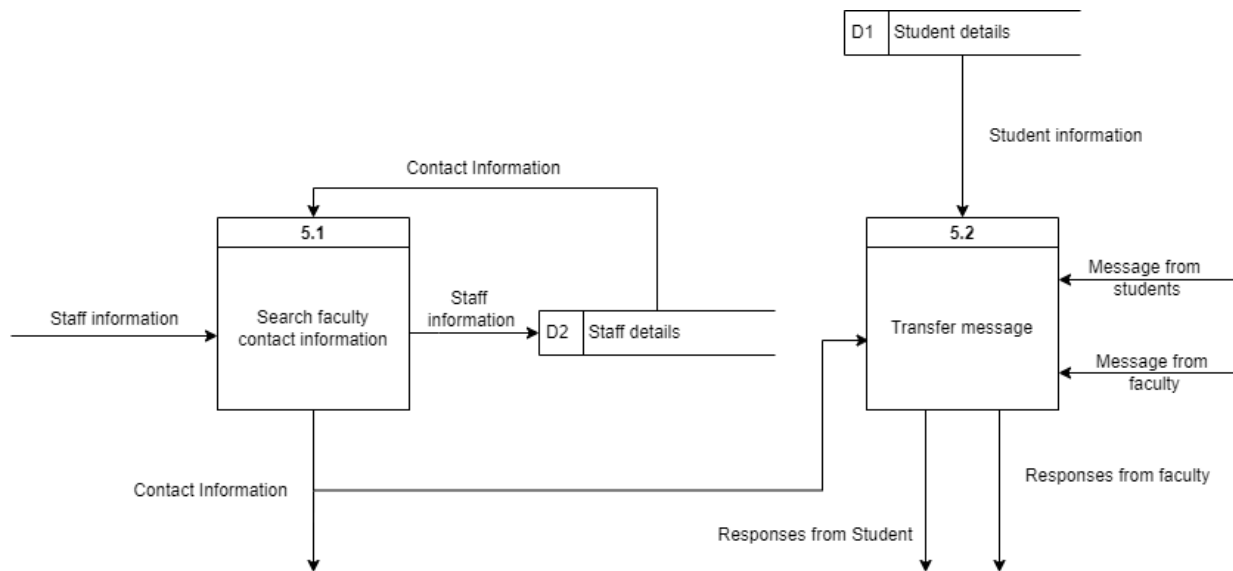
5.4.3.3 Process 3 : Manage event



5.4.3.4 Process 4 : Manage academic



5.4.3.5 Process 5: Communicate between students and faculty



6.0 Summary of Requirement Analysis process

Finally, we successfully completed the UTM.my project's aims and objectives. Throughout this assignment, we learned vital lessons about establishing the information needs for the system's development. To obtain these requirements from users, we used interactive approaches including interviews and surveys.

We created a variety of interview questions, including open-ended, closed, bipolar, and probe questions. Each sort of inquiry has specific properties that aid in eliciting significant insights from interviewees. In addition, we ran an online survey with nominal and interval questions to get additional detailed data. We were able to accurately estimate the information requirements using these methodologies, which inspired our design of a system that is both helpful and usable, aligning with the business operations and based on comprehensive information about the people, goals, data, and procedures involved.

We also taught how to generate fundamental diagrammatic representations of the system. We created a context, parent, and child data flow diagrams (level 1). These diagrams are essential for visualising the system's inputs, outputs, processes, entities, and data stores. Our ability to develop accurate and full data flow diagrams strongly relied on our meticulous work in the first step of determining information requirements.

This assignment's success may be credited to the effective cooperation and teamwork of all members. We held regular meetings to assign duties and share our thoughts on a variety of

topics, including writing interview questions and creating data flow diagrams. This coordinated effort guaranteed that every phase of the project was done with precision and efficiency.

Overall, the UTM.my project was a valuable learning experience that helped us improve our skills in information collection, system design, and teamwork. We are convinced that the solution we created would considerably improve administrative operations and resource management at UTM.

MEETING LOG FOR SADM PROJECT

Date : 19th May 2024

Log No.: 1

TEAM NAME : MICHAEL JACKSON

TEAM MOTTO : “TOGETHER WE ACHIEVE MORE”

TEAM GROUND RULE : Respect and inclusivity, clear Communication and accountability

Attendance:

Group Member Name	Signatures
1. JASON JOEL JOHNNY	
2. TAN ZHENG YU	
3. ANGIE WONG SIAW THING	
4. IVOR BARRIE JAFFERY	

Discussion Results/Findings:

We discussed the project idea and chose UTM as the project's target organisation. We did an organisational background research on the existing system at Universiti Teknologi Malaysia. This study helped us identify the issues that the administration and students were dealing with. We also noticed numerous flaws that are common in the existing system. In addition, we have specified the study's objectives, system needs, and system constraints.

Members Contributions/Ideas:

Group Member Name	Contributions/Ideas
1. JASON JOEL JOHNNY	<ul style="list-style-type: none">● Suggested UTM as a potential target organisation for our study.● Agreed to conduct an organisational background study on the current system at UTM.
2. TAN ZHENG YU	<ul style="list-style-type: none">● Supported the idea of focusing on UTM for our project.● Volunteered to identify the objectives, system requirements, and system constraints.
3. ANGIE WONG SIAW THING	<ul style="list-style-type: none">● Also recommended UTM as a suitable target for our study.● Took on the task of identifying issues that frequently occur within the current system.
4. IVOR BARRIE JAFFERY	<ul style="list-style-type: none">● Agreed with the choice of UTM as our target organisation.● Committed to identifying the problems faced by the administration and students at UTM.my.

MEETING LOG FOR SADM PROJECT

Date : 21st May 2024

Log No.: 2

TEAM NAME : MICHAEL JACKSON

TEAM MOTTO : “TOGETHER WE ACHIEVE MORE”

TEAM GROUND RULE : Respect and inclusivity, clear Communication and accountability

Attendance:

Group Member Name	Signatures
1. JASON JOEL JOHNNY	
2. TAN ZHENG YU	
3. ANGIE WONG SIAW THING	
4. IVOR BARRIE JAFFERY	

Discussion Results/Findings:

We addressed how to acquire information from UTM stakeholders, including as students, teachers, and administration. We chose to conduct interviews with four sorts of questions: open-ended, closed, bipolar, and probe questions. These interviews will help us understand the users' requirements and expectations for the new system. Furthermore, we need to acquire information on the current system at UTM.my. We also talked about creating a list of questionnaire items and determining the target respondents for these surveys.

Members Contributions/Ideas:

Group Member Name	Contributions/Ideas
1. JASON JOEL JOHNNY	<ul style="list-style-type: none">● Prepare closed questions for the interview session● Distribute the online questionnaire● Create meeting logs and peer-review evaluations
2. TAN ZHENG YU	<ul style="list-style-type: none">● Prepare open-ended questions for the interview session● Distribute the online questionnaire
3. ANGIE WONG SIAW THING	<ul style="list-style-type: none">● Prepare bipolar and probe questions for the interview session● Distribute the online
4. IVOR BARRIE JAFFERY	<ul style="list-style-type: none">● Gather information from UTM.my administration● Distribute the online questionnaire

MEETING LOG FOR SADM PROJECT

Date : 23rd May 2024

Log No.: 3

TEAM NAME : MICHAEL JACKSON

TEAM MOTTO : “TOGETHER WE ACHIEVE MORE”

TEAM GROUND RULE : Respect and inclusivity, clear Communication and accountability

Attendance:

Group Member Name	Signatures
1. JASON JOEL JOHNNY	
2. TAN ZHENG YU	
3. ANGIE WONG SIAW THING	
4. IVOR BARRIE JAFFERY	

Discussion Results/Findings:

We identified three major areas to address: system analysis, system specifications, and system design. For system analysis, we identified the events and activities currently managed by UTM and created a logical model diagram for our project. During the system specs phase, we produced data flow diagrams for levels 0 and 1 and described all required data using our database knowledge. Finally, during the system design phase, we settled on new system specifications to suit user requirements and created the project's graphical user interface (GUI).

Members Contributions/Ideas:

Group Member Name	Contributions/Ideas
1. JASON JOEL JOHNNY	<ul style="list-style-type: none">• Designed the system interface• Compiled meeting logs
2. TAN ZHENG YU	<ul style="list-style-type: none">• Created data flow diagrams for levels 0 and 1• Developed the context diagram• Defined all required data
3. ANGIE WONG SIAW THING	<ul style="list-style-type: none">• Created data flow diagrams for levels 0 and 1• Designed screen mock-ups• Defined all required data
4. IVOR BARRIE JAFFERY	<ul style="list-style-type: none">• Designed the system interface• Designed screen mock-ups

MEETING LOG FOR SADM PROJECT

Date : 25th May 2024

Log No.: 4

TEAM NAME : MICHAEL JACKSON

TEAM MOTTO : "TOGETHER WE ACHIEVE MORE"

TEAM GROUND RULE : Respect and inclusivity, clear communication and accountability

Attendance:

Group Member Name	Signatures
1. JASON JOEL JOHNNY	
2. TAN ZHENG YU	
3. ANGIE WONG SIAW THING	
4. IVOR BARRIE JAFFERY	

Discussion Results/Findings:

We reviewed the user interface design and made necessary adjustments based on feedback. We also finalised the API endpoints and ensured their integration with the front-end. Additionally, we conducted a code review session to identify and fix bugs, ensuring that the application runs smoothly.

Members Contributions/Ideas:

Group Member Name	Contributions/Ideas
1. JASON JOEL JOHNNY	<ul style="list-style-type: none">● Reviewed and adjusted the user interface design● Conducted code review
2. TAN ZHENG YU	<ul style="list-style-type: none">● Finalised API endpoints● Integrated APIs with the front-end
3. ANGIE WONG SIAW THING	<ul style="list-style-type: none">● Conducted code review● Identified and fixed bugs
4. IVOR BARRIE JAFFERY	<ul style="list-style-type: none">● Reviewed and adjusted the user interface design● Finalised API endpoints