



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

SCSJ2203: Software Engineering

**PROPOSAL FOR KTDI REPAIR AND
MAINTENANCE SYSTEM**

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Stakeholder(s):

1. Student
2. College management
3. Technician

1. INTRODUCTION

The need (N) of Repair and Maintenance System is for Tun Dr Ismail College (KTDI) student and management. It has trouble in managing the complaint form so the possibility to lose the complaint form is higher. Thus, it is hard to find and recheck the form in order to keep up with the complaints that have been filled by students.

Next, the approach (A) that we are using for KTDI student is website-based system. We are creating website-based system which provides an easy way for student and college management in taking action of managing the complaint and maintenance inside the college.

The Benefit (B) of our system is making easy for student to get estimation time when the technician fixes and maintains the damaged place. We are also making the system trouble-free for student to report and send complaint during and out of office hours because usually student have classes at that time so it will save time and more effective way in explaining the problems in the website.

Lastly, competitor (C) of Repair and Maintenance System for KTDI student is a maintenance of the system. Manual system has been existed and it is already used by a lot of students which is they need to write down the problem either about toilet breakdown, non-functioning fans or lamp or anything that related to the college's facilities. For our proposed system, we are including all these features using website to make everyone's job easy and saving a lot of time instead of wasting paper to jot down the complaints.

2. THE EXISTING SYSTEM

There is no existing computerized system to make a damage complaint specially for Tun Dr Ismail college as they still use a manual system. For the manual system, student shall go to the office to fill out damage complaint form. After filling out the form, the student will submit the form to the staff in charge to keep the record. The students shall have to wait until the technician solve their damage problem.

Based on the manual system, there are several problems student experienced. First of all, student finds it difficult to make a complaint and waste their time as they have to go to the college office. The problem worsens if a student with a packed class schedule wants to complaint when outside of working hours as they don't have free time during working hours. The system does not give feedback to student. It will make the student confused whether their complaint has been received by the college management or still in the waiting list. Plus, the student does not get estimation time for the technician to arrive. This will make the students unprepared if the technician come to fix damaged problem when the students are resting at their room.

3. THE PROPOSED SYSTEM

The project is about Repair and Maintenance system of College Tun Dr Ismail, UTM JB. For this system we decided to use website and based because it will be more effective for student to access. We also decided to give an estimated time when technician will come to fix or maintain facilitates by email or through website. Figure 1 show the Use Case Diagram for Repair and Maintenance system for Collage Tun Dr Ismail, UTM JB. From this system student need to Log in by Website. Second, student can send a complaint of broken facilitates. Next, the maintenance department of College Tun Dr Ismail will send estimated time for maintenance by email and website.

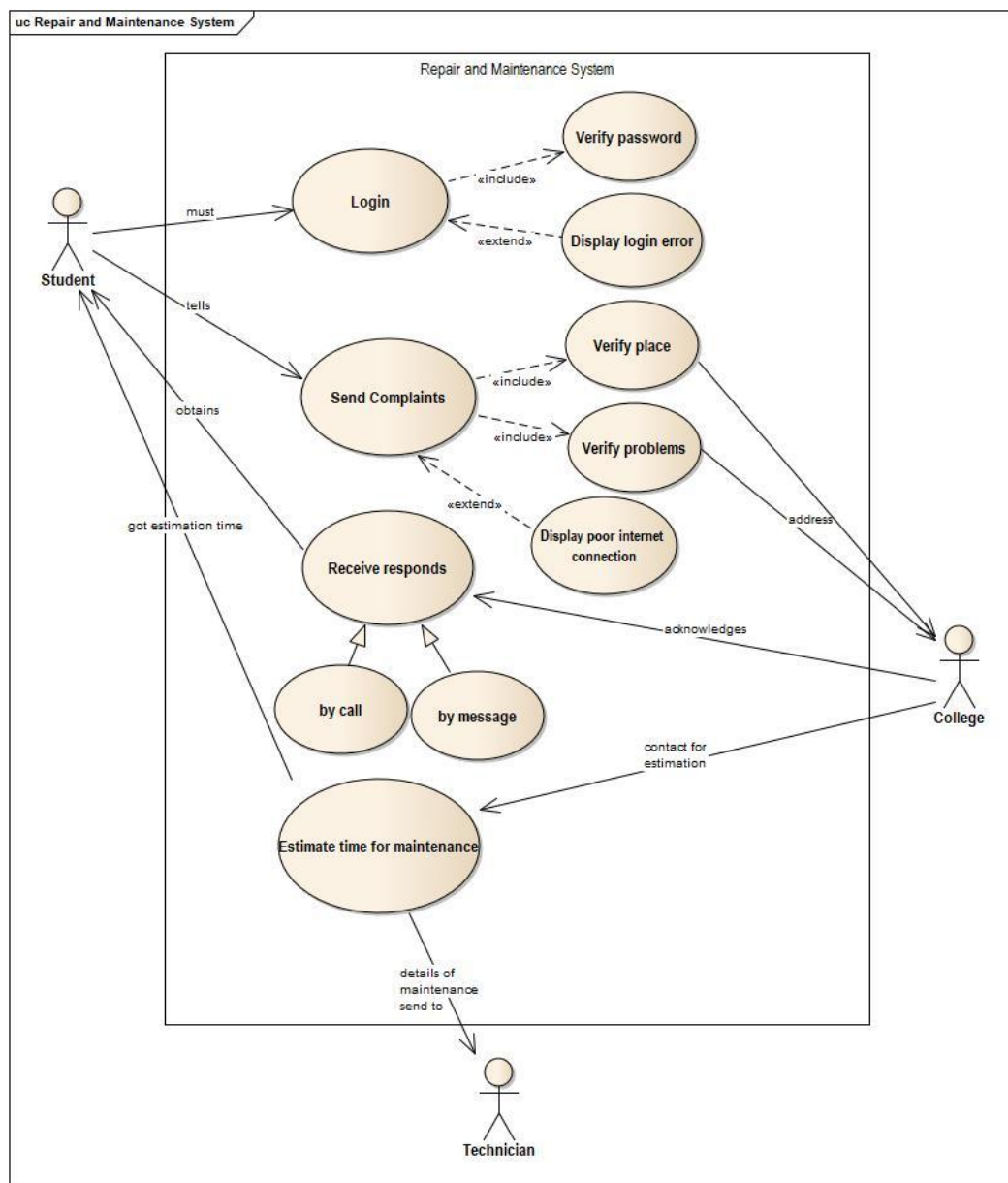


Figure 1. Use case diagram for Repair & Maintenance System

4. FUNCTIONAL REQUIREMENT

4.1 Log In

Student shall log into the system using their matric number.

4.2 Send Complaint

Student shall be able to send complaints of repair and maintenance to the college.

4.3 Receive Responds

The student shall receive respond of acknowledgement of their complaint from the system via call or message.

4.4 Inform Estimated Time for Maintenance

The college staff shall inform the estimated time for maintenance to the student.

5. NON - FUNCTIONAL REQUIREMENT

5.1 Security

Each student using the system shall be uniquely identified by his or her matric number.

5.2 Operational

Every unsuccessful login by student will display login error by the system

5.3 Reliability

The system should be allowed open in multiple device that is smartphone and desktop.

6. SCHEDULE

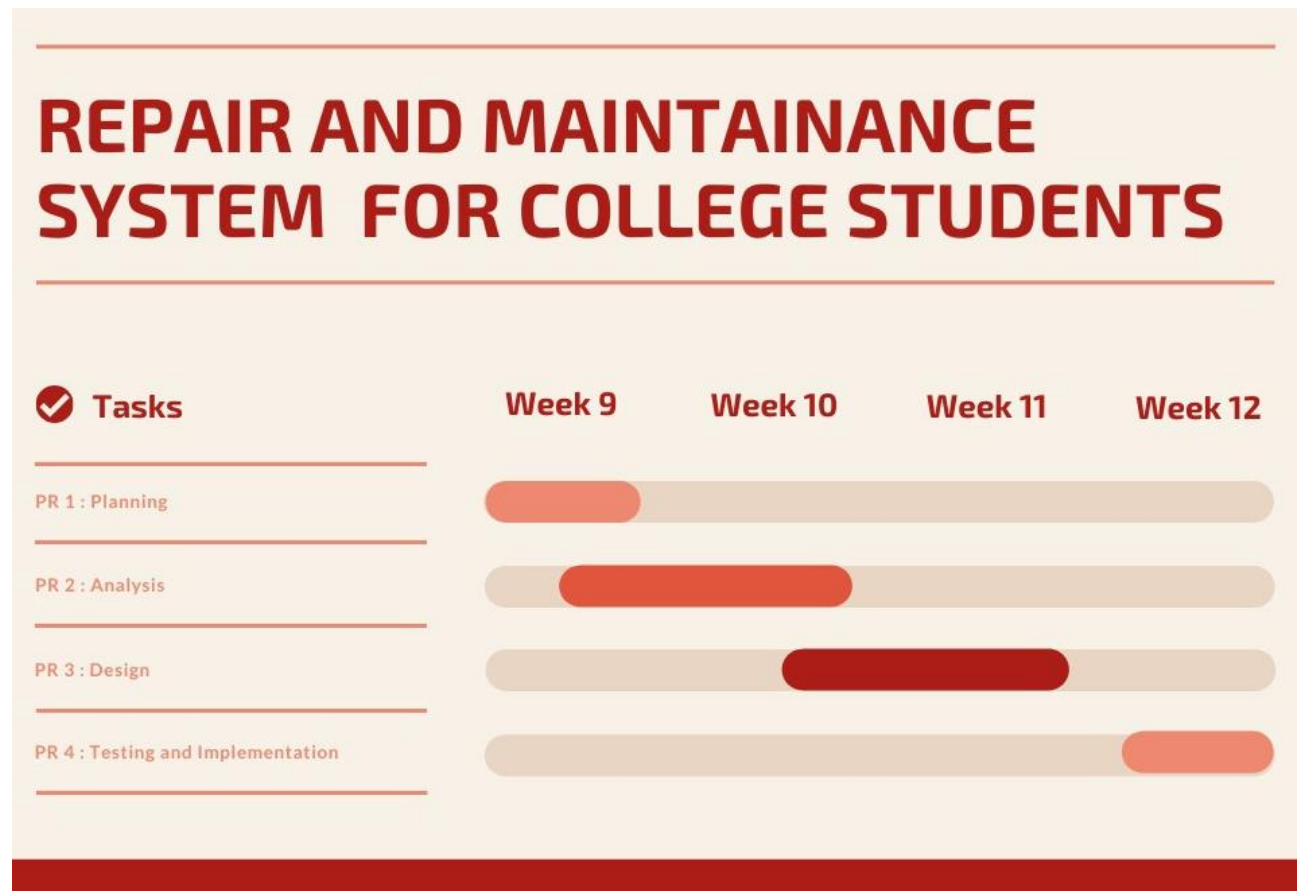


Figure 2. Project Schedule (Gantt Chart)

This is our project schedule or known as Gantt Chart in doing project for system proposed. The project schedule is used for system developer or system builder to maintain their work pace based on job scope that have been distributed by leader. It is also to make the system developer do their work as time given. For PR1, we are starting our project with planning on what system to build and how to plan the system using Use Case Diagram that need to sketch at Enterprise Architecture software before proceeding to another task. For analysis, design, testing and implementation, for now we assumed that we will finish it at week 12 but we will change the schedule if it takes more time to complete it. Because we need to make sure the system that we are creating are functioning well.

7. REFERENCES

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