



E-VOTING SYSTEM FOR UPTM MPP  
(STUDENT'S COUNCIL) ELECTION

By

AMIRAH AFIQAH BINTI AZAMI

AM2211012796

A project proposal

Submitted to

Madam Zurina binti Jusoh

Faculty of Computing & Multimedia

Universiti Poly-Tech Malaysia

0724

## Table of Contents

1.0 INTRODUCTION.....	3
2.0 PROBLEM STATEMENT.....	3
3.0 PROJECT OBJECTIVE.....	4
4.0 SCOPE.....	4
4.1 Product Scope.....	4
4.2 Project Scope.....	4
5.0 TARGET USER.....	5
6.0 PROJECT REQUIREMENT.....	5
6.1 Software Requirement.....	5
6.2 Hardware Requirement.....	5
7.0 PROJECT PLANNING AND METHODOLOGY.....	6
8.0 CONCLUSION.....	7
9.0 GANTT CHART.....	8
10.0 REFERENCES.....	9

## **1.0 INTRODUCTION**

University Poly-Tech Malaysia (UPTM) is a higher learning institution in Malaysia. This institution offers quality education in various field of study such as business, technology and computer science. UPTM is characterized by the effort it puts in training its students in a variety of fields and graduating them reasonably competent for the inclined employment opportunities. In addition to the classroom learning of the students, UPTM advances entrepreneurship, research and social practices within and beyond the institution towards the formation of new generation of leaders and specialists. It is in this context that UPTM constantly looks for ways to improve all areas of activity within the university including administration and student engagement, and therefore, seeks to improve the information dissemination systems. The Student Council, in whose custody the well being of the student community at UPTM's is always reposed, ensures that the students are represented in the various cultural governing institutions of the university and seeks to enhance democratic processes within the university through regular, free and fair elections.

By using this E-voting System for MPP offer a reliable and efficient voting experience, ensuring that all student will participate, and results are accurate. By changing to this system UPTM can upgrade its election process and provide students with greater confidence in the fairness and security of their votes.

## **2.0 PROBLEM STATEMENT**

- High possibility of “invisible voter” and duplicate voting  
Poor security measures can cause unverified individual to cast their votes. This weakness can lead to the participation of “visible voters”. Multiple votes also can be done by this kind of person by using fake metric number or fake name.
- Inefficient Candidate Registration via Google Form  
Google form is a separated platform and not integrated with the voting system which can increased the potential of errors, misinformation and struggling in managing candidate information. This also can cause delay because need a manual verification and handling of candidate profile.
- Inability to View Live Election Results  
Student have to wait until the entire period of election process ended. This condition can decrease students satisfaction and experience because the lack of transparency during the voting process.

### **3.0 PROJECT OBJECTIVE**

- To get rid of “invisible voter” and duplicate voting during the voting process. Only authenticated students can vote and “one metric number one vote” will help to prevent multiple votes from same student.
- To develop an integrated system for candidates to register in the same platform to make the process more secure and systematic contrasted to Google Forms
- To provide live updates of election results, allowing students and admin to view vote counts live during the election process.

### **4.0 SCOPE**

#### **4.1 Project Scope**

E-voting System for UPTM student council election will have three main users which are voters, candidates and admins. This system allow students to register, vote and view live election results. Candidates can register, create and manage their profile easily. Admins will manage the registration of the candidates, supervise the voting process, and make sure only eligible students can be participated.

#### **4.2 Product Scope**

The e-voting system will begin with separate login pages tailored for administrators, voters, and candidates. Once voters log in, they will land on a home page where they can easily view live election results, explore candidate profiles and information, and cast their votes all after completing their registration. For candidates, the system allows them to manage their profiles and submit their campaign details easily. Meanwhile, administrators will have a dedicated dashboard to manage candidate registrations, monitor the voting process, and access live election results, ensuring everything runs smoothly and transparently.

## **5.0 TARGET USER**

- Voters

UPTM students who want be participated in the student council elections. They want an easy and secure system to cast their votes, view candidates information and see the result in live at anytime and anywhere

- Candidates

UPTM student who want to be participated in the student council. They want an efficient registration process to sign up themselves as candidate and can manage their profile and campaign information for the voters to be viewed.

- Admins

UPTM staff which is in charge of the election process. They need to manage candidate registration, keep eye on voting process and access live election result.

## **6.0 PROJECT REQUIREMENTS**

### **6.1 Software Requirements**

- Database Management

MySQL – storing data of voter, candidates and admin

- Programming Language

HTML & CSS – front end development for a user friendly interface

JavaScript – adding interactivity

PHP – back end development to manage database interaction

### **6.2 Hardware Requirements**

System Model : HP Pavilion 15-eg2xxx

OS Name : Microsoft Windows 11 Home Single Language

Processor : 12th Gen Intel(R) Core(TM) i5-1235U 1.30 GHz

Installed RAM : 8.00 GB (7.68 GB usable)

System type : 64-bit operating system, x64-based processor

## 7.0 PROJECT PLANNING AND METHODOLOGY

For E-voting System for UPTM MPP election development, I use Agile Methodology as guidance. It can help in completing this project easily with a well organised plan. It also help in improving in solving problem and communicating with the related people.

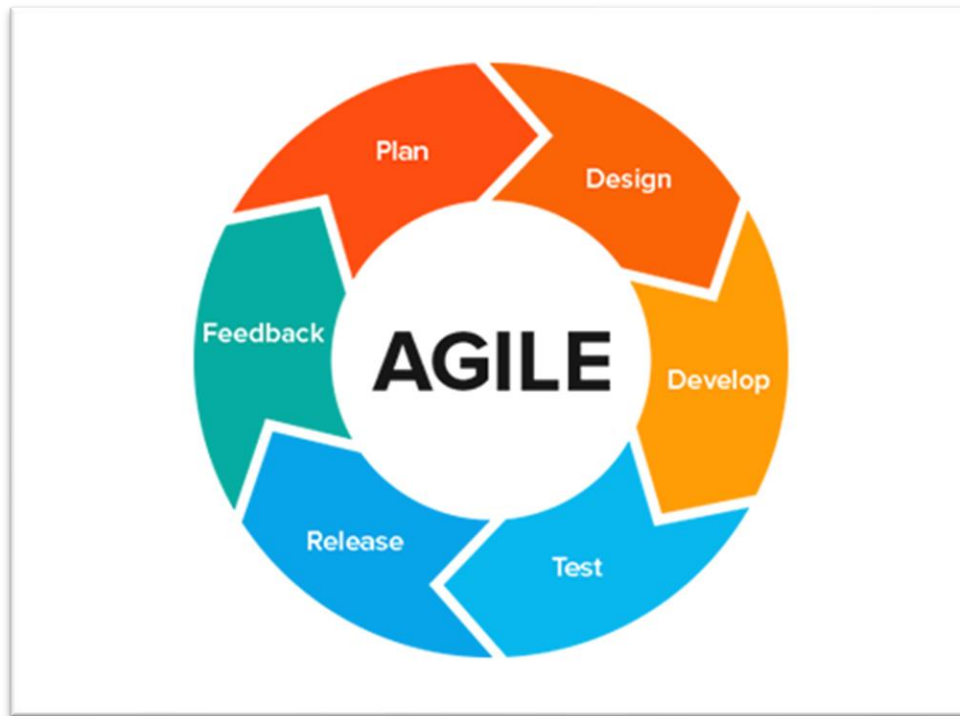


Figure 1 : AHutabarat, Y. (2020). *Agile in a Nutshell*. [online] Medium. Available at: <https://medium.com/@yafonia/agile-in-a-nutshell-7725674ee31e>.

**Plan :** During this period, all data about e-voting system including the problem that have been faced by voters, candidates and admins from UPTM were being collected. This details is used for making project problem statement, project objective and project scope to ease the preparation before enter for the next phase.

**Design :** A prototype will be shown to related staff of UPTM to visualize how the system look like and how it works. The prototype will be designed based on their requirement and any refinement or feedback provided will be taken in for the final design.

**Develop :** In this stage, development of the e-voting system will start led by the user requirement that has been gathered in design phase. In this stage also, coding will be

done to implement all the system features such as voter and candidates registration, live result of election, candidate management and so are more.

Test : E-voting System for UPTM MPP election will be tested in this phase to see if the functionality and the usability are good. Any bugs, errors or weakness will be indentified and fixed before the actual system deploy. Any feedback also will be collected during this process too to improve and ensure the system is good to go for UPTM use.

Deploy : After testing and improving phase, E-voting system for UPTM MPP election is ready to use for voters, candidates and admins for the election day. Feedback also will be received from real user of the system.

Review : After receives the feedback and reviews from the users, improvement will be made to make the system better according to user demand.

## **8.0 CONCLUSION**

The development of E-voting System for UPTM helps mordenizing the student council (MPP) election process. By using this system, UPTM can make sure all student will be experiencing more secure, efficient and transparent voting. This system also helps future students that want to register to be a part of the candidates for the new student council in easier way. No more Google Form will be used for the candidates registration that can caused misinformation and to prevent from any mistakes happen. By following the Agile Methodology, it helps a lot during the development of this system by ensuring continuous feedback and improvement to meet the needs of voters, candidates and admins of UPTM. This system also will enhance the involvement of the UPTM student to join the election process at anytime and anywhere.

## 9.0 GANTT CHART

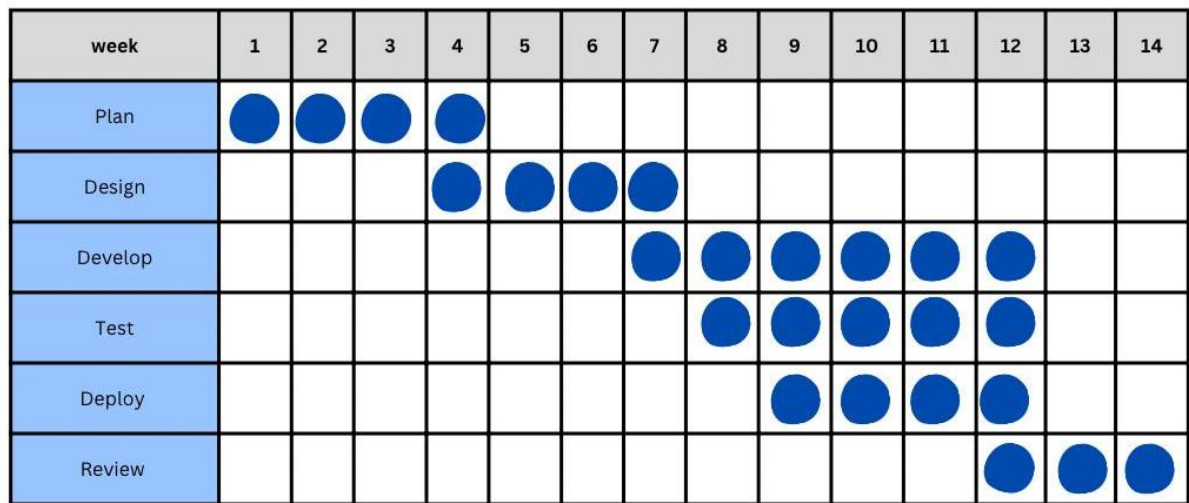


Figure 2 : Gantt Chart



## 10.0 REFERENCES

- ElectionBuddy (2022). *The Advantages And Disadvantages Of Online Voting Systems*. [online] ElectionBuddy. Available at: <https://electionbuddy.com/blog/2022/04/20/the-advantages-and-disadvantages-of-online-voting-systems/>.
- Hutabarat, Y. (2020). *Agile in a Nutshell*. [online] Medium. Available at: <https://medium.com/@yafonia/agile-in-a-nutshell-7725674ee31e>.
- Masterson, V. (2024). *What is e-voting? Who's using it and is it safe?* [online] World Economic Forum. Available at: <https://www.weforum.org/agenda/2024/04/what-is-electronic-voting/>.
- Right2Vote. (2024). *eVoting solutions for College Elections - Right2Vote*. [online] Available at: <https://right2vote.in/what-we-do/student-voting/college-elections/> [Accessed 2 Oct. 2024].
- s4sadm (2022). *How Technology Is Transforming Student Council Elections - Voting 4 Schools*. [online] Voting 4 Schools. Available at: <https://voting4schools.com/how-technology-is-transforming-student-council-elections/> [Accessed 2 Oct. 2024].