Faculty of Information Technology

UNIMAS
MAJLIS PERWAKILAN PELAJAR (MPP) PORTAL

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DECLARATION

No portion of the work referred to this report has been submitted in support of an application for another qualification of this or any other university or institution of higher learning.

Lorna Munan bt Alexius Nayang 17 March 2003

We would like to express our special thanks to our co-ordinator, Miss Fairuzah Bt Shawal for giving us great advices and guidance for in preparing this report and also in registering the UNIMAS MPP Portal.

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ABSTRACT

In this Internet era, many have realized the benefit of a portal. A portal is a gateway to access information by just a click of a mouse. Information and Communication Technology (ICT) has resulted in the development of portal in universities in Malaysia and also portal for Student Representative Council, which is known as Majlis Perwakilan Pelajar (MPP). With the portal for MPP, information are easier to be broadcasted and students can easily voice out their views and ideas. The development of this Majlis Perwakilan Pelajar Portal is one of the many portals that are upgrading the traditional way of broadcasting information to more technological and systematic way. This thesis is written based on the development of UNIMAS Majlis Perwakilan Pelajar (MPP) Portal.
ABSTRAK


1.1 Introducción

"Consumers of digital information today value reference materials that are organized, accessible, and easily navigated. Therefore, universiti and companies have, in a sense, new priorities. These priorities include the need for all universiti, which also include the Majlis Perwakilan Pelajar (MPP), to get involved as a gateway, a uni others.

"Students are learning more through digital education, and so are all organizations. Schools benefit, UNIMAS MPP.

1.1.1 Background

Universiti Malaysia known as UNIMAS, is an institution that offers a wide range of programs, including those in technology and communication. The Majlis Perwakilan Pelajar (MPP) is one of the organizations that utilize the portal for its communication needs. The portal is designed to be efficient, interactive, and consistent, providing a platform for the dissemination of information and communication among students and other stakeholders.
1.0 AN OVERVIEW

1.1 Introduction

"Consumers quickly embraced Internet-connected PCs as a point-and-click way to surf the world, gaining access to everything from global e-mail to broadcast news, stock quotes, reference material and downloadable images." (PC World Malaysia, 2002).

In this world of technology, Internet is a very useful tool used to access information, news, reference material and so on. Besides that, it is the fastest and easiest way to broadcast information via portal. Due to this fast growing technology in the era of Internet, many organization developed portal for this reason. In most universities, a portal serves as a gateway for many especially students to access information about the university itself. Besides being a gateway, a university portal is also available as a tool to convey ideas and to communicate with others.

Since the existence of the Multimedia Super Corridor (MSC), the government has strongly emphasized on the importance of Information and Communication Technology (ICT). Therefore, universities in Malaysia took a big step and placed ICT as one of their main priorities. This resulted in the development of portal in many of the universities in Malaysia, which also includes the portal for Student Representatives Council, known as Majlis Perwakilan Pelajar (MPP). The MPP is an organization in the university, which represents undergraduates of the university. With the existence of a portal for MPP, it will be much easier for students to get involved and at the same time have more freedom to present their ideas, and to communicate with other students wherever they are.

"Students are happier and more involved when their ideas are heard and their opinions valued. Schools benefit too when students are involved in school organization and planning." (New South Wales Student Representative Council, 2002).

1.1.1 Background of UNIMAS Majlis Perwakilan Pelajar (MPP)

Universiti Malaysia Sarawak (UNIMAS) has established a Student Representative Council, known as UNIMAS MPP. UNIMAS MPP was launched on 12 December 1993. The functions of UNIMAS MPP are as follow:

i. To raise the spirit of living as an organization among the students of University.

ii. To arrange and supervise facilities for students' welfare in University which includes facilities for recreation, spiritual and religious activities, and food and drink supply.

iii. To make appeal to Vice Chancellor on all matters regarding the condition of the University students' life and University students' work, in accordance to the order of Vice Chancellor.

iv. To represent in any organizations following to the accordance of the Act, appointed to do the students' welfare activities in University.

v. To perform any other activities set-up by the council from time to time.
1.1.2 UNIMAS MPP Committee Members

The UNIMAS MPP committee members are selected among UNIMAS students. They are selected by other students through an election which is not compulsory for every student. In order to vote, the students will need to register and vote for the nominated candidates during the election time at the respected poll centres. The UNIMAS MPP committee members are the representatives to the students in promoting the views of the student as well as to give positive encouragement to get students to actively participate in university’s policies. The committee consists of 11 members for a one year term in office. The positions for UNIMAS MPP organization are as Figure 1.1.

![Organization Chart of UNIMAS MPP Committee Members](image)

1.2 Problem Statements

The Student Representative Council, known as Majlis Perwakilan Pelajar plays an important role in representing students’ rights and ideas. A survey (refer appendix A) conducted among 100 UNIMAS students revealed the following outcomes:

i. Majority of the UNIMAS students fairly know about MPP, its role and as well as the committee members of MPP. About 95% from the survey conducted shows that the students are unaware of the existence of the MPP website, and 5% commented that the information in the website are not updated.

ii. Under the current system, voting for the selection of the committee members is still done manually. Most students are fairly satisfied with it. In order to cast their votes, the students need to queue up at the designated place located for voters to cast their vote. This manual process can be time consuming in the future as the number is expected to increase from 3000 to 6000 students in 2004.

iii. The election of the MPP is usually organized by the Pusat Pemajuan Pelajar (PPP) and is done once a year. Before the day of election, many staffs are needed to
make the necessary preparations for the election. During the election day itself, the staffs are required to get the students’ registration done smoothly. After the election, the organizers will tally the votes, and this takes the organizers a lot of time, due to the manual process. Based on the past experience using the current procedure, this process took the organizing committee at least four to five hours to complete and the longest time recorded for counting the votes was 12 hours.

iv. Since the election is done manually, therefore there are a few things needed, such as containers for the ballots, and white board to record the votes. This is very inconvenient because when a single mistake occur and the votes are not tallied, a vote recount is needed. As the number of students increase every year, there is a need to improve the voting procedure.

v. Besides that, we found that 70% of the students are unaware about announcements, the Wadah UNIMAS and organization chart that broadcast via paper.

1.3 Project Objectives

Based on the finding stated in the earlier section, this project will try to solve and hopefully improve the image of MPP and customize the manual process of casting ballots during election. The following are the objectives of this project.

i. To develop a portal for the UNIMAS MPP with more interactive features in addition to adequate tools to expose the students to the role of MPP and as well as the members of MPP. Furthermore, the portal is a one-stop centre for students to air out their views and ideas through discussion board.

ii. To develop a web-based working prototype on MPP voting system to facilitate students to cast their votes.

iii. To provide tools for the election organizers to manage the election process as well as to facilitate in the counting of votes, thus reducing the process time.

iv. To display voting results in charts and statistic form.

1.4 Scope of the Project

The development of this project is focused on UNIMAS MPP for UNIMAS students. This portal serves as a center for source of information and sharing ideas as well as getting feedbacks from the students. The features of this portal are as follows:

- **Voting system** – system for the students to cast their vote during the election day.
- **Discussion board** – where students can voice out their ideas, feedbacks and opinion on any topics regarding campus life.
- **Wadah UNIMAS** – provides news and happenings, as well as news from the MPP.
• Calendar – provides information on activities organized by the MPP and UNIMAS.

• Announcement – provides the latest and important announcement’s from the PPP or the MPP itself.

• Organization Chart – gives information of the current MPP committee members.

• Guest book – to allow visitors to post comments regarding the portal.

• Links – includes links related to UNIMAS.

1.5 Research Significance

At the completion of this project, the UNIMAS MPP Portal will be a very useful center for information and idea sharing. This UNIMAS MPP Portal will be featured with interactive designs. Besides, the casting votes and also calculating of votes will also be computerized. This includes instant data retrieved either in charts or in statistical form. Data in charts or statistical form is easier to compare and also analyse.

1.6 Project Plan and Schedule

Project planning and schedule is very important throughout the project life cycle. The project plan and schedule will be a guideline in completing of this project. Table 1.1 shows the specific task and duration to be completed. The Gantt Chart refer to Appendix A.

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1.7 Outline

This report will

1.7.1 Chapter One

This chapter gives background of scope of project.

1.7.2 Chapter Two

Chapter two focusses on related existing portal. The analysis of portal.

1.7.3 Chapter Three

This chapter discusses the project. Besides the project.

1.7.4 Chapter Four

This chapter provides the system design. The analysis included. It also includes system.
1.7 Outline of Project Report

This report will include eight chapters. Each chapter will be discussed briefly as given below.

1.7.1 Chapter 1: An Overview

This chapter gives an overview of the fundamentals of this project. These consist of the background of UNIMAS MPP, overall problems in the UNIMAS MPP, project objective and scope of project. This is important as a guideline to develop this project.

1.7.2 Chapter 2: Literature Review

Chapter two focuses on the literature review of the proposed portal. It is also gives a review to related existing system in the world that has its own advantages and limitations. It also compares the features, interfaces and implementation tools of the proposed portal.

1.7.3 Chapter 3: Methodology

This chapter discusses on the procedures and approaches that is used to solve problems of this project. Besides that, it explains deeply every phases that occur in this project.

1.7.4 Chapter 4: System Analysis

This chapter presents the analyses that have done to the current system and also the proposed portal. The analysis will include the system requirements and specification to develop the portal.

1.7.5 Chapter 5: System Design

System design focusses on the system design of the proposed portal. This chapter illustrate the flow diagram, interaction diagram, use case, input and output design.

1.7.6 Chapter 6: System Implementation

In this chapter, the hierarchy model of the system and the installation of operating system is included. It also includes the implementation of the system module and the user manual of the system.
1.7.7 Chapter 7: System Testing and Evaluation

System testing and evaluation will be discussed on the module test and system integration test of this system. The user acceptance test, result analysis and system limitation is also added to this chapter.

1.7.8 Chapter 8: Conclusion and Future Works

Chapter eight will conclude by discussing on the achievement and suggestion on the future work of this project.
2.0 LITERATURE REVIEW

2.1 Introduction

This chapter discusses the literature review on the Majlis Perwakilan Pelajar (MPP) Portal. Literature review is important to achieve successful system. It is important because it helps our members to tackle problems that occurred in existing portal in the world. Apart from that, it gives a guideline, clue or some idea to develop a competitive proposed system. A comparison of the tools and existing portal are also explained in this chapter.

2.2 Majlis Perwakilan Pelajar (MPP) Portal

Nowadays, the existing E (electronic) sites such as e-mail, e-commerce, e-banking and others, give a new term in IT millennium era, that is Portal. According to Hullard, a portal is a web site that is intended to be the first place people sees when using the web. It is the fastest and easiest way to broadcast information via web site. A portal site has a catalogue of web sites, a search engine, about discussion group, important links, news and other features (Hornby, A. S, 1997)

For the project, it was decided to adopt Majlis Perwakilan Pelajar (MPP) Portal as a gateway for many especially students to access information about the Majlis Perwakilan Pelajar (MPP) in the UNIMAS. It allows users especially students to access various modules thus enhancing the way Majlis Perwakilan Pelajar (MPP) effectively delivers information to students, anywhere and anytime. However, the level of student involvement is controlled by the administrator.

2.3 Student Portal Requirement

Before reviewing on similar portal for the Majlis Perwakilan Pelajar (MPP), the basic required features is first reviewed. The three websites that contains the requirement for the student portal are:

- Student Portal Features for Student
  (Reference: http://www.gu.edu.au/text/gfls/portal/students/student tour.htm)

- Student Portal
  (Reference: http://www.threerivers-cams.com/StudentPortal.htm)

- Portal: Are Windows to our College Experience
  (Reference: http://www.sunysuffolk.edu/Web/Central/IT/CompC/planning/documents/Portals.doc)

The Student Portal provides communication and student tools together with personalized, easily navigable and on-line delivery of learning materials. In this portal, it is suggested that address book, course map, discussion forums, virtual classroom, notice board, calendar, blackboard and digital drop box to be included in a student portal.
Virtual Classroom is like a “live” classroom discussions. It allows the teaching team and students to participate in the discussion and also view previous classroom sessions. Even guest speakers and subject matter experts talk with students in the virtual classroom.

The Digital Drop Box page allows one to exchange files with the teaching team.

Calendar enables students to manage their course, school, university and personal events. Upcoming and past events can be viewed daily, weekly or monthly and organized into different categories.

Electric Blackboard allows students to save notes within the student portal environment.

CAMS Student Portal is a powerful, easy to use tool that offers the highest level of security to ensure the confidentiality of students’ sensitive data.

The features for the portal are student information update, student directory, campus news, calendar, links, and online polls/student elections.

Students’ information update is where students can update their own basic information. Each institution has the full decision-making power.

Student Directory enables students to view the student directory online with email link readily available. Only students with the appropriate information will appear in the directory.

Campus news is a must in student portal. It gives the latest news and happening around the institution.

Calendar is to view all the events, registration dates and deadlines and more happen in the institution.

Discussion Groups is defined by the institution for group discussions. Links provides unlimited links to sites valuable to the student body.

Online polls/student election is where student vote for their own student government and other campus issues. Besides, students are able to view the poll results online.
Portal: Are Windows to our College Experience is another portal that gives good guidelines of features of student portal.

In this portal, it is suggested email, discussion groups, chat rooms, personal calendar and announcements to be included (Portal: Are Windows to our College Experience, 2003).

Calendar enables students to be linked to class schedule and academic calendar. Students automatically see meeting dates of the courses registered. Events are also added into the calendar.

2.4 The Review of the Existing System

In reviewing similar portals for Majlis Perwakilan Pelajar (MPP), four websites are chosen. Two websites are local universities located in Malaysia and the other three are overseas universities located in Amherst and Australia.

2.5 Comparison of the Reviewed System

There are about 20 portals that had been researched on MPP Portal but only four universities and colleges had been chosen. It is because they have a good reputation in education and moreover, their MPP provide their information through Portal for students. Table 2.1 shows the features that are available on the five existing MPP Portal that had been chosen. From the table 2.1, the basic features of Portal that must be included are found.

2.5.1 Sweet Briar College, Amherst

Sweet Briar College is a selective liberal arts and sciences college for women offering 35 majors in academic programmes (Sweet Briar College, 2003). This college also has a MPP as the students’ leader.

Students in this college can access the blackboard, location, calendar, diversions, assistance and services online. There is no password needed. For the voting for the student council representative, user name and password are compulsory. Commonly, there are features as follows in the modules:

- About Us
- Alumnae
- Blackboard
- Calendar
- Comments and Suggestions
- Directory
- Prospective students
- Search
- Voting
- Links
- Maps
- News
The About Us module is saying all about Sweet Briar College. Sweet Briar College is one of the best values in higher education. It has a national reputation for its programs in the sciences (About Sweet Briar College – Welcome, 2003). SBC is located in the foothills of the Blue Ridge Mountains of central Virginia. Sweet Briar College is about 3,250 acre with socially rich environment and a natural classroom.

SBC also provide Online Election (Election 22, 2002). Students must key in their email username and email password in order to join the election. Students were able to cast their vote from anywhere. The system ensures that only eligible students vote. For those who do not remember their username or password, or having problem logging, they can email the administrator. This module is programmed using PERL scripting language.

Suggestion Module is where students suggest any topic. This module is important for the administrator as the feedback of students enable the administrator to add changes to the portal.

Directory contains all the contact numbers of the staff in Sweet Briar College.

Calendar module is where students can view the academic calendar and other events at anytime. The calendar list events is from year 2002-2005.

Students who might be lost or cannot find certain topic in the portal, can use the search engine provided. For example, students looking for a certain topic on news, can type a phrase of word in the search engine box.

Maps show the entire route around the Sweet Briar College.

2.5.2 Universiti Sains Malaysia (USM), Malaysia

Universiti Sains Malaysia (USM) is one of the local universities in Malaysia. MPP is the voice among the students (University Sains Malaysia, 2003). They represent students to voice out anything that they not satisfy with. MPP representatives is chosen among students through election. The election is done manually where student of Universiti Sains Malaysia have to bring their identity card (ID card) to vote for the MPP. All modules can be access without passwords. The modules that are included in this portal are:

- Activities
- Alumnae
- Calendar
- Directory
- Feedbacks
- Libraries
- News
- Organization Chart
- Profile and Gallery
- Prospectus students
- Search

In the about us module is saying all about Sweet Briar College. The calendar USM is it without password. The calendar is from year 2002-2005.

The Organization MPP USM. They are the voice of all University Sains Malaysia (USM) students. They represent students to voice out anything that they not satisfy with. MPP representatives is chosen among students through official election. They are the representative of the students.

Students who have problems with the integration of the news, they can email the administrator. They can email the administrator. The modules are:

- Activities
- Alumnae
- Calendar
- Directory
- Feedbacks
- Libraries
- News
- Organization Chart
- Profile and Gallery
- Prospectus students
- Search

In forum module is very si...
In activities modules, the date and organizer of the activities are published in the modules. The module is very simple where everyone can access to it without password. The topic of the activities is highlighted above the news.

Calendar USM is also written statically (Universiti Sains Malaysia, 2003). Students can access it without password. This means that everyone who accesses this portal can view the calendar of USM. The calendar is organized month by month. When user wants to view a certain month’s activities, they click on the month that is provided.

The Organization Chart is design statically on the portal. There are few committee members in MPP USM. They are Yang Dipertua, Naib Yang Dipertua, Setiausaha, Bendahari, Biro Helsis, Biro Penerangan, Biro Kebajikan, Biro Penyelidikan dan Pembangunan, Biro Perhubungan Antarabangsa, Biro Akademik dan kerjaya, Biro Integrasi dan kebudayaan, biro suka dan rekreasi (Carta organisasi, 2003).

2.5.3 Multimedia University (MMU), Cyberjaya Campus, Malaysia

MPP in Multimedia University (MMU) is the entrusted body that has been chosen to represent the voice of all undergraduate of MMU (Multimedia University, 2002). Their vision is to see MMU students united as one. They want to bring changes and improvements to coordinate clubs and societies under MPP. MPP serves as the middle person between undergraduates and the management of the University.

From the MMU portal (Refer to Appendix B), all the information is static. Anyone can view the information without any passwords. Follows are the contents in the MMU portal:

- About us
- Email
- Guest Book
- News Archives
- Links
- Forum

In the about us module, the motto, objectives and missions are stated. The Student Representative Council is a student body, for the students, elected by the students through an official election (Students' Representative Council, 2003). Their motto is “Cross Cultural Integration”. They strive to achieve their best in serving the needs of all students.

Students who have doubt on this portal can email to the administrator. Students can use this easily as it is simple.

Guest book is open to whoever has visited the portal to sign in. In the guest book modules, students must fill in the form that requires them to fill in their name, comments and their email address.

News archives are where the administrator publishes any latest news in the portal.

In forum module, student can discuss online with anyone on any topic.

Links module provides links to other universities available.