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JUDUL : UTeM MPP VOTING SYSTEM USING SMS

SESI PENGAJIAN : 2011 / 2012

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Kem PGA, 31150
Ulu Kinta, Perak

Tarikh: 30/08/2012

(TANDATANGAN PENYELIA)

MUHAMAD SYAHRUL AZHAR BIN SANI

Tarikh: 30/08/2012

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UTeM MPP VOTING SYSTEM USING SMS

ABDUL JABBAR BIN ASERAN

This report is submitted in partial fulfillment of the requirements for the Bachelor of Computer Science (Computer Networking)

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2012

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DECLARATION

I hereby declare this project report entitled

UTEM MPP VOTING SYSTEM USING SMS

is written by me and is my own effort and that no part has been plagiarized without citations.

STUDENT : _____ Date: 30/08/2012

(ABDUL JABBAR BIN ASERAN)

SUPERVISOR : _____ Date: 30/08/2012

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DEDICATION

A special dedication to my parents who have always inspired me in everything i do. They have taught me that determination and hard work is the key to success. Also i want to thanks my supervisor for giving me the guidance for completing this report. Thank you so much.

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ABSTRACT

UTeM MPP voting system using SMS is a voting system using mobile phone for voting process. It different from the existing system that needs students to go to polling station for voting manually. The purpose for developing this system is to make the voting process can be done anywhere only using their hand phone without need to go to polling station. With this system, the voting process can be done more easily and fast. Furthermore, this system come with web page for students or voters to see the competing candidates before vote for them.

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ABSTRAK

UTeM MPP voting system using SMS merupakan sebuah system undian yang menggunakan telefon bimbit. Berbeza dengan system undian MPP yang sedia ada memerlukan pelajar untuk pergi ke pusat undian untuk mengundi secara manual. System ini direka untuk memudahkan pelajar untuk mengundi calon MPP pilihan mereka hanya dengan menggunakan telefon bimbit tanpa perlu pergi ke pusat undian untuk mengundi. Dengan bantuan system ini, proses undian dapat dilaksanakan dengan mudah dan cepat. Selain itu, system ini mempunyai laman web khas untuk pelajar melihat calon-calon yang bertanding sebelum mengundi mereka.

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LIST OF ABBREVIATIONS

PSM	-	Projek Sarjana Muda
UTeM	-	Universiti Teknikal Malaysia Melaka
SMS	-	Short Message Service
GSM	-	Global System Mobile Communication
MPP	-	Majlis Perwakilan Pelajar
2G	-	Second Generation
SMCS	-	Standard Microsystems Corporation
JPJ	-	Jabatan Pengangkutan Jalan
API	-	Application Programming Interface
ASP	-	Active Server Page
GPRS	-	General Packet Radio Service
GIF	-	Graphic Interchange Format
JPEG	-	Joint Photographic Experts Group
BMP	-	Bean-Managed Persistence
DML	-	Data Manipulation Language
GDK	-	Graphics Development Kit
3G	-	Third Generation
SCM	-	Software Configuration Management
HCM	-	Hardware Configuration Management
NIC	-	Network Interface Card

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CHAPTER I

INTRODUCTION

1.1 Project Background

In Malaysia, every University, College, and Matriculation have their own student representative council or Majlis Perwakilan Pelajar(MPP) organization consist of students to maintain student's charity. MPP consist of students that had been voted in campus elections held only twice a year. UteM MPP consists of 28 students represent 7 faculty found in UTeM. When UTeM MPP campus election comes, all candidates that wants to become one of UTeM MPP member busy to promote themselves to convince all students to vote them.

When the campus election time comes, all students need to go to polling station to vote for their chosen candidates. There is no University, College, and Matriculation included UTeM use SMS method to vote the MPP candidates. SMS stands for Short Message Service. It is a technology that enables the sending and receiving of messages between mobile phones.

In this project, voting for MPP candidates can be made by only using SMS. Although using SMS, this system comes with its own security features to prevent fraud in the voting and also avoid unauthorized person to access this system.

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1.2 Problem Statements

When discuss about using SMS to vote for MPP candidates, Security issue always play an important role within the discussion of the usage of SMS as a communication medium. The security issue such as students can only vote once only is very important. As everybody knows, one student can only vote once for MPP election. Another issue that risen before develops this project is not all students have hand phone. Although living in developed countries, not all people got their own hand phone for communication usage.

Every MPP candidates must do a campaign to promote themselves for convincing all students to gather many votes. In UTeM, there are no platforms such as web page to see all candidates' information before voting them. In MPP election, what all candidates hopes is students can vote for their MPP candidates because unvoted students can spoil the result and the result is not too accurate. In UTeM, there is no reminder to remind student to vote for their favorite MPP candidates because reminder can help administrator to gather more voting.

1.3 Objectives

The objectives of this project are:

- To allow students vote for their chosen candidates without going to the polling center
- To save students time from a long wait to vote
- To make sure student can only vote one times only
- To remind student who not voted yet to do so
- To make sure voters can get information about MPP candidates before voting them

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1.4 Scopes

There are 7 modules and 3 different users for this system. The modules and user scope were describes below.

1.4.1 User

- Admin
    - Admin is the authorize person who control this system
    - As a person that responsible to manage the system, enter record in database and perform a method function such as add, delete, update and search record
- Student/Vorter
    - Student is a main user of this system
    - As a user, students need to register first to admin before allowed to use this system
- Candidates
    - Candidates is a person that compete in UteM MPP election
    - Candidates need to register to admin before voters can vote for them

1.4.2 Specific Requirement

- Software
    - Operating system – Windows 7/ Windows XP
    - Programming Language (include version) – Vb.net
    - Development Tools / IDE (include version) – Virtual basic 2008/2010
    - Database (include version) – Microsoft Access 2010
    - iTegno 3000: iTegno Mobile Office Suite 4.01.0
- Hardware
    - GSM modem iTegno 3000

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- Sim card
- Hand Phone
- Personel computer as server

1.4.3 Module

- Login Form
  - This module only allow authorized person to login in this system
  - Authorized person or admin have been given an username and password to login in this system
  - Unauthorized person cant login to this system
- Voters Management Form
  - This module allow admin to manage the user or voters in this this system.
  - This module include add, delete, update, generate password, and search
- Candidates Management Form
  - This module allow admin to manage the candidates
  - Admin can add, delete, update, and search candidates data from the database
- GSM Connection Form
  - This module allow admin to connect GSM modem to the server
- Message Form
  - This module will retrieve all message or vote that has be send to this system
- Result Form
  - This module show the result of the election
  - The result is calculated automatically
- Report Form
  - Can provide report and analyze required data

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1.5 Project Significance

This project give the benefits to students which can easy to submit a vote without going to election station. This will help students to save thier time from a long queue. The security of this system is important because all the related data is private and confidential. So that, this system provided good data security such as all data will be save in the specific database. All authorization person have thier own username and password to make sure that unauthorized person cant access to this system.

1.6 Expected Output

The expected output for this project is a system that can help UTeM student to vote when MPP election time easy and fast. This system operate automatically and more reliable to user. Administrator can easily manage this system because all the data will save in database and can be reconfiguring anytime. Other features in this project are admin login, see voter statistic, register voters and candidates, GSM connection, Message reader, Generate password, password encryption, generate report and result and other features that can help this project are developed as well. To help system administrator and all users, system manual and user guide were provided to help user to use this system perfectly.

1.7 Conclusion

This chapter helps to understand what the project background, scope of the project and problem statement clearly before started this project. Voting system using SMS will make student easy to vote for their chosen candidates. In the next chapter, will explain about literature review and project methodology.

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