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JUDUL: ONLINE STUDENT VOTE SYSTEM

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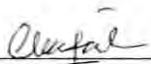
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^ Tesis dimaksudkan sebagai Laporan Projek Sarjana Muda (PSM)

# **ONLINE STUDENT VOTE SYSTEM**

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This report is submitted in partial fulfillment of the requirements for the Bachelor of Information and Communication Technology (Software Development).

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY  
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**2004**

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## **DEDICATION**

To my beloved parents...

For inspiring my dreams, for helping me so much in achieving, I love you both very  
much...

## ACKNOWLEDGEMENTS

*I would like to thank Pn. Noraswaliza bt Abdullah, my Supervisor PSM for giving assistant to complete this project successfully...*

*I would also like to thank to my beloved parents that constantly giving me support and motivation until at the end of my project.*

*I would also like to thank my friend Mr. Mohd Nor Ismail bin Mohd Said because he lend me the CPU to run my system, to Lecturer Ms Rosleen bt Abd Samad, she give me some idea that I can do the PSM until complete. She also give me a support and a suggestion for me to request a PC so that I can do my PSM in the Lab.*

*Lastly, I would like to thank for all person that involved in my PSM as a direct or indirect. Thank you very much....*

## **ABSTRACT**

As we know, the vote system not yet develops in KUTKM. The system in KUTKM is use as a manual system. So, the electronic system must be developing to replace the manual system. Besides that, the purpose of developing the project is to solve and handle the problems face by the manual system. This Online Student Vote System will reduce time, cost and papers usage during the students election process. The research has done to know the election process that held in Malaysia and also in University especially in KUTKM. The methodology that chooses to develop the system is SDLC because it explains the detail step and concept so that the system, which develops, can be more understand with using this methodology. The scope of research only comprehend election process in KUTKM and other IPTA where it make as a reference because there have already have the computerized system. We hope that with develop this system; it can help the user and administration management of the system.

## ABSTRAK

Seperti yang kita sedia maklum, sistem undi belum dibangunkan lagi di KUTKM. Sistem di KUTKM menggunakan sistem secara manual. Oleh itu, satu sistem secara online perlu dibangunkan bagi menggantikan sistem manual yang ada sekarang. Selain itu, Online Student Vote System dibangunkan adalah untuk menyelesaikan dan mengatasi masalah seperti menggunakan masa yang lama untuk mengundi, mengurangkan kos yang tinggi, dan penggunaan kertas yang banyak. Kajian telah dilakukan untuk mengetahui perjalanan proses pilihanraya yang berlaku di Malaysia dan juga di Universiti terutamanya di KUTKM ini. Metodologi yang dipilih untuk membangunkan sistem ini ialah SDLC kerana ia menerangkan langkah secara lengkap dan sistem yang akan dibangunkan lebih jelas dengan menggunakan metodologi jenis ini. Skop bagi kajian yang dijalankan hanya berkaitan dengan proses pilihanraya di KUTKM dan IPTA lain dimana ia boleh dijadikan sebagai rujukan dan panduan kerana kebanyakan IPTA yang lain telah menggunakan system undi secara berkomputer. Adalah diharapkan dengan terbinanya system ini, ia akan dapat membantu memudahkan pengguna (pelajar) dan pihak pentadbir menguruskan sistem.

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## LIST ABBREVIATION

<b>ABBREVIATION</b>	<b>DESCRIPTION</b>
ADUN	Ahli Dewan Undangan Negeri
AI	Artificial Intelligence
ASP	Active Server Pages
AUT	Application Under Test
CGPA	Cumulative Grade Point Average
COTS	Commercial Off-The-Shelf
DUN	Dewan Undangan Negeri
ERD	Entity Relationship Diagram
GUI	Graphic User Interface
HEP	Hal Ehwal Pelajar
IPTA	Institusi Pengajian Tinggi Awam
IT	Information Technology
KUTKM	Kolej Universiti Teknikal Kebangsaan Malaysia
LAN	Local Area Network
MPP	Majlis Perwakilan Pelajar
PWM	Personal Web Manager
PWS	Personal Web Server
SDLC	System Development Life Cycle
SPR	Suruhanjaya Pilihanraya
SVGA	Super Video Graphic Array
VGA	Video Graphic Array
YDPA	Yang Di-Pertuan Agong
UiTM	Universiti Teknologi Mara
UKM	Universiti Kebangsaan Malaysia
UML	Unified Modelling Language
UPM	Universiti Putra Malaysia
URL	Unified Relational Language

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## **CHAPTER I**

### **INTRODUCTION**

#### **1.1 Preamble/Overview**

Despite the growth in information and communication technology, computerized application is required to have some basic intelligence. Moreover, Artificial Intelligence (AI) has gained its place in information technology (IT) world nowadays and requires for a perfect humanized computing environment. Undoubtedly here, humanized application is the trend of future IT world.

##### **1.1.1 Project Description**

Today, computer using is a part of human life in helping their daily activity. Computer is not use in administration work only, but it also in outside, in entertainment and in education. With the current technology, all the duty that is impossible can be finished in a short time. For example, with using Flash software, we can design the animation that we need and can scroll it up and down, turn around and other.

Online Student Vote System is the computerized system that modified from the old system in KUTKM, which use as a manual. For the basic, student vote system KUTKM is the same as the online student vote system that we use now. Online Student Vote System start with the student registration form that will vote at that year. Every student need to fill the password to use the system to avoid the problem such as vote

more than one time or exist problem spirit voter. After they have done, they allow using this Online Student Vote System.

All the changing process, deleting, adding or call back data will become faster and true that can executed by the staff that have not any computer background, because every process are the operation that controller by a computer and the simple instruction like typing a password and other.

The Online Student Vote System still needs the manual process because while the registration process held and the adding data vote candidate into the computer because insert process data vote candidate execute by administrator KUTKM only. The process like voting, selecting and see the data of vote candidates will execute by computer according to the system, which develop.

### **1.1.2 Purpose of System**

Usually, the develop system have their own reason. The reason why student vote system want to develop because:

- i) It can help administration management in election process in KUTKM become easier than before.
- ii) System in KUTKM not use the computerized before and it execute as a manual only.
- iii) It can make this vote process become faster and all the data that store in the database safe.



### 1.1.3 Reference Organization

The organization that become reference for developing Online Student Vote System in KUTKM such as UKM, UPM, and UiTM. It is because KUTKM is the new Institution of Government Education (IPTA). So, it needs one organization as a reference about the concept and process of voting system in that organization.

Beside that, the reference from SPR (*Suruhanjaya Pilihanraya*) was executed to get the detail information about how a voting system held not only in Malaysia, outside Malaysia but also in Local University and Oversea.

## 1.2 Problem Statement

Problems the current voting system are: -

- i) KUTKM use the voting system as a manual

The systems that use in KUTKM still using manual like fill the form. This will exist a few of problem while saving process and searching data. It will cause maintenance process of input and output become difficult and not effective, and also a service in KUTKM not good.

- ii) Exist spirit voting

It will execute by student that not responsibility like damage the vote paper although the other student have done carefully.

iii) Take a long time while election process held

It happens while checking process and maintenance for vote candidate and student. It is because checking process needs more time to check one-by-one.

### 1.3 Objective

The purpose of the project is to develop management system and voting service that use the network computer with the same facilities in KUTKM. The system can give the facilities and comfortable to the user whether a staff or a student which using it. As overall, this system will give the better service.

This system is to handle the problems that include in a manual system. The objective is:

- i) Change the work that have done as a manual to one method of computerized with more efficient and effective and also execute the better service.
- ii) Upgrade the access method of voting information so that it will become fast, easy and more systematic.
- iii) Avoid existing spirit voting.
- iv) The security of election held becomes safety.
- v) Existing the environment work comfortable, the good service and the good quality of service.
- vi) Modify the storing data (voting database) become safety.

- vii) Provide one report of vote result as an efficient.

## **1.4 Scopes**

For this system it define two types of scope that is; scope of end-user and scope of system.

### **1.4.1 Scope of end-user**

The executing of the system involved local network in KUTKM. The users that will use the system are the student and the KUTKM administrator. This system also involved the database and modification of a real-time. This is to make sure the information that we use is truth.

### **1.4.2 Scope of system**

The time to complete this system is short and the system is complex, so to create the complete system is difficult and need a long time. This system is focus to some of main module like:

- i) Register candidate information

The system is providing to candidate register their information first.

- ii) Register student information

The system is providing to student register their information first.

- iii) Voter Checking

The voter can check the status vote that is including in the database or not.

iv) Report of data voter

The display of voter information about how many times that they vote.

v) System maintenance

System can run better with vote process and voter information (student).

vi) Online Voting

Make an online voting during election time.

vii) Report of voting result

The final of the system, it will display the result of candidate.

## 1.5 Contributions

The benefit of the project is to help system development that not exists in KUTKM. Besides that, we can know how far this system can use and their using for the student and the staff.

The data that we get will place in the database storage safely. It can't take by the unknown person and who not involved in the system except the administrator of the database. We also can study the disadvantages of system and can improve, create the function, which is not including in the system. It also can safe a time of voting result and the management will become easier and faster.

We hope that this system can safe the data from the hacker and the system can give the benefit for all person especially the staff and the student in KUTKM and the end-user that using the system.

## 1.6 Expected Output

Online Student Vote System is a web-base system, which makes the students and administration work become efficient and convenient. Student can use the system with register first. After they register, they can login the system with enter the user name and password. If the password is correct, they allow using the system, but if they enter the wrong password, they must back the login page and must enter the true password.

After that, they can see and view the data of candidate to make a selection. They also can read the rules of MPP. After they have view, they can select the candidate that they want. Here, they not allow voting more than one time. Those who are vote more than one time, the error message will pop up to warn the user. The system can show how many time this candidate have vote by the student. At the end of the system, it will display the result so that student can know whom candidate as MPP. The student also can print the result and the result will display whether at the faculty or any place in KUTKM area.

## **CHAPTER II**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

To make this system success, and the developing system need the detail information, so we choose to make a research and make some interview. It is because from the research, we can get a lot of information about the system and can make a reference and guideline and some of information that needed in the system.

Beside that, we also make an interview with seeing a staff from HEP that involved in election process to select the MPP in KUTKM to know about the technique or a process of student election held.

##### **2.1.1 Overview**

The purpose of this literature is to improve the knowledge and more experience about election process that held in Malaysia or in University. It not only involved a manual system but also the current system.

The study about the current system that have been develop also done whether from library or from the internet to make sure the system that was develop follow the movement period.

Beside help to get an information about the system, it also purpose to modify the system become better and the system to complete the user requirement that want to use this system soon.

## 2.1 Fact and finding

The example of fact and finding of the project are taken from the democracy system that held in Malaysia. The explanation are given below:

### i) Democracy System in Malaysia

The democracy is the one meaningful concept for the country that gives a freedom for individual in determine the country leadership.

The word Democracy means *Kerajaan milik rakyat, oleh rakyat, untuk rakyat*. Malaysia practice the democracy system, the power of government give by people. The selection leadership make through the election one time in 5 year.

The democracy that is practicing in Malaysia is the design of Democracy Parliament where they are the agent that selects by people to do governance through the allocation of *Perlembagaan Persekutuan*. In this case, the government that selected by people must care and appreciate the mandate that give by people better so that they can get the support by people now and election coming soon.<sup>1</sup> (Mardiana & Hasnah (2000) Pengajian

Malaysia. Penerbit Fajar Bakti Sdn. Bhd.)

### ii) Election

In the Parliament democracy, the person is determining to government development through general election. The election is introduced in *Tanah Melayu* before independent where the first elections of *Tanah Melayu* were held in 1955.

The election is the formal channel and authentic by the rules for all the people in Malaysia that have enough rule to vote for decide the leadership or their agent in Parliament, *Dewan Rakyat* and *Dewan Undangan Negeri*.

The area of election can defined as area of *Dewan Rakyat* and *Dewan Undangan Negeri*. The selection process of agent is named as voting. The overall process that decides the candidate or the party, which develop the government that defined as election.

The voice and personal possessions give the opportunity and all this through authentic like parliament and election. From the election, the people give a chance to select their own government.<sup>2</sup> (Nazaruddin Hj.Mohd Jali, Ma'rof Redzuan, Asnarulkhadi Abu Samah, Ismail Hj.Mohd Rashid: Pengajian Malaysia, Prentice Hall)

### iii) The Importance of Election

Malaysia is the country that practices the parliament democracy. The design of leadership in this country is election and voting. It is an important of politic concept especially for people to give a mandate or power to the party to develop government. From the election, the people independent to select there own government and practice the freedom concept as one of the citizen about the selection of leadership.

The agent that selected by people whether to *Dewan Rakyat* (*peringkat Persekutuan*) or *Dewan Undangan Negeri* (*perngkat Negeri*) responsibility about the voter from their area. That means, the government that practice democracy system is the government that selected and agree by the people through the election to do the task for people profit. The philosophy of democracy “from people to people and for people”.

Usually, election that have competition between the party where the winner of party develop the government and power to handle that government. The party that