



**TUNAS MAHKOTA TUITION CENTRE PORTAL
(TMTP)**

'ALAWIYYAH BINTI MELY

**A report submitted in partial fulfillment
of the requirements for the award of the degree of
Bachelor of Computer Science (Software Engineering)**

**Faculty of Computer Systems & Software Engineering
University Malaysia Pahang**

DECEMBER 2014

ABSTRACT

Nowadays, many portal systems are developed to facilitate users to interact online, where it displays the latest information according to a particular category. This is because, the online system has many advantages compared using a manual system. This portal developed caused by problems faced by the management Tunas Mahkota Tuition Centre such as student registration process where, they are having problems in data storage because the registration is done manually and all student registration information stored in files. By this method, it is exposed to loss, theft and damage data. Generally, registration method manually unsatisfactory some people and take longer time to process data. According to this problem, Tunas Mahkota Tuition Centre Portal developed to improve the quality of management of Tunas Mahkota Tuition Centre. It also helps to facilitate the students to make registration and will also satisfy both sides.

ABSTRAK

Pada masa kini, banyak portal yang dibangunkan untuk memudahkan pengguna untuk berinteraksi dalam talian, di mana ia memaparkan maklumat terkini mengikut kategori tertentu. Ini kerana, sistem dalam talian mempunyai banyak kelebihan berbanding menggunakan sistem manual. Portal ini dibangunkan disebabkan oleh masalah yang dihadapi oleh pengurusan Tuisyen Tunas Mahkota dalam proses pendaftaran pelajar di mana, mereka menghadapi masalah dalam penyimpanan data kerana pendaftaran dilakukan secara manual dan semua maklumat pendaftaran pelajar disimpan dalam fail. Dengan cara ini, ia terdedah kepada kehilangan, kecurian dan data kerosakan. Secara umumnya, cara pendaftaran secara manual tidak memuaskan sesetengah orang dan mengambil masa yang lebih lama untuk data diproses. Sehubungan dengan masalah itu, Portal Tuisyen Tunas Mahkota dibangunkan bagi meningkatkan mutu pengurusan Tuisyen Tunas Mahkota. Selain itu juga ia memudahkan pelajar untuk membuat pendaftaran dan juga turut memuaskan kedua-dua belah pihak.

TABLE OF CONTENTS

1.0 INTRODUCTION	1
1.1 PURPOSE OF THE PROJECT	2
1.2 PROBLEM STATEMENT	3
1.3 OBJECTIVES	4
1.4 SCOPE	5
2.0 LITERATURE REVIEW	8
2.1 INTRODUCTION	8
2.2 EXISTING SYSTEM COMPARISON	9
2.3 EXISTING SYSTEM DESCRIPTION	11
2.4 COMPARISON OF EXISING SYSTEM AND PROPOSED SYSTEM.....	16
2.5 COMPARISON PROGRAMMING LANGUAGE.....	18
3.0 METHODOLOGY	19
3.1 INTRODUCTION	19
3.2 SYSTEM DEVELOPMENT LIFE CYCLE (SDLC).....	20
3.2.1 PLANNING PHASE	21
3.2.2 ANALYSIS PHASE	21
3.2.3 DESIGN PHASE.	24
3.2.4 IMPLEMENTATION PHASE	28
3.2.5 MAINTENANCE PHASE.....	28
3.3 PROJECT REQUIREMENTS.....	29
3.3.1 SOFTWARE ITEM	29
3.3.2 HARDWARE ITEMS.	30
4.0 IMPLEMENTATION.....	31
4.1 INTRODUCTION	31

4.2	TOOLS AND TECHNOLOGIES.....	32
4.3	DATABASE CREATION	32
4.3.1	DATABASE CREATION METHOD USING PHPMYADMIN	33
4.3.2	TABLE CREATION	34
4.3.3	DATABASE MANIPULATION.....	41
4.3.3.1	DATABASE CONNECTION.....	41
4.3.3.2	ADDING DATA INTO DATABASE	42
4.3.3.3	UPDATING DATA INTO DATABASE.....	43
4.3.3.4	DELETE DATA FROM DATABASE	43
4.3.3.5	SELECT DATA FROM DATABASE.....	44
4.3.4	DEBUGGING AND RUNNING THE SYSTEM.	44
4.4	TUNAS MAHKOTA TUITION CENTRE PORTAL ENGINE.	45
4.4.1	CHECK STATUS.....	45
4.4.2	FORM REGISTRATION ONLINE	46
4.4.3	ADD PAYMENT STUDENT	47
4.4.4	ADD PERFORMANCE.	49
5.0	RESULT AND DISCUSSION.....	50
5.1	INTRODUCTION	50
5.2	RESULT ANALYSIS.....	51
5.3	SYTEM INTERFACE	52
5.4	CONSTRAINTS	72
5.5	FUTURE ENHANCEMENT.....	72
6.0	CONCLUSION	73
	REFERENCE	74
	APPENDIX	75

LIST OF FIGURES

Figure 2.1 : Interface ‘Pusat Tuisyen Seri Mawar Bestari’	12
Figure 2.2 : Interface ‘Pusat Tuisyen Mawar’	14
Figure 2.3 : Interface ‘Pusat Tuisyen Perintis Didik’	15
Figure 3.1: Development Life Cycle (SDLC) Waterfall Model	20
Figure 3.2: Context diagram.....	22
Figure 3.3: Use case diagram	23
Figure 3.4: Architecture design	25
Figure 3.5: Database design	27
Figure 4.1: XAMPP server Control Panel Application.....	33
Figure 4.2: Create “tntp” database.	33
Figure 4.3: Create table student.....	34
Figure 4.4: Table student.....	34
Figures 4.5: Create table admin.....	35
Figures 4.6: Table admin.....	35
Figures 4.7: Create table guestbook	35
Figures 4.8: Table guestbook.	36
Figures 4.9: Create table news.	36
Figures 4.10: Table news.....	36
Figures 4.11: Create table pay.....	37
Figures 4.12: Table pay.....	37
Figures 4.13: Create table performance.	38
Figures 4.14: Table performance.....	38
Figures 4.15: Create table subject.	39
Figures 4.16: Table subject.	39
Figures 4.17: Create table teacher	40

Figures 4.18: Table teacher.	40
Figure 4.19: The database connection coding.	41
Figure 4.20: Code for adding data to database.....	42
Figure 4.21: Add guestbook comment interface.	42
Figure 4.22: Update data into database student.....	43
Figure 4.23: Delete From Database.....	43
Figure 4.24: Select From Database	44
Figure 4.25: Check status interface	45
Figure 4.26: Coding form registration online.....	46
Figure 4.27: Form registration online interface.....	47
Figure 4.28: Coding add payment.....	48
Figure 4.29: Add payment interface.....	48
Figure 4.30: Coding add performance.....	49
Figure 4.31 Add performance interface.	49
Figure 5.1 : Main page of Tunas Mahkota Tuition Centre Portal.	52
Figure 5.2 : Profile page.	53
Figure 5.3 : Service page.....	53
Figure 5.4 : Gallery page.....	54
Figure 5.5: Timetable page.....	54
Figure 5.6: Registration form page.....	55
Figure 5.7: Check registration page.	56
Figure 5.8: Contact page	56
Figure 5.9: Main page for admin.....	57
Figure 5.10: New registration list page	57
Figure 5.11: Approvals page.	58
Figure 5.12: Registration form for teachers	59
Figure 5.13: Student list page.....	59

Figure 5.14: Edit student information page.....	60
Figure 5.15: Main page for news.....	60
Figure 5.16: Add news page.....	61
Figure 5.17: Add news page.....	61
Figure 5.18: Payment page.....	62
Figure 5.19: Add payment page.....	62
Figure 5.20: Receipt payment.....	63
Figure 5.21: List payment page.....	63
Figure 5.22: Guestbook list page.....	64
Figure 5.23: Main page for teacher.....	65
Figure 5.24: Edit information on teacher page.....	65
Figure 5.25: Add exam paper page.....	66
Figure 5.26: Exam paper list.....	66
Figure 5.27: Performance list page.....	67
Figure 5.28: Add performance page.....	67
Figure 5.29: Student page.....	68
Figure 5.30: Edit information on student page.....	68
Figure 5.31: Payment information page.....	69
Figure 5.32: Guestbook page.....	69
Figure 5.33: Performance student page.....	70
Figure 5.34: Guestbook page.....	70
Figure 5.35: Status application form.....	71

LIST OF TABLES

Table 2.1: Existing system comparison.....	9
Table 2.2: Comparison of existing system and proposed system.....	16
Table 2.3 : Comparison programming language.	18
Table 3.1: User Characteristics.	24
Table 3.2: Architecture design.	26
Table 3.3: Software Item.	29
Table 3.4: Hardware Items.	30
Table 5.1 Users function.	51

LIST OF APPENDICES

Appendix A	Gantt Chart.....	75
Appendix B	Turnitin Report.....	82
Appendix C	Agreement Letter.....	84
Appendix D	Requirements Specifications (SRS) and System Development Plan (SDP).....	85

CHAPTER 1

INTRODUCTION

This chapter briefly discuss on the overview of the research that includes the purpose of the project, problem statements, objectives of the system and scope of the system.

1.1 PURPOSE OF THE PROJECT

As we known, information technology and internet technology have affected life today. The existence of this technology provides convenience in our daily lives. Most of the manual procedures used during the procedure has changed to a more automated or more systematically by using the latest technology.

Tunas Mahkota Tuition Centre Portal is a system that developed to enable students to make the registration process to register by online. This system is essential to ensure that the management at the Tunas Mahkota Tuition Centre can be done quickly and save time. All information will be stored securely in data storage, this means that all the information can be reviewed and updated by management Tunas Mahkota Tuition Centre. Tunas Mahkota Tuition Centre Portal has it own ability where this system able to insert data, delete data, update information, displays latest news, displays payment information students, online registration, displays performance student, download examination paper, print payment receipt and print application result.

1.2 PROBLEM STATEMENT

From the investigation that has been made in the Tunas Mahkota Tuition Centre, many problems that found from the current system , where they use a manual system. Tunas Mahkota Tuition Centre Portal is new systems that will be developed based on the problems below.

- i. The current implementation uses manual registration to register new students.

Before this, the registration record is recorded using a manual system where the student must fill the form when they want to register at Tunas Mahkota Tuition Centre. From this method, it uses many papers where it will cause storage problems to management Tunas Mahkota Tuition Centre. Besides that, it takes a long time to process the registration form.

- ii. The data storage is not organized.

All student registration information is stored in a special file where, they have two types of file that company used to store the all registration information which is payment file and a registration file. From this, it can expose data to loss, data theft and damage.

- iii. Difficult for staff to check student information.

It is difficult for staff to check all the application either it has already been done approve or not where, staff need to check one by one student file to update the information. It also can take a long time to find the information of students.

1.3 OBJECTIVES

The objectives of this system are:

- i. To convert manual management system to computerized management system.
- ii. To design a database that stores all information about the students and teachers.
- iii. To develop an interactive portal for the Tunas Mahkota Tuition Centre.

1.4 SCOPE

The following are scope of the system that has identified the system and the user.

a) System

This project has the requirement for the hardware and software. Below is some example of hardware and software that will be used for this system.

i. Hardware.

The hardware that used in this project is:

- Printer.
- Computer or laptop.

ii. Software.

The software that used in this project is:

- Macromedia Dreamweaver CS 5.
- Adobe Photoshop 7.0.
- Microsoft visio 2010.
- XAMPP MySQL.[1]
- MySQL Workbench.[2]

b) User.

This system has three user which are admin (Management Tunas Mahkota Tuition Centre), student and teacher at Tunas Mahkota Tuition Centre.

i. Admin (Management Tunas Mahkota Tuition Centre).

- Adding data, updating data, delete and search data.
- Approve the student application whether accept or not.
- Add the news information or activity that can view by students and teachers.
- View the list of new registrations and list student that active at Tunas Mahkota Tuition Centre.
- View and delete comments at guest book that make from the students.
- Make a new registration for students and teachers.
- Add fees payment.
- Print receipt payment.

ii. Student.

- Register online.
- View gallery.
- View profile Tunas Mahkota Tuition Centre.
- Add a comment in the guest book.
- Check status registration.
- View subject offered.
- Download examination paper.
- Edit profile
- View schedule.
- View payment information.
- View performance information.

iii. **Teacher.**

- **Add and view list examination paper.**
- **Add and edit performance student.**
- **Edit profile.**

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

Nowadays, there are many tuition portal available. Each system has its own strength and weakness against each other. For the Tunas Mahkota Tuition Centre Portal, there are many modules or functionality designed to support the portal such as service module, timetable module, form module, guestbook module and others module to ease the user to use this system

In this chapter, it is to identify the strength and weakness of the several systems such as 'Pusat Tuisyen Seri Mawar Bestari', 'Pusat Tuisyen Mawar' and 'Pusat Tuisyen Perintis Didik' website which related with on this project and the development of web based for Tunas Mahkota Tuition Centre Portal. All the case study can be implemented as a reference to continue this system.

2.2 EXISTING SYSTEM COMPARISON

There are several systems that used as a reference such as 'Pusat Tuisyen Seri Mawar Bestari', 'Pusat Tuisyen Mawar' and 'Pusat Tuisyen Perintis Didik'. Below are the tables of example comparison between each website based on several criteria regarding it modules, interface design, strengths and weakness.

Table 2.1: Existing system comparison.

	<i>'Pusat Tuisyen Seri Mawar Bestari'. [3]</i>	<i>'Pusat Tuisyen Mawar'. [4]</i>	<i>'Pusat Tuisyen Perintis Didik'. [5]</i>
Supporting module.	i. Home. ii. Latest news. iii. Program. iv. Schedule. <ul style="list-style-type: none"> • Secondary school. • Primary school. v. Gallery. vi. Testimony. vii. Contact us. viii. Register online <ul style="list-style-type: none"> • Online registration form. • Rule. 	i. Home. ii. Corporate. <ul style="list-style-type: none"> • About us. • Career opportunity. • Contact us. iii. Branches. iv. Academic. <ul style="list-style-type: none"> • UPSR, SPM bank question. • Result. • Gallery. • Latest news. • Student registration. • Download timetable. 	i. Home. ii. Introduction. iii. Service. <ul style="list-style-type: none"> • List of subjects. • Schedule. • Environment tuition. • Registration and fees. iv. Inspiration. <ul style="list-style-type: none"> • Motivation. v. Gallery. vi. Contact us.

Interface design.	<ul style="list-style-type: none"> i. Basic graphical interface design. ii. Clearly' navigation. iii. User friendly. 	<ul style="list-style-type: none"> i. Good graphical interface design. ii. Clearly navigation. iii. User friendly. 	<ul style="list-style-type: none"> i. Good graphical interface design. ii. Clearly navigation. iii. User friendly
Strengths	<ul style="list-style-type: none"> i. All elements are neat and orderly. ii. Can ask questions or comment to the tuition management. iii. Can make registration via online. 	<ul style="list-style-type: none"> i. Have the UPSR, SPM bank question. ii. Have the exam countdown. iii. Display number of the visitors. iv. Display latest news. v. Able to download timetable. 	<ul style="list-style-type: none"> i. Display calendar. ii. Display news info. iii. Display number of the visitors.
Weakness	<ul style="list-style-type: none"> i. Does not display the date and time. 	<ul style="list-style-type: none"> i. Does not display the date and time. ii. Does not have the registration form online. iii. Does not display subject package with clear. 	<ul style="list-style-type: none"> i. Does not display time. ii. Does not have the registration form online. i. Does not display subject package with clear.

2.3 EXISTING SYSTEM DESCRIPTION

Each of the tuition websites has provided their own designed interface and others function for users. Below are some examples of the design interface of existing systems and some of the description about the system.

i. Case study 1 : (*'Pusat Tuisyen Seri Mawar Bestari'*).

On the '*Pusat Tuisyen Seri Mawar Bestari*' website , the Graphical User Interface (GUI) that it uses is a basic graphical interface design where the design is simple. Besides that, the navigation such as button is clear and this system is user friendly.

The strengths of this website are all elements are neat and orderly such as for the picture, button and so on. Besides that, user can ask questions or comment to the tuition management at column provided on the home page. User also can make registration via online, if they want to join '*Pusat Tuisyen Seri Mawar Bestari*'.

The weakness of this system is, it does not display the date and time on their website. From this, it can make difficult to users or visitors to know the current time and date.

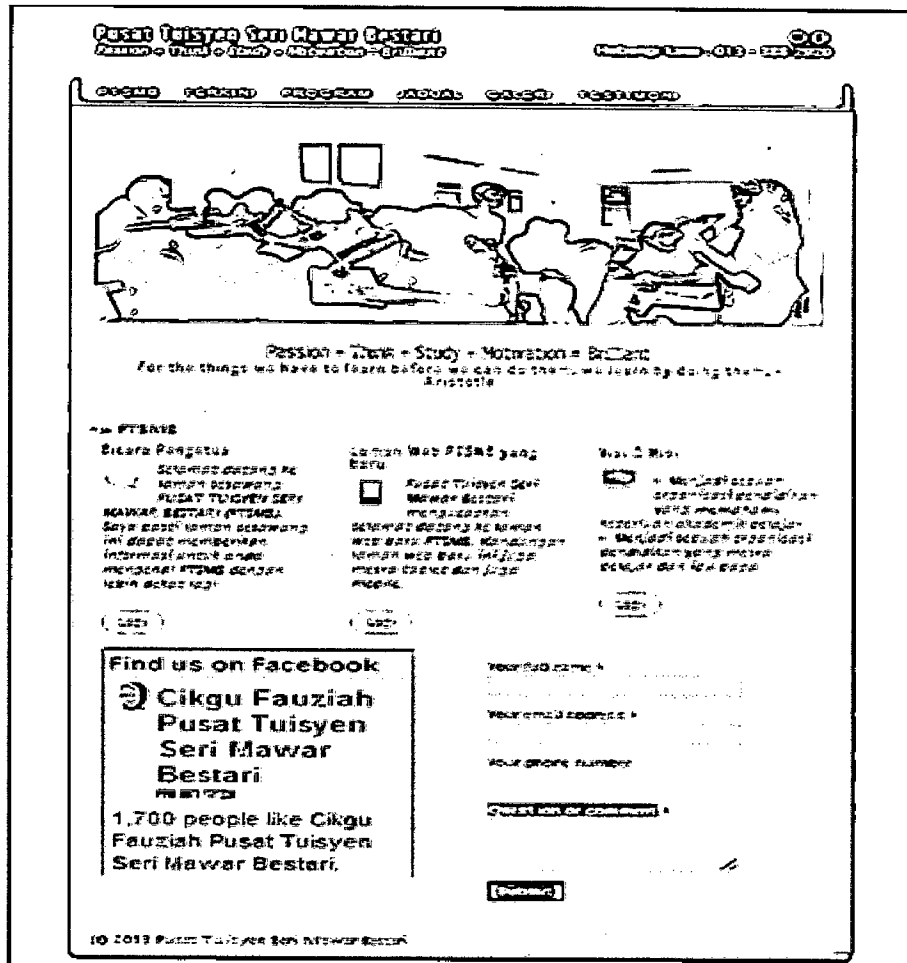


Figure 2.1 : Interface 'Pusat Tuisyen Seri Mawar Bestari'.

ii. Case study 2 : (*'Pusat Tuisyen Mawar'*).

On the '*Pusat Tuisyen Mawar*' website, the Graphical User Interface (GUI) that it use is good graphical interface design because it contains elements of multimedia such as video, graphics and so on. Besides that, the navigation such as button is clear and this system is user friendly.

The strengths of this system are, it has the UPSR and SPM bank question where it is easy for students to get the examination question. This system also has the exam countdown where it is easy for a user to view the examination days, display number of the visitors, display the latest news in their tuition and user also able to download the timetable.

The weakness of this system is , it does not display the date and time on their website. These systems also, not have the registration form online, where they only use the manual system. Besides that, it does not display subject package with clearly where it can difficult for users to know the subject that have offered in this tuition. Below are examples of website interface for the '*Pusat Tuisyen Mawar*'.

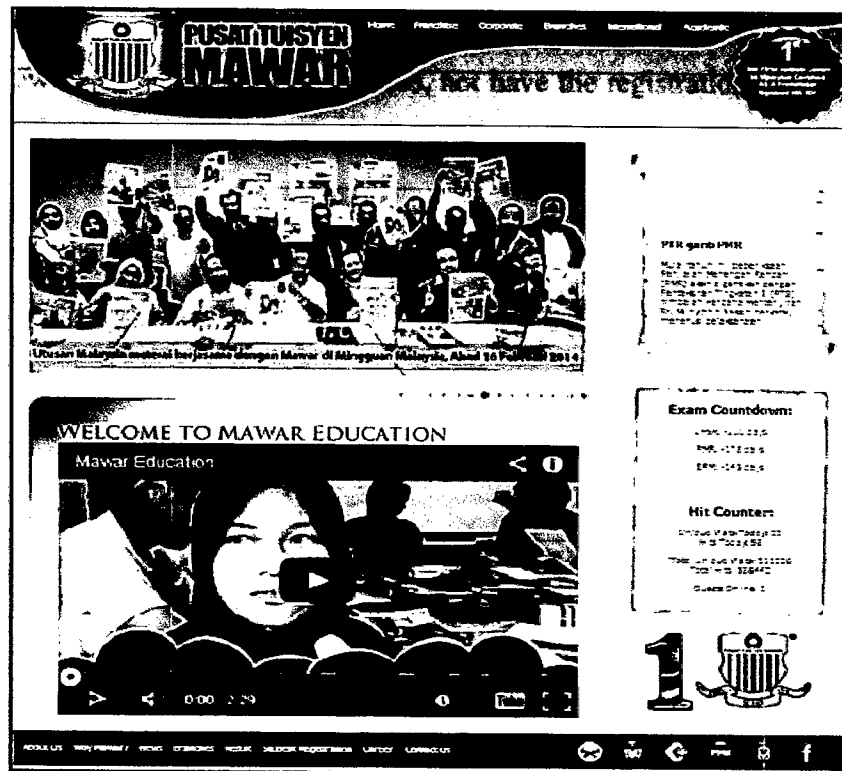


Figure 2.2 : Interface 'Pusat Tuisyen Mawar'.

iii. Case study 3 : ('Pusat Tuisyen Perintis Didik').

On the 'Pusat Tuisyen Perintis Didik' website , the Graphical User Interface (GUI) that it use is good graphical interface design because they use the element of multimedia such as video and graphics for creating the banner and others design is very interesting. Besides that, the navigation such as button is clear and this system is user friendly.

The strengths of this system are, it displays calendar where it is easy for users to see the date. This system also displays news info that appears the activity that related to their tuition. It also displays the number of the visitors where it counts how many visitors visit this website.