

BROADCASTING REAL TIME INFORMATION
USING MOBILE AND INTERNET TECHNOLOGY
(MALAYSIA SUPER LEAGUE LIVE SCORE
SYSTEM)

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ABSTRACT

Currently, almost all Malaysian have interest on football. If the game is promoted properly in Malaysia, we can produce a new generation who are committed towards this sport and become a fan and supporters for Malaysia. To develop the interest toward this sport, a platform which functions as a mediator between the fans and the sports events is needed. The need of user to know about the results of football tournament is fulfilled by the system. Moreover, the system enables the results reach users through SMS alerts. Besides that, it creates medium for sharing through its discussion board features. This feature helps users to point out their thoughts and opinions about football sport in a good way. This web based application is a bridge for the users to the football world. This project use Agile methodology to implement the development process. For the project development, PHP language been used as a language and MYSQL as a database to store information.

Table of Content

Contents

Number	Title	Page
1	INTRODUCTION.....	1
1.1	Introduction.....	9
1.1.1	Problem Statement	10
1.1.2	Objectives.....	11
1.1.3	Scopes.....	11
1.2	Existing System.....	12
1.2.1	Introduction – Live Score.....	12
1.2.2	Related Existing Systems or Research	13
1.3	Current System and Limitation	15
1.4	Method of Approach	15
1.5	Scope and Limitation of the Malaysian Super League Live Score System.....	16
1.6	Outline of the Outcome	17
2.1	User Requirement.....	18
2.2	Design Description.....	18
2.2.1	Method and Materials.....	19
2.3	Development Plan	21
2.4	Implementation.....	22
2.4.1	Database	22
2.4.2	Web Layout	24
2.4.3	Login and Registration Component.....	26
2.4.4	Live Score Module	29
2.4.5	SMS Module	40
2.4.6	Forum	42
2.4.7	Non-proposed additional features.....	45
2.5	Testing Plan.....	48
2.5.1	Unit Testing.....	49
2.5.2	Integration Testing	52
2.5.3	System Testing	53
3.1	Advantages and Disadvantages	54

3.1.1	Advantages	54
3.1.2	Disadvantages.....	55
3.2	Assumptions	55
3.3	Overall conclusion.....	56

List of Tables

Table	Title	Page
Table 2.2.1.1:	List of Software Used.....	Error! Bookmark not defined.
Table 2.2.1.2:	List of Hardware Used	Error! Bookmark not defined.

List of Figures

Number	Title	Page
Figure 2.2.1.1:	Agile Software Development 1	20
Table 2.3:	List of Software Used.....	Error! Bookmark not defined.
Figure 2.4.1.1:	Database Structural View	23
Figure 2.4.1.2:	conn.php (localhost).....	23
Figure 2.4.1.3:	conn.php (real server)	24
Figure 2.4.2.1:	Web layout (admin panel).....	25
Figure 2.4.2.2:	Web layout (client side).....	26
Figure 2.4.3.1:	Registration.....	27
Figure 2.4.3.2:	Successful Register.....	27
Figure 2.4.3.3:	Error Message.....	27
Figure 2.4.3.4:	Login.....	28
Figure 2.4.3.5:	Login error handling	28
Figure 2.4.3.6:	Structural view of login	28
Figure 2.4.3.7:	Structural view of member.....	28
Figure 2.4.4.1:	Admin panel – Add Teams	29
Figure 2.4.4.2:	Structural view of team.....	30
Figure 2.4.4.3:	Admin panel – List Teams.....	30
Figure 2.4.4.4:	Admin panel – Add Player.....	31
Figure 2.4.4.5:	Structural view of player table.....	31
Figure 2.4.4.6:	Admin panel – List Player	31
Figure 2.4.4.7:	Admin panel – Fixtures.....	32
Figure 2.4.4.8:	Structural view of fixtures table.....	33
Figure 2.4.4.9:	Admin panel – Live Score	33
Figure 2.4.4.10:	Structural view of time_score table	34
Figure 2.4.4.11:	Admin panel – Standings.....	35
Figure 2.4.4.12:	Structural view of standing table	35
Figure 2.4.4.13:	Real time update script	36
Figure 2.4.4.14:	Client side - Live Score	36
Figure 2.4.4.15:	Client side – Result	37
Figure 2.4.4.16:	Client side – Fixtures	38
Figure 2.4.4.17:	Client side – Standings	38
Figure 2.4.4.18:	Functional structure of Live Score Module	39
Figure 2.4.5.1:	Client side –Payment	40

Figure 2.4.5.2: Admin panel –SMS Notifications.....	41
Figure 2.4.5.3: Script for SMS Notifications	41
Figure 2.4.5.4: Functional structure of SMS module	42
Figure 2.4.6.1: Client side – Create New Forum.....	43
Figure 2.4.6.2: Client side – View list Forum	43
Figure 2.4.6.3: Structural view of forum_tajuk table	44
Figure 2.4.6.4: Client side – Replies topic in Forum page	44
Figure 2.4.6.5: Structural view of forum_jawapan table.....	45
Figure 2.4.6.6: Admin panel – List all topic in Forum page	45
Figure 2.4.7.1: Admin panel – Add News.....	46
Figure 2.4.7.2: Structural view of news table.....	46
Figure 2.4.7.3: Admin panel – List News	47
Figure 2.4.7.4: Client site – News	47
Figure 2.4.7.5: Client site – More detail News	47
Figure 2.4.7.6: Client site – Video	48
Figure 2.5.1.1: Admin panel - Live Score	49
Figure 2.5.1.2: Client site - Live Score interface	49
Figure 2.5.1.3: Admin panel - Live Score interface	50
Figure 2.5.1.4: Client site - Live Score interface	50
Figure 2.5.1.5: Admin panel – SMS Notifications.....	51
Figure 2.5.1.6: SMS Testing	51
Figure 2.5.2.1: Integration of admin interface.....	52
Figure 2.5.2.2: Integration of member interface.....	52
Figure 2.5.3.1: Real server testing.....	53

CHAPTER 1

INTRODUCTION

1.1 Introduction

Everyone knows about football sports and football is sports most popular in worldwide. Football sports also more commonly known as just "football" or "soccer". Football is a sport play as a team which the players use various skill and maneuvers to outplay the opponent in order to score a goal for his team. In Malaysia, we can be said almost all Malaysian have interest on football. If the football sports are promoted properly in Malaysia, we can produce a new generation who are committed towards football sport and became a fan and supporters for football Malaysia.

Nowadays, Malaysian Super League tournaments are telecasted live on television channels according to specified schedule of matches. Malaysia television networks spending millions to get the license for telecasting Malaysian Super League tournaments to entertain Malaysian Super League fans all over Malaysia. Sometimes, it is hard of Malaysian football fans, who are working or travelling to know the updates such as news,

standings, results of their favorite football matches instantly. It is possible to reach Malaysian Super League fans through website, social sites and mobiles.

Web portals and alert newsletters through mobile and social sites can make updates such as news, standings and results of Malaysian Super League tournaments reach their fans easily and on time. By developing an online Malaysian Super League tournaments live score system, it is easy to reach the fan community. This system can help information about their favorite team to reach users easily and can promote football game as well.

1.1.1 Problem Statement

Usual newspaper bought in stores or television telecasting from media mass report can only reach certain group of customers. Traditional way such as newspaper and television telecasting of getting information is not in real time. The information has a certain time gap between information time and the time it reach the audience. People sometimes will forget the schedule tournament such as date or time of the telecast of their favorite football matches. Due to their work or lack of busy schedule they will miss the telecast of their favorite football matches. Football fans need an on time reminder to avoid this problem such as SMS alerts. An update of the schedule tournament such as date and time of their favorite matches is needed, so that real fans would not get disappointed.

People of fans who are busy with unavoidable task have to rely on the media mass such as the newspapers or other news media to get the update or result of their favorite football games. As fans, we need instant updates of scores and results of the match. As far as we know, the newspaper one day late and by getting instant updates they don't have to rely on late news or the next day's newspaper.

Fans need platform to voice out their opinion about the football matches such as about player performance, technique from coach or fan behavior. There must be a proper medium such as forum to deliver their opinions and discuss the topic with others who are with same interest. This can help to join the fans of football under one roof to discuss the

any topic. Hence a system with information about football match which will broadcast real time information is needed to deliver the information to the users in real time.

1.1.2 Objectives

The objectives of this project:

- i. To develop a system that will update the users about current status of on-going Malaysian Super League football tournaments in real time and upcoming events.
- ii. To ensure the Malaysian Super League football fans, who registered to the system, receives alerts regarding the results.
- iii. To create a discussion board or a forum for the users of the system to deliver their point of view or comment about Malaysian Super League football with people who are in same interest

1.1.3 Scopes

The scopes of this project:

- i. This system is will have updates and news for all users. Only registered users and users account active are eligible for SMS alerts.
- ii. Users will get update about information only after the system administrator updates the information and trigger the SMS alerts.
- iii. The updates and results are assumed to be taken from reliable sources at that time such as other football page.
- iv. The accessibility of the system depends on the stability of hardware, software and technologies used by users.

Users or respondents:

- i. Member
- ii. Non-Member
- iii. Admin

1.2 Existing System

This subtopic briefly describes the review on existing techniques related with sports tournament live scoring system referred from the internet. This topic includes the introduction to live score and review of existing related works or research.

1.2.1 Introduction – Live Score

The term live score means the deliverability of scores or results to the targeted users or customers instantly in real time. The term of live score can be any form of score information that is delivered to the users or customers in mean time then other information sources. Live score services widely offered by many sports particularly sport of football related websites and broadcasters as well as online sports betting operators. It is idea of updating fans and sport enthusiasts the updates in real time when the game or match of tournament is going on. Live score are usually free and very popular among sports enthusiasts and critics, as they allow viewing collected data on many sports events such as football, cricket or badminton.

The most common sports that is popular in live score is soccer or football. Most major news and sports sites offer a live score service for their website. Some websites such as the BBC, provide up to the minute details information about match of football such as latest scores, bookings, sending offs, injuries and attendances from the FA Premier League right away down to non-league divisions. Some websites also provide additional information about match of football such as a player list, card details, substitution and an online chat where sports fans can gather and discuss the current event. Several sports organizations such as Major league baseball and the National Football league have set up their own networks to deliver live scores to fans specific payment rates via mobile phones.

Example of programs, broadcasting networks and websites providing live scores:

- i. Goal.com
- ii. LiveScore.com
- iii. Soccer Saturday
- iv. The Goal Rush

- v. Eurosport News
- vi. ESPNcrinfo

1.2.2 Related Existing Systems or Research

i. System and Method for Providing Live Scoring Information and Statistical Data

This system was invented and patent by five people are involved Pat Tocci, Jordon Griffith, Jim Harkless, Joseph Keer and Micheal Moyer from United States. The system was patented and completed early year in January 7, 2011. The invention relates to a system and method for a team to manage information about a wrestling team match, and provide live scoring information and up to date and real time statistical data at a wrestling meet and thereafter.

This system comprises are:

- a) Has a scorebook system, related methods and show all information for receiving optional performance and weight classification data for wrestlers of any age and background.
- b) The system also show providing live scoring and real time statistical data at a wrestling meet and thereafter.
- c) The system also shows analyzing and reporting statistical information about the meets, teams and wrestlers.
- d) The system also show compiling and providing media information about a wrestling meet.

The system and methods also are described in the context of wrestling, particularly for adult such as at a high school or college level; they also may be applied to any sport or activity. The scorebook system used in the system is a computer based application, and may be accessed through the internet. When the scorebook system used in the system receives assessment data and roster information of every assessed wrestler for a school or team. In the system, competitions may be entered through the Team Schedule Component. After the system gets the results, results of competitions may be entered after competition through Competition Data Entry (CDE) component or live

through Live Scorebook Component. In addition, results from the system will be used to update Team Information and Wrestler Information pages.

ii. Digicel Cricket Live Score SMS Alerts

The system is provided by the company Digicel, a big mobile telecommunication company which covers parts of Oceania, Central America, and the Caribbean regions. The company is incorporated or registered in Bermuda, and based or located in Jamaica. This system provides live score alerts through social network such as twitter and through sms alerts. Their services include two sports famous are football and cricket. The system has live SMS score alerts will be provided to Digicel customers across the region each day of play. For use this service, the users can subscribe for sms alerts through WAP portal that has been provided by Digicel.

Provided Services by company Digicel:

- a) Member registration: The user can choose two methods to subscribe are users can sign up through Digicel WAP or send subscription SMS to Digicel to sign up and subscribe SMS alerts.
- b) Manual alerts: Users can choose to use the manual alerts is users can text to the code each time that they would like a score alert, and they will receive a SMS afterwards with the information. After use manual alerts, the user will be charged per text received.
- c) Automatic Alert: If user lazy to use manual alert, user can register for daily updates. When use the automatic alert, the system will send the alerts automatically each time the score update on our system. After use automatic alerts, the user will be charged per text received.

When user uses these services, the users will be charged by Digicel for the SMS alerts. User will receive SMS alert in the given region only because the system is only applicable for Digicel users in the given region. In other words, users who are not use service Digicel or who are not Digicel customers are not eligible for this SMS alerts. All Digicel customers have four type are including postpaid, prepaid, dual and hybrid customers. They will be qualified to participate in the promotion.

After use this services, user also can unsubscribe. To unsubscribe from this system, user should send a text message to Digicel. In this services the tournament sports,

the scores are sent at each innings break and at the end of the game. Users will receive message such as each SMS will show team away, team home, scores and who score goal and time score goal.

1.3 Current System and Limitation

The system that is proposed to broadcast real time information is Malaysian Super League Live Score System. The system will comprise:

- i. Live score update in web portal: to update the portal users about the on-going Malaysian Super League football tournaments.
- ii. An alert system in SMS: to alert subscribed users about update the results in real time.
- iii. Discussion board or forum: provide a platform for users to discuss or deliver their opinions about Malaysian Super League football tournaments in the forum.

The Malaysian Super League Live Score System Limitations:

- i. The web portal services and alert system is depends on stability, efficiency, and accessibility of the hardware and software used and required.
- ii. The SMS alert system is only services registered customers and have credit in account.
- iii. The forum services online only for registered customers to discuss about Malaysian Super League football tournaments.

1.4 Method of Approach

Many different ways and techniques will be used to develop this system to full fill the functional requirement of the system or web portal. The hardware, techniques and services that will be used are:

- i. The web server
- ii. The development language and software and database
- iii. Auto-refresh technique

iv. Third party bulk SMS services

The web server for the development phase and testing phase of this system is provided by 000webhost.com. This web server is free hosting and can be accessed by anyone after enrolling in web000webhost.com. This server will give 1500 MB disk space.

For language, we will use Html 5, PHP, Java are the preferred development languages. Mysql database will be used to save data and the real database located at phpMyAdmin free hosting in 000webhost.com. Software for develop will use like Adobe Dreamweaver, Adobe Photoshop will be used to assist the development process of this online portal.

Auto-refresh technique which uses JavaScript will be implemented in this system to provide updates in real time through the web portal. After use this technique, the web portal will automatically refresh and reload to provide most recent updates in a pre-configured period.

Third party bulk SMS service from isms.com.my will be used to send SMS to registered customers and user account active about the football games that they subscribed. For use this services, must buy SMS. Payment depend the rate SMS. The cheapest rate is 500 SMS for RM50.

1.5 Scope and Limitation of the Malaysian Super League Live Score System

The scope and limitations of the developed system:

- i. This system is will have the updates and news such as live score, standings, result, fixtures for all users. Only registered users and have account active are eligible for news alerts because it is not possible to cover all the football fans throughout the world. This is due to the required information for the alert system is SMS alerts. The registration process will gather those required information such as username, email and phone number of users.
- ii. Users will get update such as live score, standings, results and news only after the system administrator updates the information and triggers the alert system. This

updates is limited because the news and updates have to be provided manually to the system for it make it functional from admin panel.

- iii. The updates and results are assumed to be taken from reliable sources at that time such as other website. The system administrator are not responsible for the validity of data obtained from the system because the information from other website need to gathered for third-party sources to full fill the scope of this system and to cover all the customer needs.
- iv. The accessibility of the system depends on the stability of hardware, software and technologies used in the system. The hardware, software and technologies might be not secure, unstable or malfunction since most of the web scripting techniques are in development and maintenance phase.
- v. In the system, some functions might be available for certain group of users due to the scale of this prototype because his limitation is due to the available resources for the development and testing process.

1.6 Outline of the Outcome

The Malaysian Super League Live Score System that has been proposed will be developed according to functionality specified above. The system might comprise additional functionality such as payment for active account that might be added during development phase. The Malaysian Super League Live Score System can be expected as the fully functional system according to the specifications or requirement and will serve targeted users by broadcasting information in real time. Malaysian Super League Live Score System will be the solution for the problem statement stated above and functions as existing live score system and will have additional functions such as fixtures, standings and news.

CHAPTER 2

REPORT BODY

This chapter includes the user requirement, methods and materials used technical results and comparison with previous works, discussion and analysis of materials and testing plan and results.

2.1 User Requirement

All user requirements will be detailed out in the Software Requirement Specification. Due to the length of the SRS, it has been located at Appendix A.

2.2 Design Description

All design description of the application is documented in the Software Design Documentation, Due to the length of SDD; it has been located at Appendix B.

2.2.1 Method and Materials

i. Method

For develop a system, we must have schedule or guideline for finish system with time. In system, guideline is called methodology. Methodology will use for is generally a guideline for solving a problem, with specific components such as phases, tasks, methods, techniques and tools. The methodology also can be defined as the systematic study of methods that have been applied within a discipline. While the similarly methodology means refers to the rationale or the philosophical assumptions that underlie a particular study or a particular methodology. There are various models of software development process and a lot of methodologies that have been made which might be used in developing good software. Because lot of methodologies, we must by choosing the right and suitable method of software development process, it will determine the efficient and effectiveness of the system. This section will discuss the method that will used by the system in development process of Malaysian Super League Live Score System. After doing research, the methodology agile had been chosen as the methodology used to implement in this project.

The methodology agile software development is a group of software development methods based on iterative and incremental development, where requirements and solutions evolve through collaboration between self-organizing, cross-functional teams. This methodology will also promote adaptive planning, evolutionary development and delivery, a time-boxed iterative approach, and encourages rapid and flexible response to change. This methodology will also is a conceptual framework that promotes foreseen interactions throughout the development cycle.

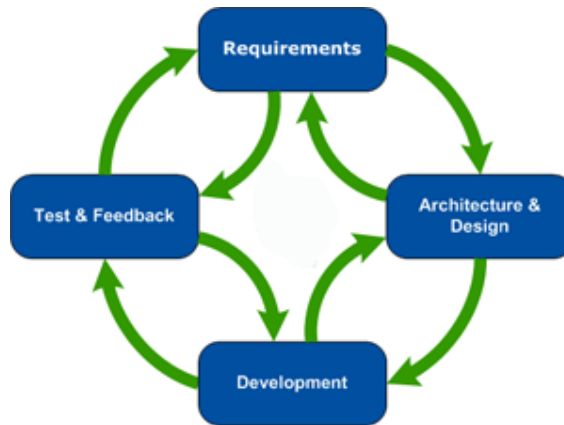


Figure 2.2.1.1: Agile Software Development 1

ii. Materials

Several hardware and software will be used to develop this system.

List software used:

Software	Description
Apache	Web Server
Adobe Dreamweaver CS5	Development language such as HTML, PHP, SQL, JavaScript, CSS
MySQL Database	Database application software
PhpMyAdmin	Database management
Adobe Photoshop CS5	Editing images
Google Chrome	Web testing
Bulk SMS services	Apply service SMS
Windows 7	Operating system used by the server which will be hosting the system

XAMPP	All in one web server used to host the system
-------	---

Table 2.2.1.1 ::Software Used

List hardware used:

Hardware	Description
Laptop i. Acer Aspire 4740G ii. 3.00 GB RAM iii. Intel(R) Core(TM) i 5 CPU iv. 64-bit Operating System	Personal research, testing server and project development based on the task delegated.
Portable Hard Disk : Toshiba 500GB	Backup data and files
Printer : Canon PIXMA MP258	Print document
Domain To host system	To save file
Mobile devices	Forget SMS
Network connection	To connected with internet

Table 2.2.1.2 : Hardware Used

2.3 Development Plan

The development phase is planned will refer to follow methodology agile software development method. In this methodology, each function module is developed separately. The component testing is conducted by the developer after the completion of development of each module. After that, the development process started with next module. If the successful integration of completed modules, the development of other modules is started. The development will follows an order of 'required modules first' to ensure effective for development and for easy development.

The order of 'required modules first' is:

- i. Database(required for all the basic operation of the system)
- ii. Web layout(uniform layout for all the interface)
- iii. Registration component(needed to differentiate client and administrator)

- iv. Live Score module(client side and admin side)
- v. SMS module(admin side)
- vi. Discussion Board module(forum)
- vii. Non-proposed additional features

By following this all order, the bugs and errors in each module can be identified easily. The testing can be carried out along with the development phase. The guidelines to be followed in developing this system are SDD and SRS. A local server and software consists in the development environment. The local server such as localhost is providing a development environment which imitates the real server where the system will be published for. To develop the system is use the local server because carries all the functionalities that is required. The required services like third-party SMS services such as isms.com.my are subscribed in the development phase. After the completed components, the system is the deployed on real server.

2.4 Implementation

This section carries detailed description of development phase of development phase that has been implemented.

2.4.1 Database

For store data, this system uses mySQL database to store all the information. In development environment the database in provided by XAMPP@ server. This includes the phpMyAdmin - a GUI management Of mySQL database. The database and real server is provided is created by 000webhost.com (<http://www.000webhost.com/>). Only one database is used in this system which is named fls and for real server database is a5812546_mslls.In total eleven tables are created to be used in this system fixtures, forum_jawapan, forum_tajuk, login, member, news, payment, player, standing, teama and time_score as shown in Figure 2.4.1.1. The function of each database is explained in related sections below.

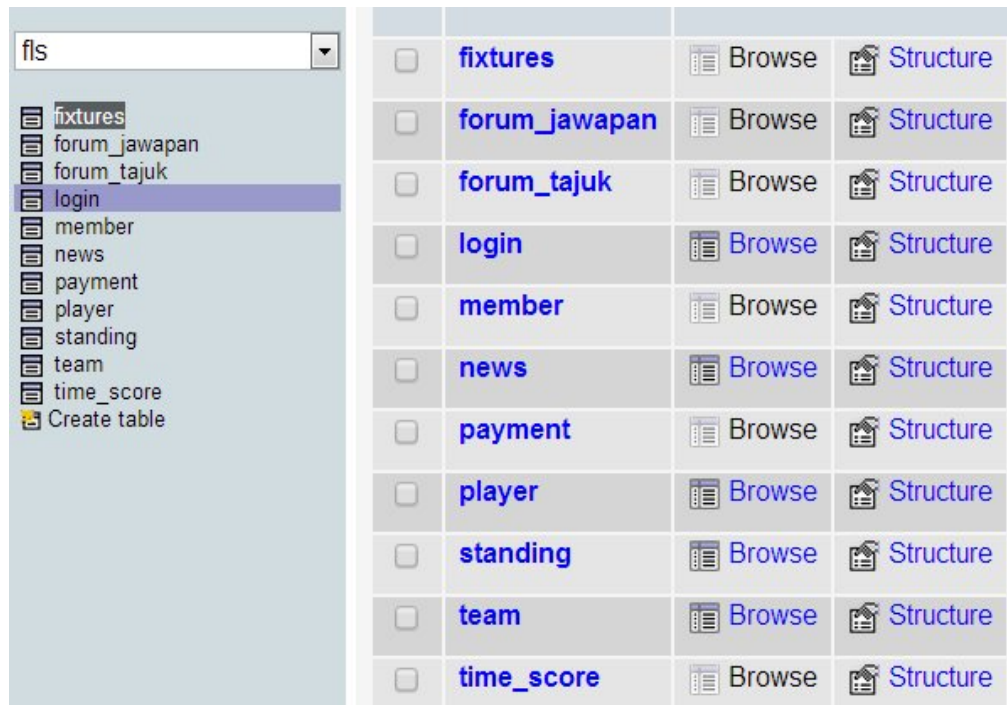


Figure 2.4.1.1: Database Structural View

A PHP file names 'conn.php' file is created to hold the details of database connection. The 'conn.php' file will hold the server, username, password and database name which needs establish a connection between database and system. The 'conn.php' is called whenever the system needs to communicate with the database local server or real server as shown in figure 2.4.1.2 and figure 2.4.1.3. By creating this file, the repeating connection statement is avoided.

```

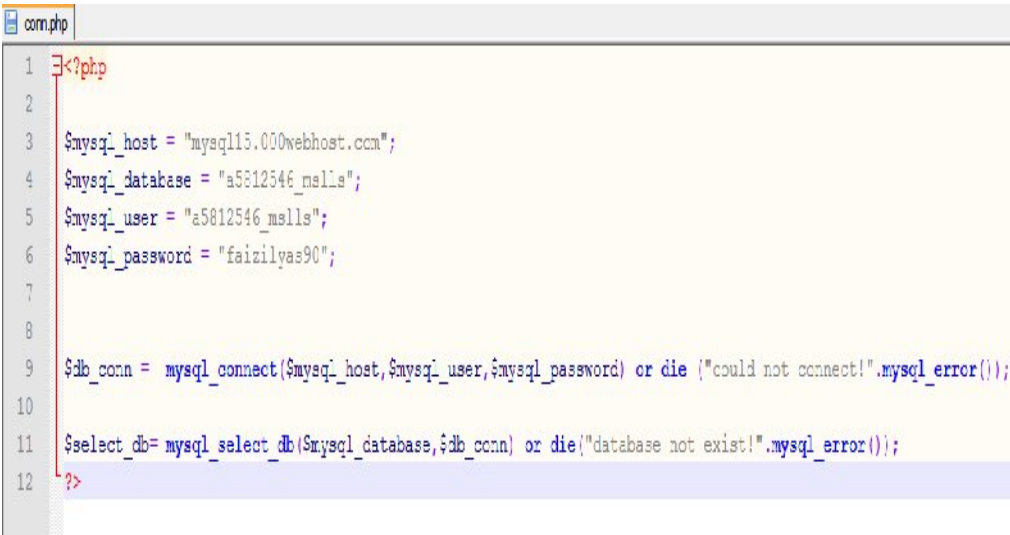
1 <?php
2 $db_conn = mysql_connect('localhost','root','') or die ("could not connect!".mysql_error());
3
4 $select_db= mysql_select_db("fls",$db_conn) or die("database not exist!".mysql_error());
5 >

```

Figure 2.4.1.2: conn.php (localhost)

The 'conn.php' file will simplify the process of connecting database because developer no need write coding repeatedly. Since it is the only file that holds the connection between system and database, any changes or rename database in the database

connection details can be made easily by modifying only this file. The transfer process of the system from local server to real server is done easily by just write the coding in this file. The conn.php file for the real server is shown in the figure 2.4.1.3 below.



```
1 <?php
2
3 $mysql_host = "mysql15.000webhost.com";
4 $mysql_database = "a5812546_malls";
5 $mysql_user = "a5812546_malls";
6 $mysql_password = "faizilyas90";
7
8
9 $db_conn = mysql_connect($mysql_host,$mysql_user,$mysql_password) or die ("could not connect!".mysql_error());
10
11 $select_db= mysql_select_db($mysql_database,$db_conn) or die("database not exist!".mysql_error());
12 ?>
```

Figure 2.4.1.3: conn.php (real server)

2.4.2 Web Layout

For develop the web layout for this system is designed in Adobe Dreamweaver CS5. To develop, many languages use such as HTML, PHP, SQL, JavaScript, CSS. For admin panels the layout made in much simpler form, considering the network traffic and loading time constraints. The web layout for admin panel can refer figure 2.4.2.1 and for client side refer figure 2.4.2.2.

Malaysian Super League Live Score



[HOME](#)
[MEMBER](#)
[PLAYERS](#)
[TEAMS](#)
[FORUM](#)
[LIVE SCORE](#)
[FIXTURES](#)

[STANDINGS](#)
[NEWS](#)
[SMS](#)
[LOG OUT](#)

Standings

No.	Team	P	W	D	L	GF	GA	GD	PTS
1	PAHANG FA	0	0	0	0	0	0	0	0
2	LIONSXII	0	0	0	0	0	0	0	0
3	T-TEAM FC	0	0	0	0	0	0	0	0
4	PKNS FC	0	0	0	0	0	0	0	0
5	SIME DARBY FC	0	0	0	0	0	0	0	0
6	JOHOR DARUL TAKZIM FC	0	0	0	0	0	0	0	0
7	PERAK FA	0	0	0	0	0	0	0	0
8	SARAWAK FA	0	0	0	0	0	0	0	0
9	TERENGGANU FA	0	0	0	0	0	0	0	0
10	SELANGOR FA	0	0	0	0	0	0	0	0
11	KELANTAN FA	0	0	0	0	0	0	0	0
12	ATM FA	0	0	0	0	0	0	0	0

Use mozilla firefox 3.5 above and latest Chrome for best view
Copyright©Football_Live_Score

Figure 2.4.2.1: Web layout (admin panel)



Figure 2.4.2.2: Web layout (client side)

2.4.3 Login and Registration Component

i. Registration

The registration form is available on this system to register users and subscribe them to our services. As shown in figure 2.4.3.1, users have to provide their first name, last name, phone number, email, username and password. Successful registration will be recorded in member table and login table in the database. After successful register, message box will appear shown in figure