

Football Prediction

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BS in Computer Science



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FYP ID	FYP19-GROUP-012			
Project Group Members				
Sr.#	Reg. #	Student Name	Email ID	*Signature
(i)		Ali Hassan Khan	Hassan.khan6668@gmail.com	
(ii)		M.Wasif Aslam	Wasifrajpoot6@gmail.com	
(iii)		Usama Ashiq	Amanusama50@gmail.com	

*The candidates confirm that the work submitted is their own and appropriate credit has been given where reference has been made to work of others

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This is to certify that, I _____ S/D of, group leader of FYP under registration no _____ at Software Engineering Department, The Superior College, Lahore. I declare that my FYP report is checked by my supervisor.

Date: _____ Name of Group Leader: _____

Signature: _____

Name of Supervisor: Dr. ABC

Co-Supervisor: Mr. XYZ

Designation: Lecturer

Designation: Associate Professor

Signature: _____

Signature: _____

HoD: Dr. Arfan Jaffar

Signature: _____

Project Report

[Football Prediction]

Change Record

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APPROVAL

PROJECT SUPERVISOR

Comments: _____

Name: _____

Date: _____ Signature: _____

PROJECT MANAGER

Comments: _____

Date: _____ Signature: _____

HEAD OF THE DEPARTMENT

Comments: _____

Date: _____ Signature: _____

Dedication

*This work is dedicated to
My respected parents,
Who educated me and enabled me
To reach at this level
Of my life.
Their guidance, motivation,
Encouragement and trust made me
To complete this project.*

Acknowledgements

“Whatever is in the heavens and whatever is on the earth is exalting Allah, the Sovereign, the Pure, the Exalted in Might, the Wise.” [LXII: 1]

All praises to **ALLAH ALMIGHTY**, the most Merciful and the most Gracious, for the strengths and HIS blessings in completing this Project.

We consider ourselves very lucky and honored to have a wonderful teacher leading us, throughout this project. We’re grateful to **Mr.Asadullah Tariq**, who in spite of being extraordinarily busy with his duties, took out time to hear, guide and keep us on the correct path. We would never have been able to reach this stage but for the prayers and great support of our families. Thanks and best wishes for all those who have made this learning experience so wonderful for us.

Last but not least, we would like to thank our parents for their unconditional support, both financially and emotionally throughout our degree.

Executive Summary

Predicting any football match before it get started , using app. In this app user can find which team have maximum chances to win the match using many factors such as skills, morale of the player, team current score etc. User can also build their profile to bet and get many rewards.

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Chapter 1

Introduction

Chapter 1: Introduction

In this chapter we are introducing the main steps of our project. This introduction contains the background, Motivation/Challenges, Goals/Objectives, Solutions, Gap Analysis, Gantt chart, Project Plan, and Report Online. This material of introduction helps to understand the main issues related to this project.

.1. Background

Football normally refers the sports, where a ball is kicked by the player foot to score a goal in order to win the match. It is also commonly known as “soccer” or “football” or “association football” (Williams, 1994). The rules of play have changed as it keeps evolving. The word "football" has been used to refer other sports too in different parts of the world such as rugby/handball in the USA. Various forms of football are found in the history of football, it was made popular by the British Empire in the 18th century. The British private schools are credited for the start of modern era of football during the 16th century, it was their teachers and students who decided how football was played and by turning it to a organized sports they made the kicking and running part of football clear. Books were written after that describing how football is played. In early days football was played with hands too. Richard Mulcastar is known as the greatest sixteenth century advocate of football who was a student at Elton college in early 16th century. 7 There have been many attempts to ban football due to its boisterous nature but that didn't go through. Sports clubs started playing dedicated football since the 18th century. According to Wikipedia, two of the oldest clubs that started playing football were the Barnes Club, founded in 1839, and Guy's Hospital Football Club which was founded in 1843. Dublin University Football Club founded in 1854 is the world's oldest documented football club. The FIFA states that three boys were tasked at Rugby school with codifying the rules to be used at the school in 1985. These were the first set of written rules (or code) for any form of football. Corder-Eggleston Cup, which started since 1858 is one of the longest running football fixture contested every year between Melbourne Grammar School and Scotch College, Melbourne. Football started getting its popularity and become more global game after they started playing it on national levels and international competition started. FIFA was founded in 1904; it tried to arrange an international football tournament between nations outside the Olympic framework in Switzerland in 1906. These were very early days for international

football, and the official history of FIFA describes the competition as having been a failure. FOOTBALL IN NEPAL Football is the most popular sports in Nepal with a shadow of doubt. Although Nepal hasn't had success on international level everyone loves the game in Nepal. People started playing football in the Rana regime in early ages of the 19th century (Wikipedia). Football was introduced in Nepal by some young players who went abroad and learned how to play. Huge mass of people gathered to watch football and it became an instant hit. Kids started playing football using homemade ball in every town. According to ANFA (All Nepal Football Association) the teams like Mahabir-11, N R T-11, Jawalakhel-11, and Public Institute-11 were established in 1934. The football tournament was organized for the first time in institutional way in 1934. In which 12 teams had participated. In that tournament, the team of Jawalakhel club led by Nar Shumsher had secured first position (Wikipedia). At that time, the chief of Public team Mr. Najarman Singh told that his team had got support and encouragement from Trichandra campus and audience (Wikipedia). The tournament was a huge success, attendance was very huge but due to political reasons the government banned football in Nepal. Later on a football committee was formed to keep an eye on game and ban was lifted. In 1947, Tribhuvan Challenge Shield was introduced by late King Tribhuvan for the development of this football game which was organized at Tudikhel in front of Haribhavan. In that tournament Naresh-11 team led by Nar Shumsher secured first position and N. R. T. team secured second position. In the same year Shree 3 Padma Shumsher introduced "Ramjanaki cup" which was continuously won thrice by Police Force team. The same cup was again introduced 8 but was renamed as Marty's Memorial League football and hence League matches were introduced in Nepal. For the further growth and management of football league ANFA was founded in 1951 and got the affiliation to FIFA in 1970. Current president of ANFA is Mr. Ganesh Thapa .

.2. Motivations and Challenges

The last couple of years have been a long bumpy ride for me, as they have for everyone my age. As a personal participant in this "game" we call life, I would say clearly that without football it can't be great. As a student, I am an active participant in my academic and extracurricular activities. Taking an account of consideration with extracurricular activities I am an amateur football player from my childhood. I used to watch football matches regularly after the 2002 FIFA World Cup Final between Brazil vs. Germany.

Meanwhile, during the 2002 world cup Raul Gonzalez Striker of Spanish team impressed me a lot. As a result I was drag into Spanish Football and Real Madrid. These passions of football drag me into the situation that I cannot even stay quiet for the weekend if there is no football matches. Now, I am an active football fans 3 playing football in the local level and enjoying the different fantasy in the internet about the football. For this online prediction Application, matches but due to technical, knowledgably skills, time frame I left the fantasy part and concern more about the match score prediction. At the very moment, I presented my concept to my supervisor through presentation.

.3. Goals and Objectives

The main aim of this proposal is to develop an online prediction system for the football fan around the world where user can prediction the different football match of different categories. During the development of any project there must be some sorts of objectives. The objectives are the realistic target of the project. “The goal (aim) is where we want to be & the objectives are the steps to get there” (University, 2007). Thus this project also contains some *SMART* objectives as well as long term objectives.

.4. Literature Review/Existing Solutions

A detailed survey has been collected by the mean of the internet & among random sports prediction apps There is no other efficient application currently, that is being used by public with a great response but few applications are being tested for similar purpose. There are few websites and applications working on this proposed solution:

NO.	Application/Websites	Strategy	Workplace	Weakness
1.	Football	Android Based, Free, User Friendly	Islamabad, Karachi(continued) Lahore	Without best calculator System, Physical Money Involving with no security.
2.	Best Predictor	Online Web Portal	New York, USA	For all games Not specified for football

.5. Gap Analysis

There are quite a few things that we want to achieve through this project, so following are the main gaps that we analyzed and tried to cover

This project doesn't only focus on the English premier league but also the Spanish, Champions, French, Germany, Italian, and as well as Nepali Football League fixtures can be predicted. But in the initial phase, this project is only focus on the English football league.

- Market the product to spread awareness of its existence.
- Develop in such a manner that the end product is better than its competitors.
- Make it user-friendly and hassle-free to make the users stay.

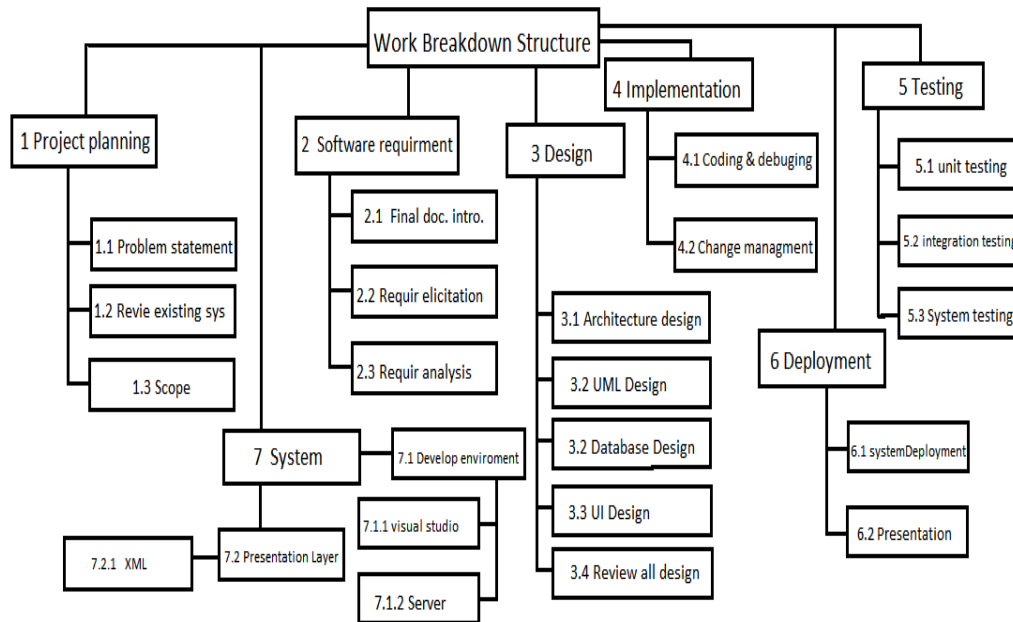
.6. Proposed Solution

This online portal is intended to focus the prediction culture in today's football community. This online portal will contain information about football match including the recent news, transfer gossips, rumour etc. This project doesn't only focus on the English premier league but also the Spanish, Champions, French, Germany, Italian, and as well as Nepali Football League fixtures can be predicted. But in the initial phase, this project is only focus on the English football league.

.7. Project Plan

The project will be managed to divide into modules a modules to clearly understand how we take next step with the specified time. First we use the gather the requirement and then do all the phases of Software making like after requirement we analyze them and make design of our gathered requirements and divide the modules to our members then do implementation and later we do integration of the modules and last we do test our application and then make it available for our customers. We follow the agile methodology in our project and work on each of single iteration within the time specified. We are using this methodology for Improvement in our project and can adopt change easily in each of single iteration.

.7.1. Work Breakdown Structure



- Gather functional and non functional requirements
- Analysis of each single requirement
- SRS documentation

➤ App Portal:

- User interface
- Customer support and help
- Report complaints
- Usability
- Reliability

➤ User panel:

- User gets registered
- User login

- Make profile
- Feedback

➤ **Admin panel:**

- Admin Login
- View Profile
- Manage database
- Manage new update
- Delete customer account
- Blacklist customers

➤ **Implementation:**

- Divide whole implementation into modules.
- Divide task to each members.
- Perform meetings for improvement.
- Integrate modules.

➤ **Testing:**

- Perform different types of testing's
- Integration testing
- System testing
- Performance testing
- Usability testing
- Security testing

.7.2. Roles & Responsibility Matrix

The purpose of roles & responsibility matrix is to identify who will do what.

Activity #	App Deliverable	Activity to Complete the Deliverable	Duration (# of Days)	Responsible Team Member(s) & Role(s)
1		Requirements		Wasif/Hassan/Usama
2		Documentation		Usama/Hassan/Wasif
3		Design		Wasif/Hassan/Usama
4		Application		Usama/Hassan/Wasif
5		Admin Portal		Wasif/Hassan/Usama
6		User Portal		Usama/Hassan/Wasif
7		Guest Portal		Wasif/Hassan/Usama
8		Application Demo		Usama/Hassan/Wasif
9		API's		Usama/Hassan/Wasif
10		Testing/Marketing		Wasif/Hassan/Usama

Table 1 - Roles & Responsibility matrix

.7.3. Gantt Chart



.8. Report Outline

- introduction of the project
- motivations behind the project
- aims and objectives
- scope of the project

Chapter 2

Software Requirement Specifications

Chapter 2: Software Requirement Specifications

.1. Introduction

In this app, a user should make its profile with some personal details. A user should select teams and the app will predict who will win the match.

.1.1. Purpose

The project objective is to Provide android platform to facilitate all football or sport lovers. This project is an attempt to provide the advantages of online prediction through Android app which team has more chances to win or who will win today rather than in going of depression which will win on your mobile app you will find the ease of everything.

.1.2. Document Conventions

- When writing this document for "Football prediction" the following terminologies are used: To make the document more effective and readable I used font: Calibri
- Line spacing: 1.5 line spacing
- Font Size:12pt,
- Headings: 14pt,
- *Headings are bold and highlighted with attractive colors*

.1.1. Intended Audience and Reading Suggestions

This document is for all sport viewers. The document is planned for, [i.e.: the users, project management, system analysts (i.e., developers who may participate in the requirements), and system designers (i.e., developers who may participate in the system design)]

.1.2. Product Scope

Normally the scope of any project refers the operating boundary of the system. Scope of the project is required to limit the boundless requirements of the system. The scope of the project is given below under following components.

Components	Scope
Guest Registration & Authentication	Here new user to the system get registered by using the personal information required by the system.
Fixtures View	Here a logged in user can view the different match day fixtures of the EPL
User Prediction	Here a user can predict the score for the desire match available in the fixtures.
Control Panel	For this component a system admin can manage the fixture (insert fixture, update & delete fixtures), manage the results (insert, update & delete results) and generate the rank based on the user correct prediction points

.1.3. References

- We use Stack Overflow to remove errors in code
- <https://stackoverflow.com/>
- The official website of the android contains a brief description of the tools
- <https://developer.android.com/>

.2. Overall Description

.2.1. Product Perspective

.2.2. Product Functions

- **USER:**
- **User Registration:** A new user can create an account to use the portal with the full functionality.
- **Login & Authentication:** A user is register member to the site but not logged in, users can log into the system for its smooth operation.
- **User Prediction:** A user can predict the different fixtures available on the site.
- **User Prediction Point:** A user can review the point of different fixtures that he predicted before.
- **View Update:**A user can view all recent Update.
- **User Logout:** A user is logged in can easily log out.
- **View Actual Results:** A user can view actual result both teams.

- **Admin:**
- **User Registration:** A new user can create an account to use the portal with the full functionality.
- **Login & Authentication:** A user is register member to the site but not logged in, users can log into the system for its smooth operation.
- **User Prediction:** A user can predict the different fixtures available on the site.
- **User Prediction Point:** A user can review the point of different fixtures that he predicted before.
- **Admin Logout:** A user is logged in can easily log out.
- **Add Teams:** An admin manage (add/edit/delete) the teams playing the current EPL seasons.
- **Add Fixtures:** An admin manage (add/edit/delete) the fixtures of the current EPL seasons game week.
- **Add Actual Results:** An admin manage the results playing the current EPL seasons fixtures.
- **Declare Winner:** Admin declare the winner for the recent game week of EPL.

- **Guest:**
- **User Registration:**User can login through a guest id provided by the system.
- **User Prediction:** A user can predict the different fixtures available on the site.
- **User Prediction Point:** A user can review the point of different fixtures that he predicted before.
- **View Update:**A user can view all recent Update.
- **User Logout:** User can logout from guest id.
- **View Actual Results:** A user can view actual result both teams.

.1.1. User Classes and Characteristics

Admin

Admin manage all functionality/operations of this application.

User:

User can view statistics of all players and also view previous results with another user. Texting with sentimental analyzer system is the main feature of our product which can avail all user.

.1.2. Operating Environment

It is android application hence it can be run on any android mobile with minimum 4.4 KitKat android version.

Ram: minimum of 1 GB

Rom: 200 MBS.

- This system will operate in browsers like Mozilla, Firefox, Opera and Google Chrome.
- The processor could be single core or above.

The processor's speed should be 1.3Ghz or greater

- Ram should be or greater than 1GB.

- Operating system: Windows 7, 8, 8.1, 10
- Client/Server System
- IDE (Integrated development environment)
- SQL (Structured query language)
- SSMS (SQL server management Studio)

.1.3. Design and Implementation Constraints

The device will have 8GB RAM.

Good quality Internet connection required.

Operating System Windows 10

Tools:

- Android Studio 3.2.1
- Google Firebase
 - XML
 - JAVA
 - JSON
- Developers have to complete this system in minimum time, 6 months.
- The languages which will be used in this project are PHP, HTML5, CSS3, JavaScript, XML and Java.
- This software will follow all the copyright and cyber laws PTA (Pakistan Telecommunication Authority).

.1.4. User Documentation

- The product will include user manual. The user manual will include product overview, complete configuration of the used software, technical details, backup procedure and contact information which will include email address. The product will be compatible with the Google chrome.

.1.1. Assumptions and Dependencies

In this application, the user must create an account and register his/her self through Number verification. User must have a smartphone and at least 4.4 version of Android. Also, the user must have internet access because the app is online.

- To share data user must give access to multimedia in his/her phone.
- To make friends user should invite other users to install Sentimental analyzer.
- User must take care of the privacy of other users.

.2. External Interface Requirements

- **External machine interfaces**

External Machine interface is not required since computation will be done on Windows OS and Android OS.

- **External system interfaces**

This will only include the MySQL and SQLite database for the Student/Tutor data.

- **Human interface**

The software will use a Graphical User Interface coded in HTML, CSS and JavaScript.

.1.1. User Interfaces

- The application provides a user-friendly and interactive user interface. In this application, the user will easily understand the use of every element and enjoy the user experience.

.1.2. Hardware Interfaces

- It is android application hence it can be run on any android mobile with minimum 4.4 KitKat android version.
- Ram: minimum of 1 GB
- Rom: 200 MBS.

This is an online system so the hardware interface that are going to be used are the hardware components that are required for the internet access as they are mentioned below:

- WLAN
- WAN
- LAN
- Ethernet Cross-Cable
- Modem
- Router

.1.1. Software Interfaces

- Android Studio 3.2.1
- Php
- Google Firebase
- XML
- JAVA
- *JSON*

.1.2. Communications Interfaces

- Client (Seller) on Internet will be using HTTP/HTTPS protocol.
- Client (Buyer) on Internet will be using HTTP/HTTPS protocol.

.1. System Features

USER:

- **User Registration:** A new user can create an account to use the portal with the full functionality.
- **Login & Authentication:** A user is register member to the site but not logged in, users can log into the system for its smooth operation.
- **User Prediction:** A user can predict the different fixtures available on the site.
- **User Prediction Point:** A user can review the point of different fixtures that he predicted before.
- **View Update:**A user can view all recent Update.
- **User Logout:** A user is logged in can easily log out.
- **View Actual Results:** A user can view actual result both teams.

Admin:

- **User Registration:** A new user can create an account to use the portal with the full functionality.
- **Login & Authentication:** A user is register member to the site but not logged in, users can log into the system for its smooth operation.
- **User Prediction:** A user can predict the different fixtures available on the site.
- **User Prediction Point:** A user can review the point of different fixtures that he predicted before.
- **Admin Logout:** A user is logged in can easily log out.
- **Add Teams:** An admin manage (add/edit/delete) the teams playing the current EPL seasons.
- **Add Fixtures:** An admin manage (add/edit/delete) the fixtures of the current EPL seasons game week.
- **Add Actual Results:** An admin manage the results playing the current EPL seasons fixtures.
- **Declare Winner:** Admin declare the winner for the recent game week of EPL.

Guest:

- **User Registration:**User can login through a guest id provided by the system.
- **User Prediction:** A user can predict the different fixtures available on the site.
- **User Prediction Point:** A user can review the point of different fixtures that he predicted before.
- **View Update:**A user can view all recent Update.
- **User Logout:** User can logout from guest id.
- **View Actual Results:** A user can view actual result both teams.

.1.1. System Feature 1**User Registration****.1.1.1. Description and Priority**

It is high priority feature which new user can create an account to use the portal with the full functionality

.1.1.2. Stimulus/Response Sequences

Identifier	FR-01
Title	User Registration
Requirements	First name, Last Name, Emails, Password, contact no, address etc
Rational	Register to the system with data integrity
Restriction/risk	User must enter correct information otherwise not registered
Dependency	Connection with server through PC, mobile laptop etc.
Priority	Quality, security

.1.1.3. Functional Requirements

User Register
Actor
<ul style="list-style-type: none"> • Guest
Pre conditions
<ul style="list-style-type: none"> • User not logged in
<ul style="list-style-type: none"> • Fill to sign up form for registration
Basic flow
<ul style="list-style-type: none"> •User wants to register for the particular application
<ul style="list-style-type: none"> • User must provide all required information
Alternate flows
<ul style="list-style-type: none"> • User don't open the register page
Post conditions
<ul style="list-style-type: none"> • A new account is created for the guest

Create an account

Priority: Must Have

Actor: Guest

Precondition: User not logged in

- Fill to sign up form for registration

Description: A new user can create an account to use the portal with the full functionality.

Result: A new account is created for the guest.

.1.2. System Feature 2

Login & Authentication

.1.2.1. Description and Priority

It is high priority feature which user is register member to the site but not logged in, users can log into the system for its smooth operation.

.1.2.2. Stimulus/Response Sequences

Identifier	FR-02
Title	Login & Authentication
Requirements	User id, password
Rational	Enter data then user might be login
Restriction/risk	User must enter correct information otherwise not registered
Dependency	Connection with server through PC, mobile laptop etc.
Priority	Quality, security

.1.2.3. Functional Requirements

Login & Authentication
Actor
<ul style="list-style-type: none"> • Guest • User
Pre conditions
<ul style="list-style-type: none"> • The user is registered to the portal but not logged in
Basic flow
<ul style="list-style-type: none"> • User wants to register for the particular application • User must provide all required information
Alternate flows
<ul style="list-style-type: none"> • User would not use or registered to your application
Post conditions
<ul style="list-style-type: none"> • A user is logged in

Priority: Must Have

Actor: Guest or user

Precondition: The user is registered to the portal but not logged in

Description: A user is register member to the site but not logged in, users can log into the system for its smooth operation.

.1.3. System Feature 3 (and so on)

- **User Prediction**

- **.1.1.1. Description and Priority**

It is high priority feature which user can predict the different fixtures available on the site.

.1.1.2. Stimulus/Response Sequences

Identifier	FR-03
Title	User Prediction
Requirements	Select team
Restriction/risk	Select only one team at a time. If you login as a guest or user interface are same.
Dependency	All results are come on all players statis ,power and ability

2.4.2.3.Functional Requirements

User Prediction
Actor
<ul style="list-style-type: none"> • Users
Pre conditions
<ul style="list-style-type: none"> • User at the landing page
Basic flow
<ul style="list-style-type: none"> • A user can predict the different fixtures available on the site.
Post conditions
<ul style="list-style-type: none"> • A page with the user actual prediction

Priority: Must Have

Actor: User

Precondition: User at the landing page

Description: A user can predict the different fixtures available on the site.

Path:

4.9.3.1 Select the recent game week,

4.9.3.2 Fill the fixtures form,

4.9.3.3 Submit fixtures form,

4.9.3.4 System verifies if valid information provided or not, if yes then store it into the database.

4.9.3.5 System redirect to the confirmation page after the prediction.

Exception: empty prediction.

Result: A page with the user actual prediction

.1.2. System Feature 4

User Prediction Point

.1.2.1. Description and Priority

It is medium priority feature which user can review the point of different fixtures that he predicted before.

.1.2.2. Stimulus/Response Sequences

Identifier	FR-04
Title	User Prediction Point
Requirements	login
Rational	If he has logged in then he can see old fixtures
Restriction/risk	Login information must be correct
Dependency	Connection to local server
Priority	Saved data

2.4.2.3. Functional Requirements

User Prediction Point
Actor
<ul style="list-style-type: none"> User
Pre conditions
<ul style="list-style-type: none"> User at the landing page
Basic flow
<ul style="list-style-type: none"> Old fixtures are considered
<ul style="list-style-type: none"> Database or statistics
Alternate flows
Database or data not found
Post conditions
<ul style="list-style-type: none"> A page with the actual prediction point display.

Priority: Must Have

Actor: User

Precondition: User at the landing page

Description: A user can review the point of different fixtures that he predicted before.

Path:

4.9.3.6 Select the special game week that the user want to know about,

4.9.3.7 System provides the result of the user point based on the calculation provided with the system specification document.

4.9.3.8 System redirect to the confirmation page after the prediction.

Exception: None.

Result: A page with the actual prediction point display.

.1.3. System Feature 5

User logout

.1.3.1. Description and Priority

It is medium priority feature which user is logged in can easily log out.

.1.3.2. Stimulus/Response Sequences

Identifier	FR-05
Title	User logout
Requirements	Selecting right option
Rational	Selected right one options from menu
Restriction/risk	No other option has been selected
Dependency	Internet local server
Priority	Logout securely

2.4.2.3. Functional Requirements

User logout
Actor
<ul style="list-style-type: none"> User
Pre conditions
<ul style="list-style-type: none"> The user is logged in portal.
Basic flow
<ul style="list-style-type: none"> Must fill all requierments
Alternate flows
<ul style="list-style-type: none"> Follow are restrictions.
Post conditions
<ul style="list-style-type: none"> A user is logged out

Actor: User

Precondition: The user is logged in portal.

Description: A user is logged in can easily log out.

Path:

4.9.3.9 Select Log out Button,

4.9.3.10 System logs the user out.

4.9.3.11 System redirect to the home page of the portal after log out.

Exception: None.

Result: A user is logged out

.1.4. System Feature 6

Add Teams

.1.4.1. Description and Priority

It is medium priority feature which An admin manage (add/edit/delete) the teams playing the current EPL seasons.

Identifier	FR-06
Title	Point Calculation
Requirements	Data set
Rational	Data collected must be accurate
Restriction/risk	Only valid points are considered
Dependency	User database
Priority	Points calculation

2.4.2.3.Functional Requirements

Add Team
Actor
<ul style="list-style-type: none"> • Admin
Pre conditions
<ul style="list-style-type: none"> • The admin is logged in portal.
Basic flow
<ul style="list-style-type: none"> • The admin is logged in portal.
<ul style="list-style-type: none"> •
Alternate flows
The admin is logged in portal.
Post conditions
<ul style="list-style-type: none"> • A team is added.

4.9.4.1 Add Teams

Priority: Must Have

Actor: Admin

Precondition: The admin is logged in portal.

Description: An admin manage (add/edit/delete) the teams playing the current EPL seasons.

Path:

4.9.4.1.1 Select Team from the EPL,

4.9.4.1.2 System verifies the selected teams.

4.9.4.1.3 System redirect to the admin panel.

Exception: Double input of the same team.

Result: A team is added.

.1.5. System Feature 7

Add Fixtures

.1.5.1. Description and Priority

It is medium priority feature which An admin manage (add/edit/delete) the fixtures of the current EPL seasons game week.

.1.5.2. Stimulus/Response Sequences

Identifier	FR-07
Title	Add Fixtures
Requirements	Yes
Rational	Its depend upon
Restriction/risk	No
Dependency	On run time
Priority	Add fixtures easily

2.4.2.3.Functional Requirements

Add Fixtures
Actor
<ul style="list-style-type: none"> • Admin
Pre conditions
<ul style="list-style-type: none"> • The admin is logged in portal.
Basic flow
<ul style="list-style-type: none"> • The admin is logged in portal.
<ul style="list-style-type: none"> •
Alternate flows
Didn't logged in to portal
Post conditions
<ul style="list-style-type: none"> • A fixtures is added.

Priority: Must Have

Actor: Admin

Precondition: The admin is logged in portal.

Description: An admin manage (add/edit/delete) the fixtures of the current EPL seasons game week.

Path:

4.9.4.2.1 Select real fixtures from the EPL,

4.9.4.2.2 System verifies the selected fixtures.

4.9.4.2.3 System redirect to the admin panel.

Exception: Double input of the same fixtures.

Result: A fixtures is added.

.1.6. System Feature 8

Add Actual Results

.1.6.1. Description and Priority

It is medium priority feature which An admin manage the results playing the current EPL seasons fixtures.

.1.6.2. Stimulus/Response Sequences

Identifier	FR-08
Title	Add Actual Results
Requirements	Same as
Rational	Database
Restriction/risk	No
Dependency	Its depend on time
Priority	Yes

2.4.2.3.Functional Requirements

Add Actual Results
Actor
<ul style="list-style-type: none"> • Admin
Pre conditions
<ul style="list-style-type: none"> • The admin is logged in portal.
Basic flow
<ul style="list-style-type: none"> • Add the actual results
<ul style="list-style-type: none"> •
Alternate flows
The admin is logged in portal.
<ul style="list-style-type: none"> • An actual result is stored in the data center.

Priority: Must Have

Actor: Admin

Precondition: The admin is logged in portal.

Description: An admin manage the results playing the current EPL seasons fixtures.

Path:

4.9.4.3.1 Select fixtures results from the EPL,

4.9.4.3.2 System verifies the correct input of the fixtures results.

4.9.4.3.3 System redirect to the admin panel.

Exception: Mistake in the fixtures result, double input of the same fixtures result.

Result: An actual result is stored in the data center.

.1.7. System Feature 9

Declare Winner

.1.7.1. Description and Priority

It is medium priority feature which Admin declare the winner for the recent game week of EPL.

.1.7.2. Stimulus/Response Sequences

Identifier	FR-09
Title	Declare Winner
Requirements	Analyze the game
Rational	Yes
Restriction/risk	No external interfere
Dependency	Risk
Priority	Winner

2.4.2.3. Functional Requirements

Declare Winner
Actor
<ul style="list-style-type: none"> • Admin
Pre conditions
<ul style="list-style-type: none"> • The admin is logged in portal.
Basic flow
<ul style="list-style-type: none"> • Get the right one winner
<ul style="list-style-type: none"> •
Alternate flows
Admin declare the winner for the recent game week of EPL.
Post conditions
A winner is declared.

Priority: Must Have

Actor: Admin

Precondition: The admin is logged in portal.

Description: Admin declare the winner for the recent game week of EPL.

Path:

4.9.4.4.1 Select user from the list,

4.9.4.4.2 System calculates the points based on the correct prediction with that of the actual EPL results.

4.9.4.4.3 System generates the rank of the user based on the points obtained.

Exception: None.

Result: A winner is declared.

.1. Other Nonfunctional Requirements

Non-functional requirements describe the different areas of requirements that are required for the smooth and proper functioning of the Application. Among them some are mentioned certain requirements are mentioned below.

.1.1. Performance Requirements

It specifies the timing features of the system. There are certain features, which are more time-sensitive than others. The non-functional requirements should identify those software functions, which have some constraints on their performance.

Response Time: It specify the response time for the user login etc in the system. Normally the other Applications can handle many users at a time

Notification Time: It defines the time required to notify the user about the completion, error in the login or in results

Recovery Time:

Loading or Run Time (Application Loading should not take long time)

.1.2. Safety Requirements

- Server secure
- Database secure
- Login secure
- Safe information

.1.3. Security Requirements

It describes the ability of the software to remain protected from unauthorized access.

This includes both change access and view access.

- Authentication system will used for the secure password validation.
- Safe Login & Logout will be done by session handling

.1.4. Software Quality Attributes

User Friendliness: The system should be ease and simple to use for the end users. It doesn't require extra training to use the system.

Reliability: The Android Application should be reliable because it handles the strong username and password authentication mechanism. The system shall provide storage of all databases on redundant computers

Scalability: The Application should be scalable as the other android Applications should handle the growing amount of work.

Fault Tolerant: In case Battery failure system should able to recover the data using the backup mechanism as well as transaction logs.

Operating Platform: This Application should operate of the Android mobiles having the with minimum 1GHz processor and 256MB RAM.

Interface Metaphor: This Application GUI must include the dialog boxes, menus, buttons and also some screen instructions. And uses scroll to go up and down on Application

Ease of Use: The Application must be user friendly in terms with ease menu,instructions etc.

.1.5. Business Rules

Our predication better than other prediction app. 90 percent accurate work. Company all member play important role for success.

.2. Other Requirements

The users of the system will be the different level of technical expertise. Any users from the world with the basic knowledge on internet and football prediction nature should be able to utilize the system smoothly. English will be the only language that this site will be available in, this makes difficult to those user from different part of the world to use the system or the site who do not speak English.

Normally there are three types of users:

- **Guests:** These are the new users to the system who don't have user account to log into the system.
- **Users:** These are the registered users to the system who have user account.
- **Administrations:** These are authorized personnel to the system who is responsible for the app management.

Chapter 3

Use Case Analysis

Chapter 3: System Analysis

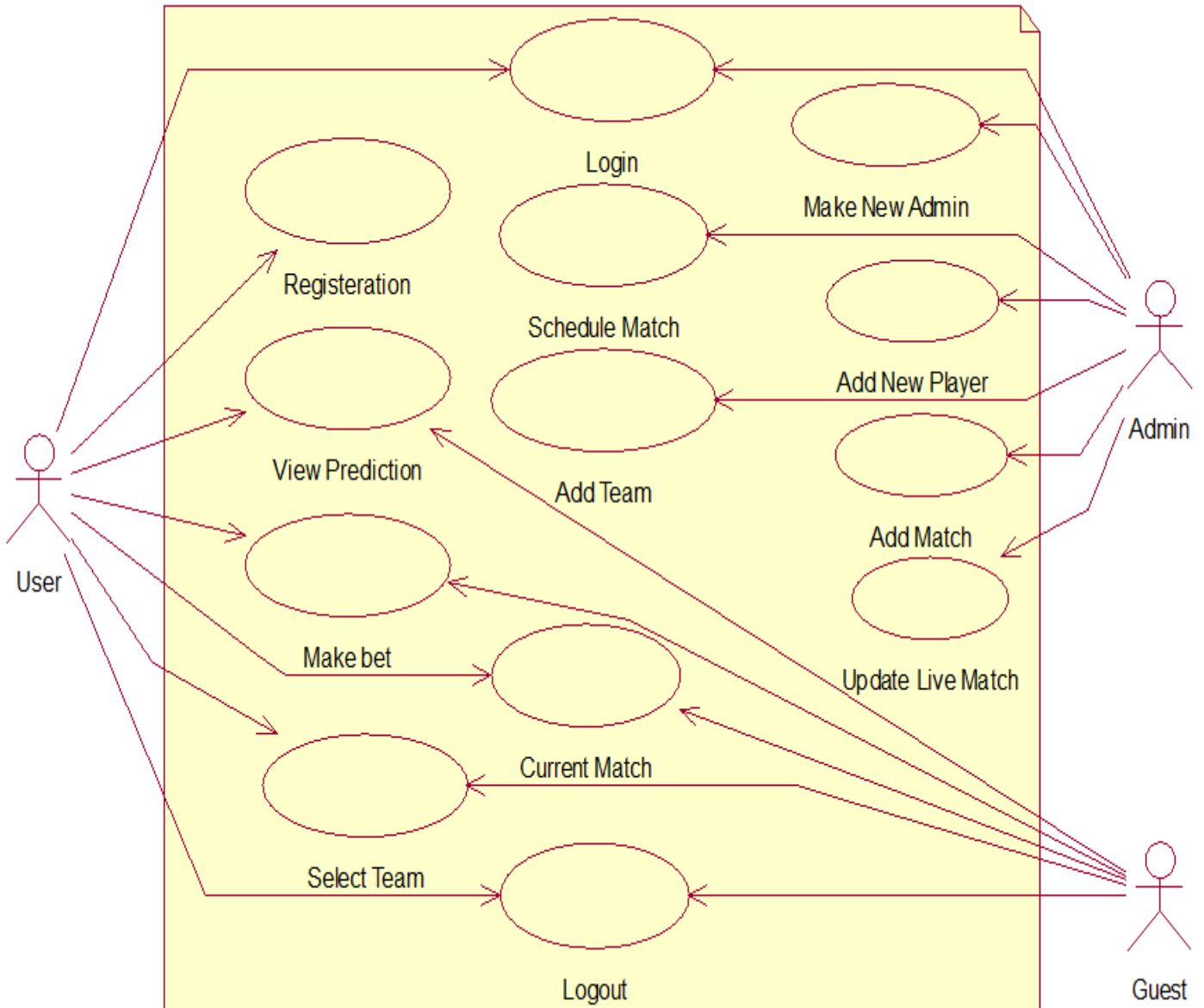
This chapter describe about system use cases and how the different actors are interacting with the system.

In use case main functionalities of the system are defined that are divided in different modules

For example: major use case in which all functionalities of the system are defined is divide into predictor and admin module and each actor interacting with module and performing his module functionalities.

3.1. Use Case Model

4. Elicitation Techniques / Tools



4.1. Use Case Descriptions

Login (Valid user)

Primary Actor:	USER
Secondary Actor:	System
Goal:	USER login in the account
Preconditions:	None
Post-conditions:	User login the account.

Table 2. Fully Dressed UC

Main Success Scenario

1. User enters verification data into the system.
2. The System validates that they are registered to open his account if the password is correct.
3. After that System show User profile panel.

Upload Team (Admin)

Primary Actor:	Admin
Secondary Actor:	System
Goal:	To upload team
Preconditions:	Valid-user login successfully
Post-conditions:	Uploaded the teams

Main Success Scenario

1. Click on team menu and select the team to add.

2. After that fill the form. Form include description, team name, players name, teams rating. etc
3. Then click on add team button.

Upload Match (Admin)

Primary Actor:	Admin
Secondary Actor:	System
Goal:	To upload match.
Preconditions:	Valid-user login successfully andthere is alreadyteam available.
Post-conditions:	To upload match.

Main Success Scenario

1. Click on Match menu and select the match to add.
2. Already all of your teams added will be displayed and add their match.
3. Then click on the add match button.

Delete Team (Admin)

Primary Actor:	Valid-User
Secondary Actor:	System
Goal:	To delete Team and match
Preconditions:	Valid-user login successfully and there is alreadyteam available
Post-conditions:	To Delete the match that you don't need any more by delegating the team.

Main Success Scenario

1. Click on team menu and select the team you want to delete.
2. Then click on the delete button.

View Matches (All User)

Primary Actor:	Valid-User/Admin
Secondary Actor:	System
Goal:	To view current matches.
Preconditions:	None
Post-conditions:	To view current matches.

Main Success Scenario

1. Click on login to go directly to matches.
2. Then select the match to view details.

Create an Account (User)

Primary Actor:	User
Secondary Actor:	System
Goal:	To make personal account
Preconditions:	Valid-user login successfully and there is already ad available
Postconditions:	To make personal account.

Main Success Scenario

1. Click on the **create account** that you can see on the login page of the website or app.
2. Fill the form. Write your name, email, password, location etc.
3. Click on submit button and then your account will be successfully created.

Login (Admin)

Primary Actor:	USER
Secondary Actor:	System
Goal:	admin login in the account
Preconditions:	None
Post-conditions:	Admin login the panel and add new category, location, item etc

Main Success Scenario

1. Admin enters verification data into the system.
2. The System validates that they are registered to open his account if the password is correct.
3. After that System show Admin profile panel.

Add Bid (Admin)

Primary Actor:	Admin
Secondary Actor:	System
Goal:	To add new bid for current match.
Preconditions:	Valid-user login successfully and a match already added.
Post-conditions:	To add new bid for current match going.

Main Success Scenario

1. Click on set bid from the menu and select the match to set the bid.
2. Then click on Set bid button.

Remove Match (Admin)

Primary Actor:	Admin
Secondary Actor:	System
Goal:	To remove Match
Preconditions:	Valid-user login successfully
Post-conditions:	To delete the match and the bidding value previously set.

Main Success Scenario

1. Click on the match from the menu and select the match.
2. Then click on Delete button.

Make Prediction (User)

Primary Actor:	User
Secondary Actor:	System
Goal:	To make a prediction of a match.
Preconditions:	User must be logged in and must select the team and bid for that ongoing match.
Post-conditions:	To make a prediction of a match.

Main Success Scenario

3. Click on any match from the home page of app/web and select the match.
4. Click on Make Prediction and set the bid for liked team.
5. Then click on Predict.

Search History (User)

Primary Actor:	User
Secondary Actor:	System
Goal:	To search previous perdition record.
Preconditions:	Valid-user login successfully
Post-conditions:	To search previous perdition record.

Main Success Scenario

3. Click on profile and select the history icon.
4. Then view the previous matches you predicted.

Then click single match to view details of that match.

Chapter 4

System Design

Chapter 4: System Design

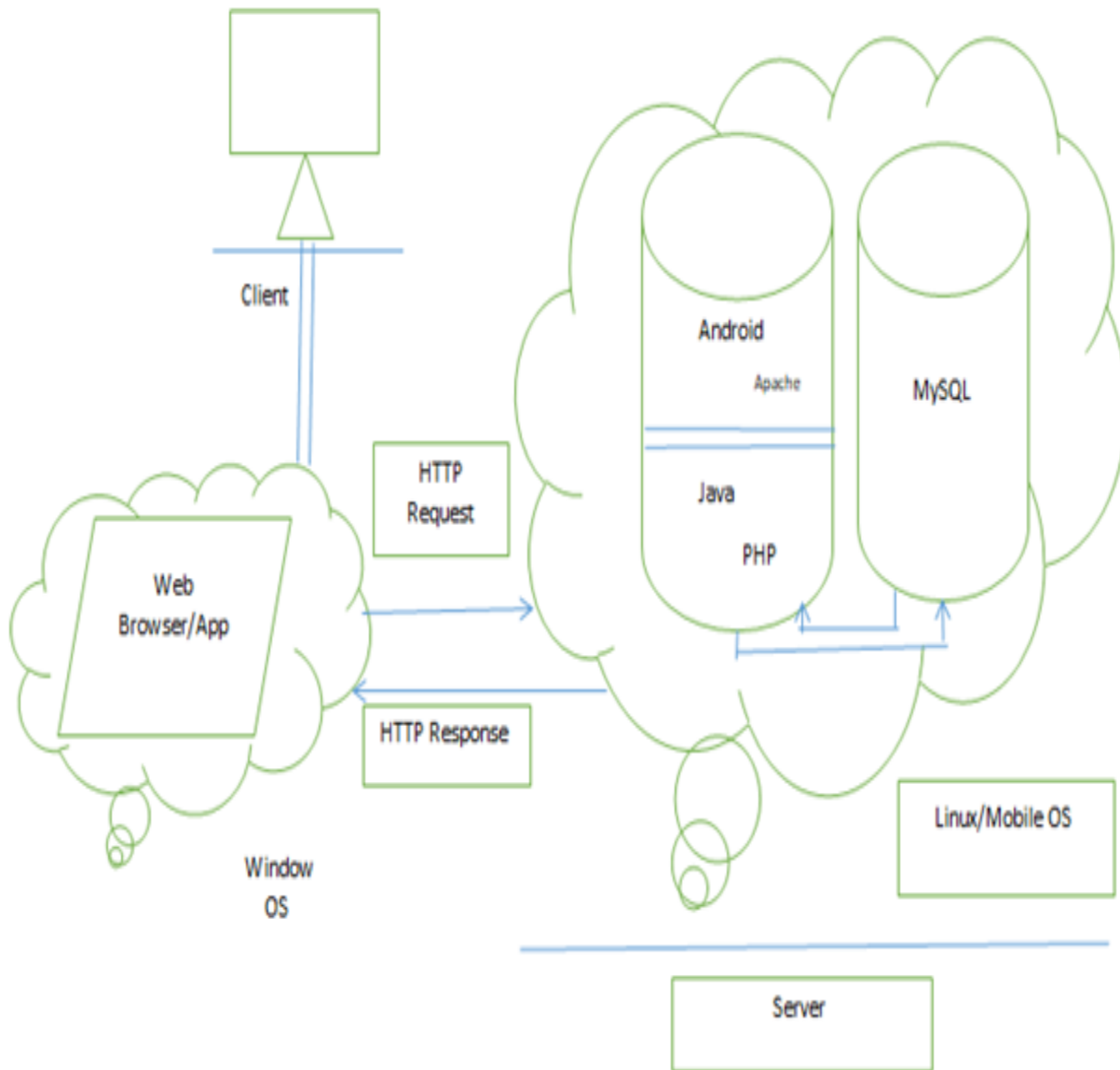
Introduction The objectives of this section of the system specification are to model the proposed system. The lists of requirements that are gathered in previous chapter are to be design in this chapter. This section contains different UML diagrams to design the requirements UML stands for Unified modeling language that is used in OOAD approaches in Software Company. UML is treated as a rich language that is used to model any business functions, structures.

Purposes

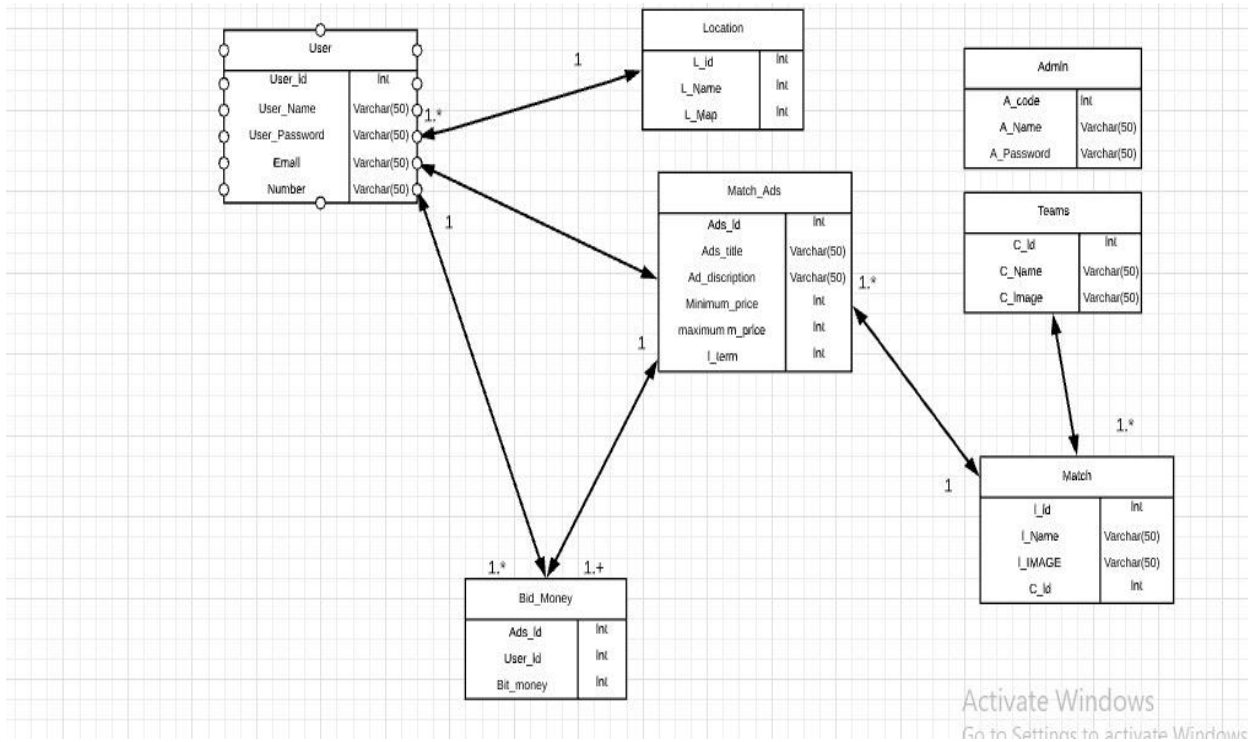
The main purpose of design specification document is as follows:

- i) Design specification document is used for various functions from laying out plans for a new space ship to addressing the design concerns of the system.
- ii) ii) Provide the hawk eye structure of the project through different pictorial representation.
- iii) iii) The expectations of user are documented, and are agreed by the users and developer team.

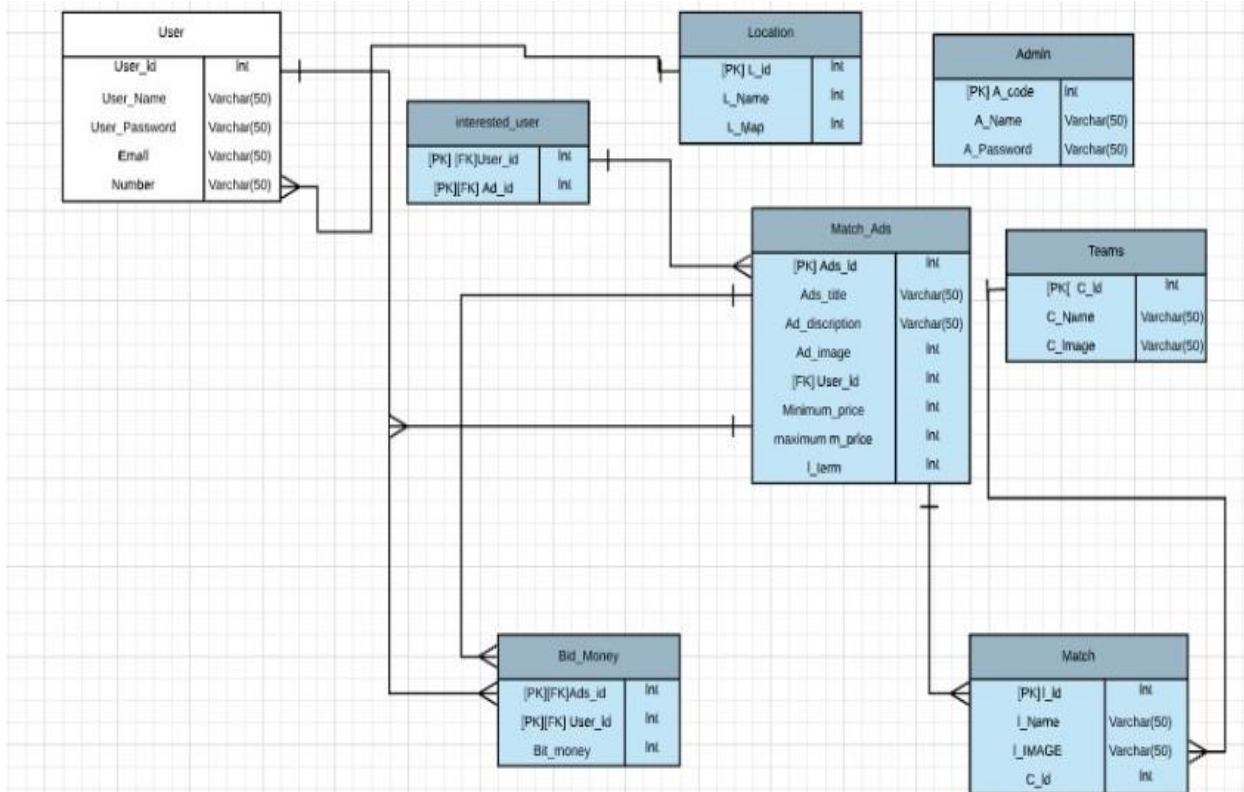
4.1. Architecture Diagram



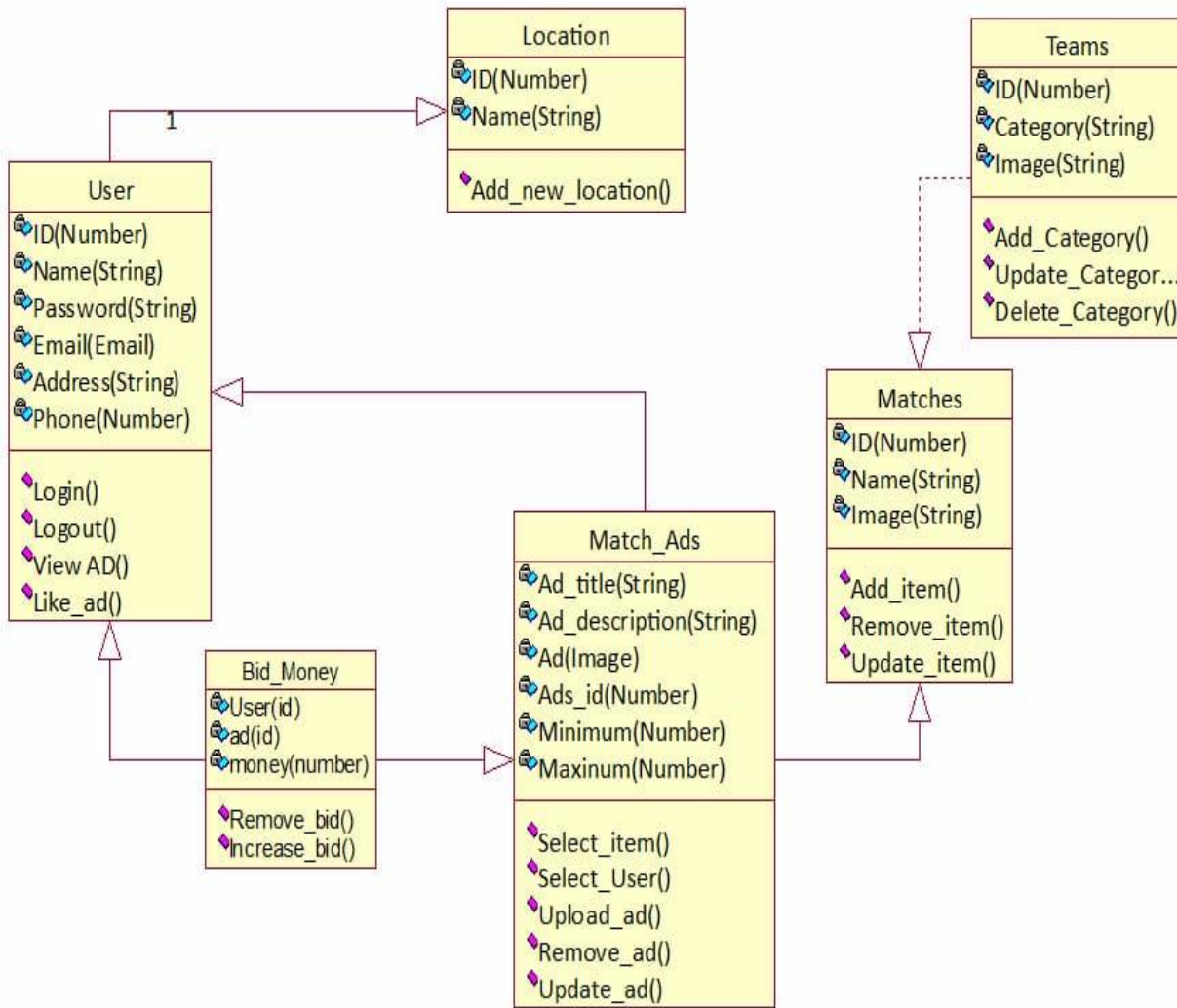
4.2. Domain Model



4.3. Entity Relationship Diagram with data dictionary

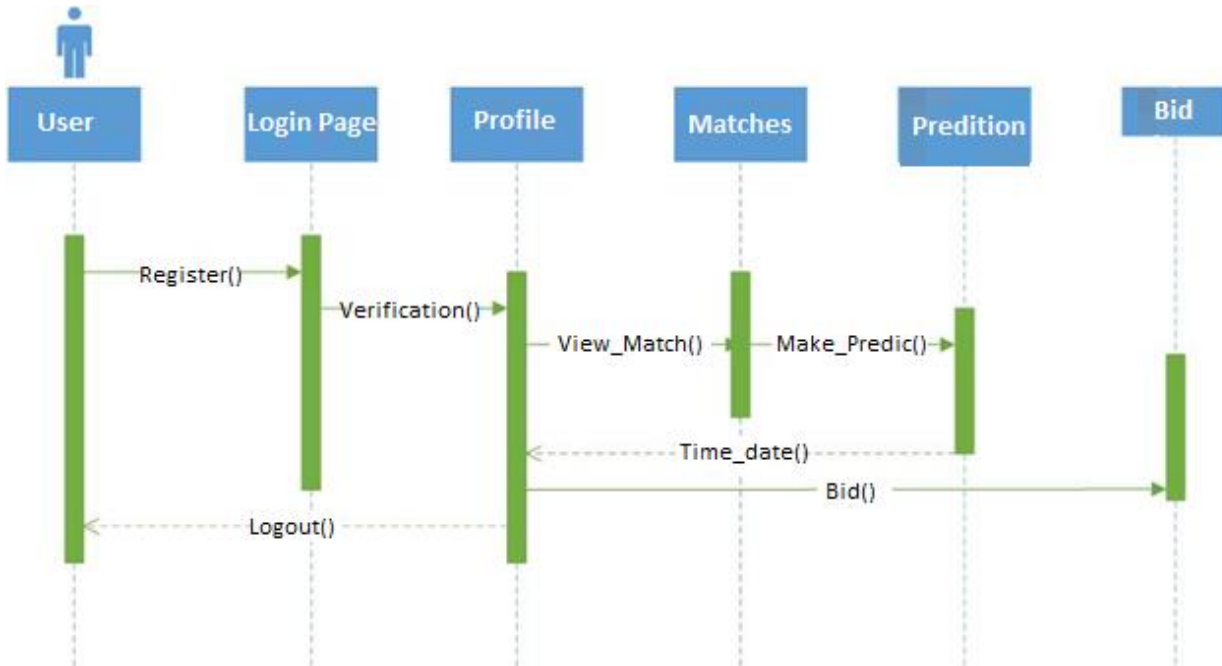


4.4. Class Diagram

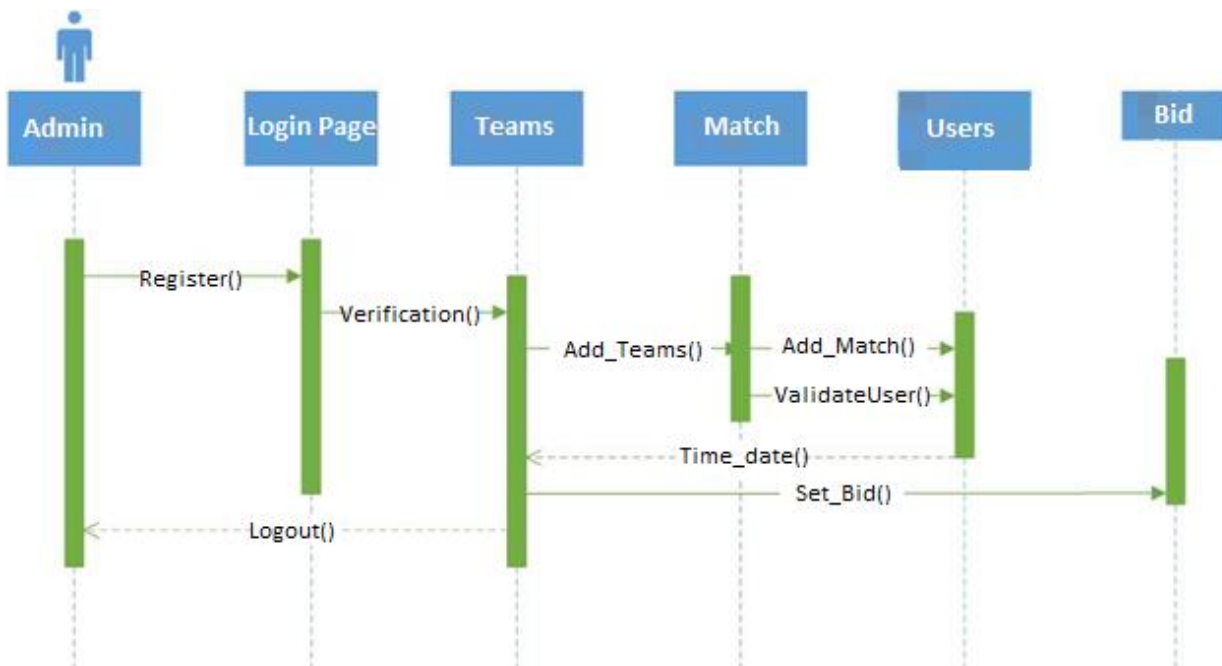


4.5. Sequence / Collaboration Diagram

User:



Admin:



4.6. Operation contracts

1) Operation contracts 1

Operation Name: Register

Pre-conditions:

- User has entered the data in registration fields

Post-Conditions:

- User is registered to the user accounts database

2) Operation contracts 2

Operation Name: Login

Pre-conditions:

- User has provided the correct credentials
- User is registered

Post-Conditions:

- User is logged into his account
- User can make changes and post ads

3) Operation contracts 3

Operation Name: Verify

Pre-conditions:

- Credentials are entered

Post-Conditions:

- Log in if the credentials are correct and redirect to profile page
- Notify if the credentials are not correct

4) Operation contracts 4

Operation Name:View Match

Pre-conditions:

- User is logged in Valid user.

Post-Conditions:

- User can view matches and teams.

5) Operation contracts 5

Operation Name:Predict Match

Pre-conditions:

- User has entered the required information in bid and prediction fields
- The information is valid

Post-Conditions:

- The bid will be added.
- Other users can view this bid and results.

6) Operation contracts 6

Operation Name: Logout

Pre-conditions:

- User is logged in

Post-Conditions:

- The user will be logged out of the system

7) Operation contracts 7

Operation Name: Search

Pre-conditions:

- User has entered at least 10 alphabets into the search bar
- (OPTIONAL) filters have been applied

Post-Conditions:

- User will be redirected to the search results page

8) Operation contracts 8

Operation Name: Update Profile

Pre-conditions:

- Only the authorized user can update profile by logging in.

Post-Conditions:

- The profile will be updated.
- Categorized report will be sent to admin

9) **Operation contracts 9**

Operation Name: View History

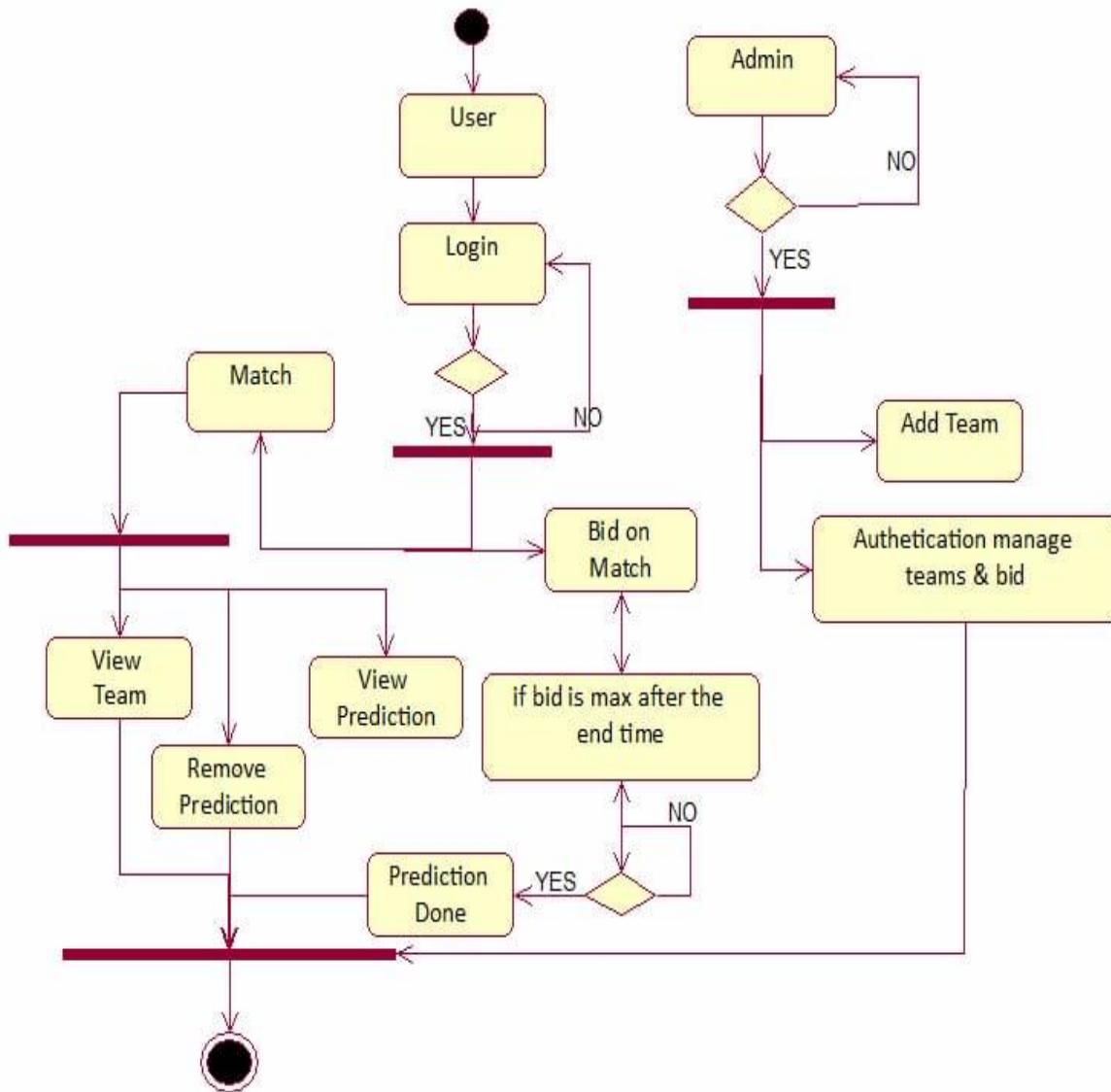
Pre-conditions:

- Only the authorized user can see previous bids and predictions by logging in.

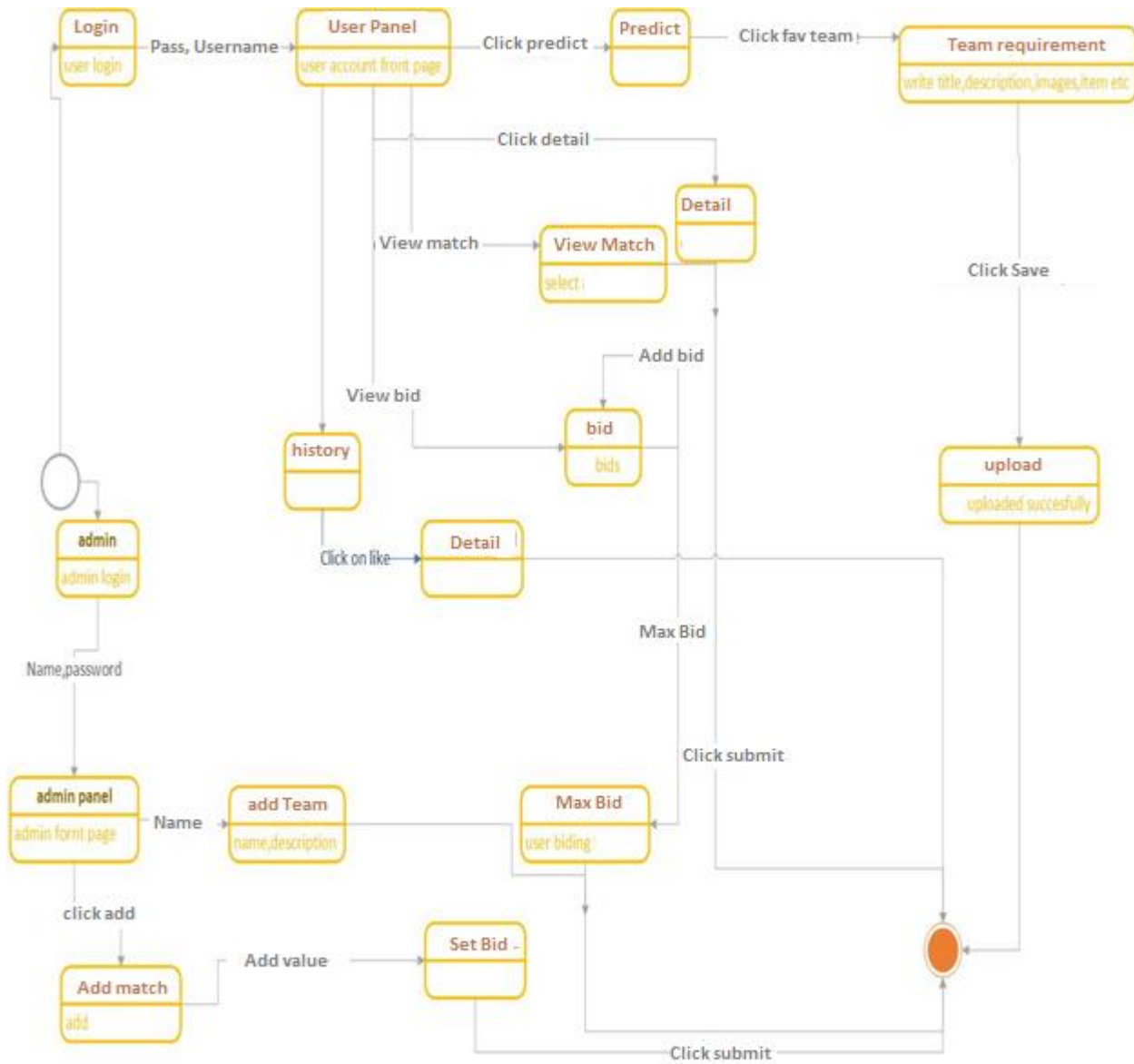
Post-Conditions:

- User must have previous prediction record to see.

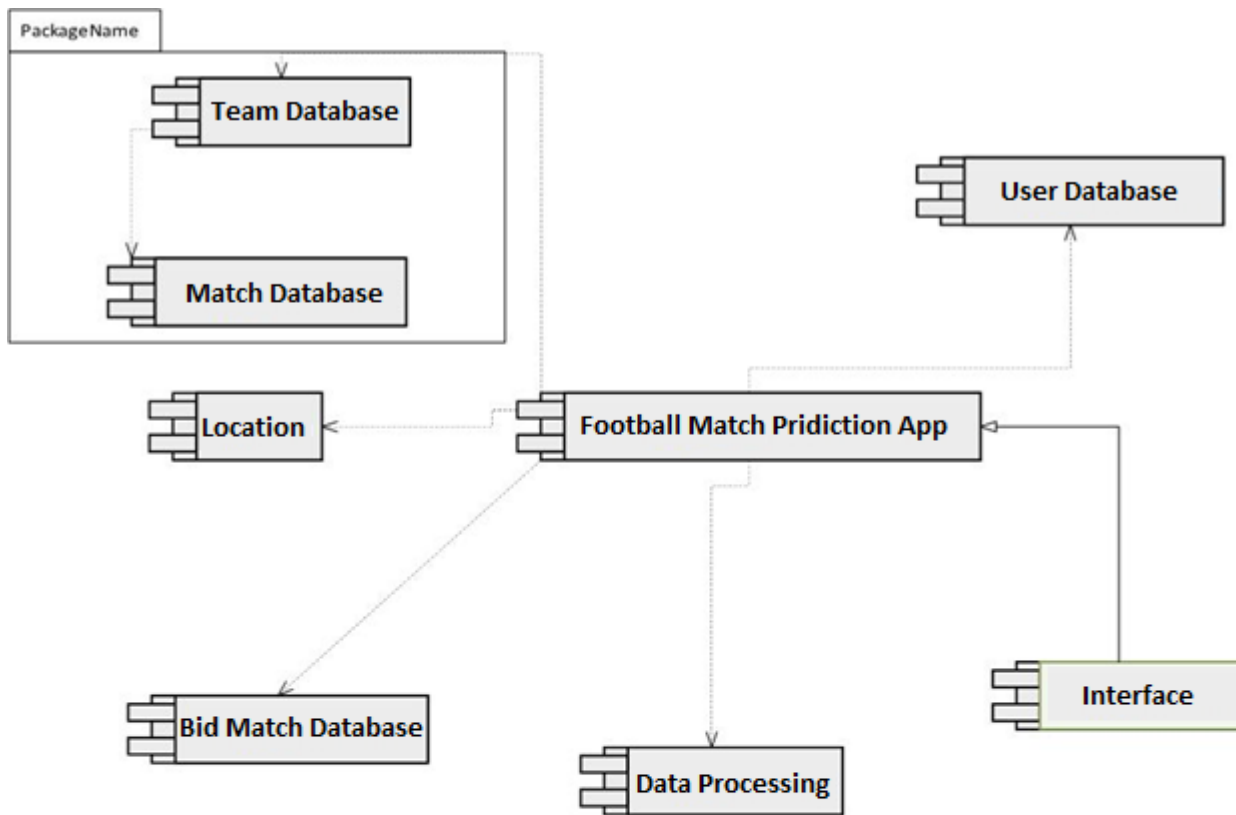
4.7. Activity Diagram



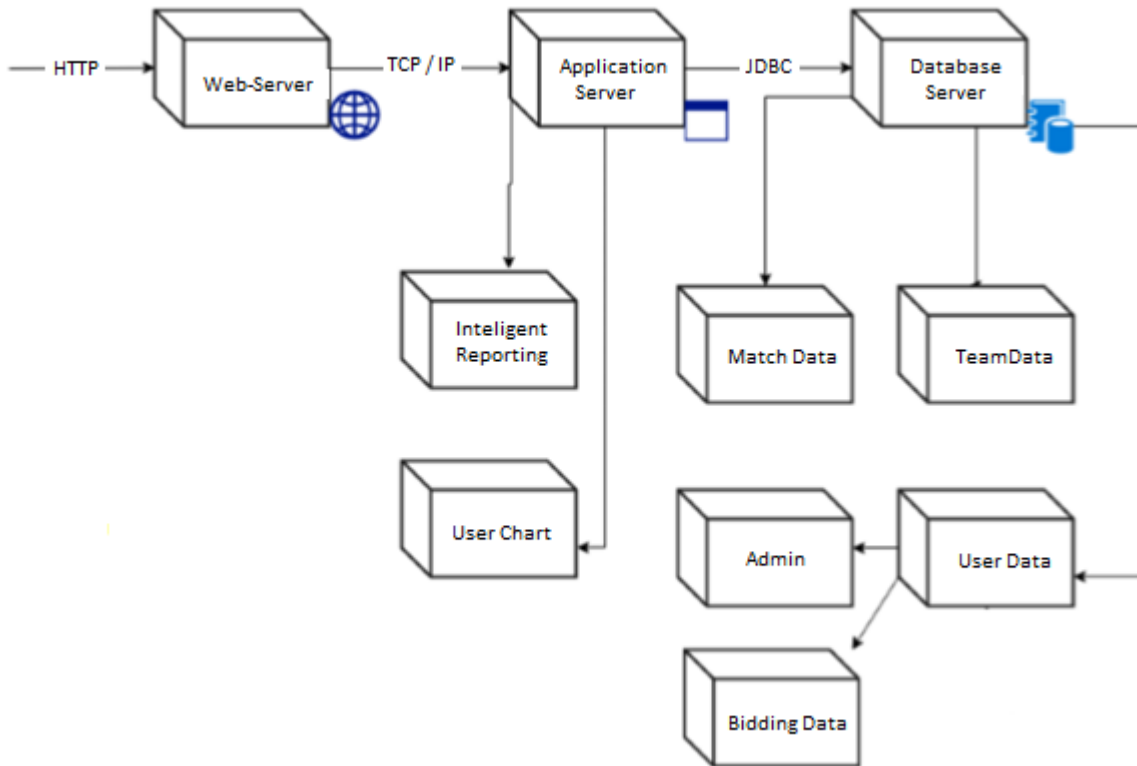
4.8. State Transition Diagram



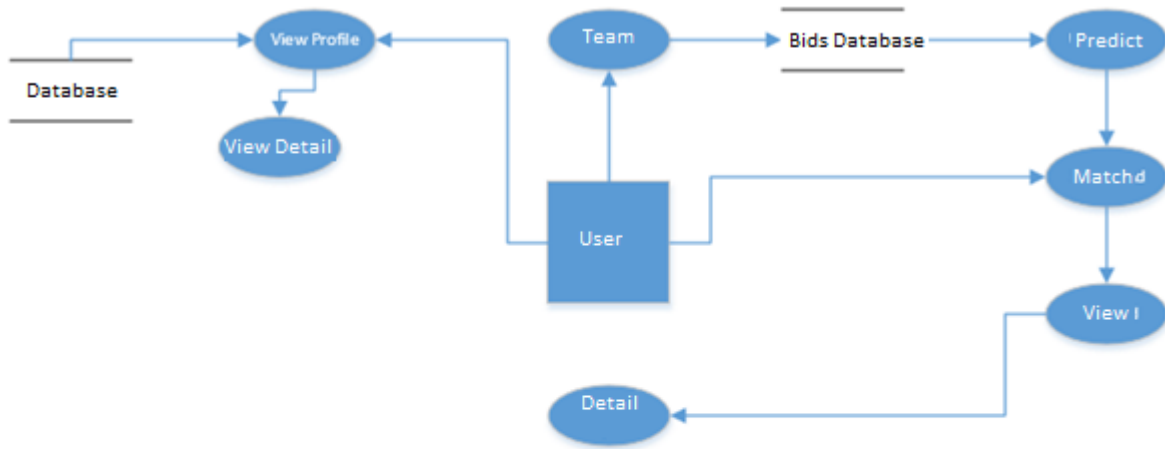
4.9. Component Diagram



4.10. Deployment Diagram



4.11. Data Flow diagram



Chapter 5

Implementation

Chapter 5: Implementation

Waterfall methodology use for the Implementation of this system. We get all the necessary information of all the development phases including requirement gathering, analysis, design, implementation, testing and deployment. In implementation we develop the platform and we check either the system fulfill the requirements.

Requirement Gathering & Analysis	In this phase all the requirements and assets necessary are ready for analyzing. Errors and bugs are pinpointed during analysis and fixed. And then the feasibilities in the different areas of implementation are formulated (including time and cost).
Planning	In this phase plan will be manifested on the basis on the analyzed data and requirements. The time and cost for each SDLC phase will also be decided.
Design	In this phase, development model will be chosen and database will be designed. It will be verified by Supervisor.
Implementation	After design phase implementation according to the requirements. During and after completion of this phase, V&V will be applied to check if the system fulfills the requirements
Testing	Testing will be done to check requirements and functionality. Both dynamic and static testing will be performed. Dynamically through testing tools and statically to check every line of code manually. Static testing will reduce errors upon execution and allow us to find errors that otherwise are very difficult to find.
Deployment	After tests are done and no further errors are discovered, the system will be deployed. In case of discovery of errors or in case a change is made, regression testing will be performed.

5.1. Important Flow Control/Pseudo codes

Admin Panel:

- Logs in
- Checks activity log
- Decision Making, removes and verifies accounts
- Add,update,delete team and matches.
- Add,update,delete bid value
- Validate, delete user.
- Log out

Renter Panel:

- Logs in
- Logout
- Upload,update user data.
- View matches
- View teams
- View earned coins
- View History/Record
- Bid on teams
- Edit Profile

5.2. Components, Libraries, Web Services and stubs

Languages and Libraries:

Font-awesome, Bootstrap4, PHP, JavaScript, HTML, CSS, Android.

Web services:

Rest AP

5.3. Deployment Environment

Browser

- Safari
- Chrome
- Firefox
- MS edge
- Internet Explorer
- Play Store

Server

- Bandwidth: 6GB
- Space: 500MB

5.4. Tools and Techniques

- Bracket
- Visual Studio Code
- Visual Studio
- Xampp

- Adobe Photoshop
- Adobe Dream Viewer

5.5. Best Practices / Coding Standards

- Ask for feedback
- Strong security
- Automatic image slider
- Good Color combination
- Fast loading speed
- Commenting
- Keep the code simple
- Naming Conventions
- Alert text blinking
- Detail documentation for help
- Graphics must be good

Chapter 6

Testing and Evaluation

Chapter 6: Testing and Evaluation

The major objectives of system testing and evaluation are to check the developed system and evaluation. This section also provides the different strategies and evaluation plan required for the purpose of testing and evaluation.

In software engineering, system testing plays an important role for the delivery of the project or the system. Every developed system is checked in order to find out the programming bugs. Meanwhile, testing cannot guarantee the total bug free system. Hence, the basic objectives of the system is to find out the bugs solve them for the bugs free system

6.1. Use Case Testing

Test Case 1

Test Suite ID	TS01
Test Case ID	TC01
Test Case Summary	To register user successfully
Related Requirements	RS01
Test Procedure	<p>Go to the user interface</p> <p>Enter name in the name field as "ABC XYZ"</p> <p>Enter password in the password field as "ABC123xy"</p> <p>Enter Email in the email field as abc@xyz.com</p> <p>Clicks on the button "register"</p>
Expected Result	<p>After entering correct information display message "user registered successfully".</p> <p>Go to home page</p>
Actual Result	<p>Get notification of "user Registered successfully"</p> <p>Go to home page</p>
Status	Partially Pass
Created By	M.Wasif ,Hassan, Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 2

Test Suite ID	TS02			
Test Case ID	TC02			
Test Case Summary	To login successfully			
Related Requirements	RS02			
Prerequisites	Admin or User should be registered			
Test Procedure	<p>Go to the user interface</p> <p>Enter Email in the email field as abc@xyz.com</p> <p>Enter password in the password field as "ABC123xy"</p> <p>Clicks on the button "Login"</p>			
Test Data	Sr.No.	Email	Password	Status
	1	abc@xyz.com	ABC123xy	Pass
	2	abc@xyz	ABC123xy	Fail
	3	abc.xyz.com	ABC123xy	Fail
	4	abc@xyz.com	ABC123	Fail
	5	abc@xyz.com	Abcdefgh	Fail
	6	abc@xyz.com	Abc-123-	Fail
Expected Result	If email and password matches to the data in the database then go to the home page			
Actual Result	Goto home page			
Status	Partially Pass			
Created By	M.Wasif,Hassan,Usama			
Date of Creations	08/06/2020			
Executed By	M.Wasif,Hassan,Usama			
Date of Execution	08/06/2020			
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y 			

Test Case3

Test Suite ID	TS03
Test Case ID	TC03
Test Case Summary	User can view prediction
Related Requirements	RS003
Prerequisites	User should be logged in
Test Procedure	Go to home page Clicks on the view prediction
Expected Result	Go to the match prediction page Give a view of the predictions in percentage of both the teams to win or loss
Actual Result	Go to the match prediction page Give a view of the predictions in percentage of both the teams to win or loss
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case4

Test Suite ID	TS04
Test Case ID	TC04
Test Case Summary	Bitting should be done successfully
Related Requirements	RS04
Prerequisites	Should be logged in
Test Procedure	Go to home page Go to view prediction Clicks on the button "add to bitslip" Add coins in the field Clicks on the button "bet now"
Expected Result	Give it a notification "successfully Bet Amount::Wait for Results!"
Actual Result	Give it a notification "successfully Bet Amount::Wait for Results!"
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 5

Test Suite ID	TS05
Test Case ID	TC05
Test Case Summary	Can view results of the matches
Related Requirements	RS05
Prerequisites	User should be logged in
Test Procedure	Go to the home page Clicks on the button "Results"
Expected Result	After clicking it should go to the Results page Give user a view of the results of all the matches of the day
Actual Result	After clicking it should go to the Results page Give user a view of the results of all the matches of the day
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case6

Test Suite ID	TS06
Test Case ID	TC06
Test Case Summary	View betting help
Related Requirements	RS06
Prerequisites	User should be logged in
Test Procedure	Go to home page Clicks on the button "betting help"
Expected Result	Bring user to the betting help page
Actual Result	Bring user to the betting help page
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case7

Test Suite ID	TS07
Test Case ID	TC07
Test Case Summary	Can view live scores of the matches
Related Requirements	RS07
Prerequisites	User should be logged in
Test Procedure	Go to home page Clicks on the button "Live Scores"
Expected Result	Brings user to the live score's page Give user a view of live scores of the matches
Actual Result	Brings user to the live score's page Give user a view of live scores of the matches
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 8

Test Suite ID	TS08
Test Case ID	TC08
Test Case Summary	Can view news about matches
Related Requirements	RS08
Prerequisites	User should be logged in
Test Procedure	Go to home page Clicks on the button "news"
Expected Result	Bring user to the news page View news on the news page
Actual Result	Bring user to the news page View news on the news page
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 9

Test Suite ID	TS09
Test Case ID	TC09
Test Case Summary	User should be logged out successfully
Related Requirements	RS09
Prerequisites	User should be logged in
Test Procedure	Go to home page Clicks on the button "log out"
Expected Result	Logged out Brings user to the log in page
Actual Result	Logged out Brings user to the log in page
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 10

Test Suite ID	TS010
Test Case ID	TC010
Test Case Summary	Successfully go to add new player page
Related Requirements	RS010
Prerequisites	Admin should be logged in
Test Procedure	<p>Go to dashboard</p> <p>Clicks on the dropdown list “manage players”</p> <p>Clicks on the clickable “add new player”</p> <p>Enter player name in player name field as “abc”</p> <p>Enter date of birth of the player in the DOB field as “31-12-20yz”</p> <p>Enter height of player in height field as “00cm”</p> <p>Enter nationality in the nationality field as “abc”</p> <p>Rate ball control in ball control field out of 100 as “00”</p> <p>Rate dribbling skills in dribbling skills field out of 100 as “00”</p> <p>Rate Partially Passing accuracy in Partially Passing accuracy field out of 100 as “00”</p> <p>Rate body control in body control field out of 100 as “00”</p> <p>Rate spatial awareness in spatial awareness field out of 100 as “00”</p> <p>Rate tactical knowledge in tactical knowledge field out of 100 as “00”</p> <p>Rate risk assessment in risk assessment field out of 100 as “00”</p> <p>Rate endurance in endurance field out of 100 as “00”</p> <p>Rate balance and coordination in balance and coordination field out of 100 as “00”</p> <p>Rate speed in speed field out of 100 as “00”</p> <p>Rate strength and power in strength and power field out of 100 as “00”</p> <p>Rate Partially Passion and love for sport in Partially Passion and love for</p>

	<p>the sport field out of 100 as “00”</p> <p>Rate composure and mental strength in composure and mental strength field out of 100 as “00”</p> <p>Rate coachability in coachability field out of 100 as “00”</p> <p>Rate self motiation in self motivation field out of 100 as “00”</p> <p>upload player’s picture in image field</p> <p>clicks on the button “upload”</p>
Expected Result	give notification “ player is added”
Actual Result	glve notification “ player is added”
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 11

Test Suite ID	TS011
Test Case ID	TC011
Test Case Summary	Admin can view player successfully
Related Requirements	RS011
Prerequisites	Admin should be logged in
Test Procedure	Go to dashboard Clicks on the dropdown list “manage players” Clicks on the clickable “ view players”
Expected Result	admin can view the list of players
Actual Result	admin can view the list of players
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case12

Test Suite ID	TS012
Test Case ID	TC012
Test Case Summary	Admin can view details of player
Related Requirements	RS012
Prerequisites	Admin should be logged in and already in view player page
Test Procedure	Clicks on the clickable “view details”
Expected Result	System should bring admin to the view details page Admin can view details of the player
Actual Result	System should bring admin to the view details page Admin can view details of the player
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case13

Test Suite ID	TS013
Test Case ID	TC013
Test Case Summary	Admin can edit details
Related Requirements	RS013
Prerequisites	Admin should be logged in and already on the view players page
Test Procedure	Clicks on the clickable “edit details” Admin can edit the details of the players After editing the details clicks on the button “update”
Expected Result	System should display the notification “player’s details are edited successfully”
Actual Result	System displays the notification “player’s details are edited successfully”
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 14

Test Suite ID	TS014
Test Case ID	TC014
Test Case Summary	Add match
Related Requirements	RS014
Prerequisites	Admin should be logged in
Test Procedure	<p>Go to dashboard</p> <p>Clicks on the dropdown list “schedule match”</p> <p>Clicks on the clickable “add match”</p> <p>Select the teams for match in respected field</p> <p>Select the name of the stadium in “stadium name” field</p> <p>Select the league name in “league name” filed</p> <p>Select the date in date field from calendar</p> <p>Select the timw of the match in time filed</p> <p>Clicks on the button “save”</p>
Expected Result	Match should be added to the league
Actual Result	Match is added to the league
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 15

Test Suite ID	TS015
Test Case ID	TC015
Test Case Summary	Admin can view all the schedules of upcoming matches
Related Requirements	RS015
Prerequisites	Admin should be logged in
Test Procedure	Go to the dashboard Clicks on the dropdown list “ schedule matches” Clicks on the clickable “view schedules”
Expected Result	Admin can view all the schedules of upcoming matches
Actual Result	Admin can view all the schedules of upcoming matches
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 16

Test Suite ID	TS016
Test Case ID	TC016
Test Case Summary	Admin can add new team
Related Requirements	RS016
Prerequisites	Admin should be logged in
Test Procedure	<p>Go to dashboard</p> <p>Clicks on the dropdown list “build teams”</p> <p>Clicks on the clickable “ add new team”</p> <p>Enter team name in “team name” field</p> <p>Enter country name in “country name” field</p> <p>Enter captian name in the “captian name” field</p> <p>Enter the headcoach name in the “head coach” field</p> <p>Upload the team logo in the “upload logo” filed</p> <p>Select the team players in the “select team player” field</p> <p>Clicks on the button “ save”</p>
Expected Result	New team should be added and notify admin as “new team is added”
Actual Result	New team should be added and notify admin as “new team is added”
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 17

Test Suite ID	TS017
Test Case ID	TC017
Test Case Summary	View all teams
Related Requirements	RS017
Prerequisites	Admin should be logged in
Test Procedure	<p>Got to dashboard</p> <p>Clicks on the dropdown list “build team”</p> <p>Clicks on the clickable “view teams”</p>
Expected Result	<p>System brings admin to the “view teams” page</p> <p>Can view all the teams</p>
Actual Result	<p>System brings admin to the “view teams” page</p> <p>Can view all the teams</p>
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 18

Test Suite ID	TS018
Test Case ID	TC018
Test Case Summary	Update live score successfully
Related Requirements	RS018
Prerequisites	Admin should be logged in
Test Procedure	Go to dashboard Clicks on the clickable “live score updation”
Expected Result	System should bring admin to the page “live score updation”
Actual Result	System should bring admin to the page “live score updation”
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

Test Case 19

Test Suite ID	TS019
Test Case ID	TC019
Test Case Summary	Can view all leagues
Related Requirements	RS019
Prerequisites	Admin should be logged in
Test Procedure	Go to dashboard Clicks on the clickable "View league"
Expected Result	System should bring admin to the page "view leagues" Admin can view all the registered leagues
Actual Result	System should bring admin to the page "view leagues" Admin can view all the registered leagues
Status	Partially Pass
Created By	M.Wasif,Hassan,Usama
Date of Creations	08/06/2020
Executed By	M.Wasif,Hassan,Usama
Date of Execution	08/06/2020
Test Environment	<ul style="list-style-type: none"> • Chrome: N • OS: Windows(any) Y

6.2. Data flow testing

Data Flow Testing Results			
Data Unit Name	Data Flow Method		Test Results
Login Form	Interface-->Database, >Interface	Database--	Partially Pass
Admin Panel	Interface-->Database, >Interface	Database--	Partially Pass
User	Interface-->Database, >Interface	Database--	Partially Pass
Guest	Interface-->Database, >Interface	Database--	Partially Pass
Select Team	Interface-->Database, >Interface	Database--	Partially Pass
Make Bid	Interface-->Database, >Interface	Database--	Partially Pass
Add team	Interface-->Database, >Interface	Database--	Partially Pass
Add Match	Interface-->Database, >Interface	Database--	Partially Pass
Match Schedule	Interface-->Database, >Interface	Database--	Partially Pass

6.3. Unit testing

Unit Testing of RWS Software Units		
Software Unit Name	Testing Method	Test Results
Login Form	Manual testing on localhost	Partially Pass
Admin Panel	Manual testing on localhost	Partially Pass
User	Manual testing on localhost	Partially Pass
Guest	Manual testing on localhost	Partially Pass
Select Team	Manual testing on localhost	Partially Pass
Make Bid	Manual testing on localhost	Partially Pass
Add team	Manual testing on localhost	Partially Pass
Add Match	Manual testing on localhost	Partially Pass
Match Schedule	Manual testing on localhost	Partially Pass

6.4. Integration testing

Football Prediction			
Software Unit Name	Test with Unit	Testing Method	Test Results
Login Form	Interface and relevant feature	Manual testing on Localhost	Partially Pass
Admin Panel	Interface and relevant feature	Manual testing on localhost	Partially Pass
User	Interface and relevant feature	Manual testing on localhost	Partially Pass
Guest	Interface and relevant feature	Manual testing on localhost	Partially Pass
Select Team	Interface and relevant feature	Manual testing on localhost	Partially Pass
Make Bid	Interface and relevant feature	Manual testing on localhost	Partially Pass
Add team	Interface and relevant feature	Manual testing on localhost	Partially Pass
Add Match	Interface and relevant feature	Manual testing on Localhost	Partially Pass
Match Schedule	Interface and relevant feature	Manual testing on localhost	Partially Pass

Chapter 7

Summary, Conclusion and Future Enhancements

Chapter 7: Summary, Conclusion & Future Enhancements

7.1. Project Summary

Project Title	FootBall Prediction
Project Supervisor	Sir Assadullah Tariq

Purpose: The main purpose of this project is to fulfill the FYP requirement for the completion of the degree program in University Level. It also provides the football fans to get rewards and predict that their favorite team will win or lose.

Description: The project Football predictor is developed by the team of students of the department of CS&IT under the supervision of Sir Assadullah Tariq.

Benefit: This project will facilitate users to predict which team will win the upcoming match and also win money if they won the bet. Football have the biggest fan base. So, fans will attract to this application by their interests.

Output/Outcome: Website based Application Named as Football Predictor.

7.2. Achievements and Improvements

Completing any academic project directly contribute for the extra learning to the student involved in the project. Developing the prediction portal for the football fans made me know about the different aspect of the football such as the history, background, different historical moments, and key players from the history, major competition, football rivals between the nation and the professional's football clubs etc. Completing the project also increased my project management behavior as the project contain the unchangeable time frame, likewise various survey techniques were learnt in order to understand the problems domain of the project. The achievements are also mentioned on the achievement table below.

7.3. Critical Review

Objectives:

1. To provide a dedicated platform to people to make and get predictions for their favorite teams.
2. To develop software by following software engineering best practices by utilizing the latest tools available in the market.
3. To help people so that we can make them happy by giving them rewards for their interest.

Methodology:

- We have found that users should have a dedicated platform. Where they can easily
- Spend their time to get easy money by enjoying their favorite game.

Conclusions:

The project Football Prediction is developed with the aim to provide a dedicated platform to Users to find the future result of upcoming matches. And they can also get all information about football on News field. We will hopefully provide everything that a user wants to enjoy and get rewards.

7.4. Lessons Learnt

Following are the learning outcome that we have learned during the development of the project:

- Learn how to apply software engineering techniques on a project.
- Learn about the importance and role of documentation in a software project.
- Learning of new technology and tools.
- Learn to meet deadlines.
- Learn to be flexible while developing a software project.
- Team building skill and responsibilities.
- Learn to manage the project effectively.
- Learn how to tackle the changes to the software scope during development.
- Learn how to develop use full and live working project.
- Learn communication skill for better project communication management.
- Learn new testing and development tools.
- Learn to develop better documentation.

7.5. Future Enhancements/Recommendations

Following are the future recommendations for our project Football Predictor.

- Add new features and functionalities if needed and requested by the users.'
- Add API's to get live Data through google API's.
- Add payment methods for the users to redeem their rewards.
- Add the role of moderator to reduce the workload of the admin of the system.
- Any other changes and improvements for positive improvement for the project are welcome in future.