

# **Project Proposal**

## **Virtual Soccer**

**Course: SE – 505 Software Project Lab – 2**

Submitted By

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Submitted To

**Manager SPL – 2**



**Institute of Information Technology,**

**University of Dhaka.**

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## **Proposal Submission Letter**

Date: 25 – 01 – 2018

SPL – 2 Program Committee,  
Institute of Information Technology.  
University of Dhaka.  
Dhaka.

Subject: Seeking permission for approving SPL – 2 Project.

Dear Sir,

With due respect, we are the students of BSSE 08<sup>th</sup> batch, Institute of Information Technology, University of Dhaka. We would like to inform you that in running semester we have a course SE – 505(SPL – 2). In this course we need to implement a software project. For this reason, we selected “Virtual Football” as our project to implement supervised by Shah Mostafa Khaled, assistant professor, Institute of Information Technology.

We wish that, you would be kind enough to grant our application and oblige thereby.

Your Sincere,

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Atiq Ahammed  
BSSE0817

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BSSE 8<sup>th</sup> Batch

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Shah Mostafa Khaled  
Assistant Professor,  
Institute of Information Technology,  
University of Dhaka.

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## 1. Introduction

Fantasy Premier League [1] is a game in which participants concoct an imaginary football team of real-life footballers and score points based on those player's actual statistical performance or their desired contribution on the field of play. "Virtual Soccer" like Fantasy Premier League will be developed in which the rules will be customized based on stakeholder's requirements.

## 2. Description

The aim of our project is to develop a virtual game based on real-life football statistics. The project will have some features like:

- 1) Authentication for team manager
- 2) Team selection
- 3) Game week ranking and cumulative ranking generation based on team point
- 4) Head to head game week challenge between two interested random team managers
- 5) Selection of man of the match of every game based on team manager voting
- 6) Game-week (a period of time in which every real-life football club participates in a single scheduled football match) score update
- 7) Simulation of best XI in every game week

At first, the user will register herself/himself as a team manager. At the beginning of a season, every team manager will be given an equal number of player transfer coin and challenge coin. Then he will form a football team of fifteen players based on some criteria within a specified player transfer coin that would be given to her/him at the starting of the game.

Before a game week, the team manager will confirm a football team of eleven players. After the game week, the point of the manager will be increased or decreased based on the real-time game performance of the selected players. Based on the game point the manager will get a global cumulative ranking and a game week ranking.

For head to head challenge, the interested team manager will challenge before starting a game week investing a defined amount of challenge coin. The opponent will be selected randomly from the other interested challengers. At the end of the game week, one of the players will win and her/his challenge coin and challenge experience will be increased.

In every game week, the team manager will get a free transfer opportunity. If the manager wants to have multiple transfers in a single game week that will cost the detriment of that game week point.

At the end of every game week, the best XI will be generated automatically based on the players game week point.

At the end of a real-life league season, the game winners will be selected based on their cumulative game week point.

### **3. Objective**

The main objectives of the project are to keep records in a database, follow object-oriented concepts, and create an android mobile game. A few of the implementations are given below:

- To utilize our knowledge of Software Requirement Analysis, Object Oriented Programming, Android and Database on this project
- The application will provide authentication system. It will also provide the dashboard for users so that users will get some facilities
- Any user can get access to his/her account from anywhere using the internet connection

### **4. Scope**

Filters for each service will be optimized according to the stakeholders requirements.

- The system will work for the only Android device
- Game week point will be updated based on real-life football game week point
- Stakeholders will define the game policy
- The price of the players will be updated from Fantasy Premier League [1]
- The player's performances statistics will be updated automatically
- There will be no previous prediction policy for any game result

### **5. Stakeholders Description**

Stakeholders of our project are:

- Iftekhar Jamil, BSSE 8<sup>th</sup> batch, Institute of Information Technology, University of Dhaka
- Asadullah-Al-Galib, BSSE 7<sup>th</sup> batch, Institute of Information Technology, University of Dhaka
- Rayhanur Rahman, Lecturer, Institute of Information Technology, University of Dhaka.
- Football lovers as general users

## **6. Methodology**

To complete the project, we will follow the steps mentioned below:

- 1) Identify the stakeholders and interview them to gather requirements
- 2) Develop quality function deployment of our project
- 3) Prepare a scenario of the system
- 4) Conduct scenario-based modeling
- 5) Conduct data modeling. The database will be used for storing data and retrieving information
- 6) Conduct class-based modeling
- 7) Conduct behavioral modeling
- 8) Implement the project

## **7. References**

- [1] "Fantasy Premier League," 24 January 2018. [Online]. Available: <https://fantasy.premierleague.com/>.