## **CS 242 Final Project Proposal Template**

# Real FootbAll: One Stop Football App

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#### 1. Abstract

## 1.1. Project Purpose

One stop to follow all football teams/leagues/players etc. Our app will also provide the ins and outs of the footballing world. Avid fans of the game can rely on this app for real time league standing, match scores, and players statistics among many other features.

## 1.2. Background/Motivation

It is difficult to keep track of match timings, league standings etc across different leagues and time zones. Football fans prefer statistics in one place to keep track of live scores with event timeline as well as player and team stats.

## 2. Technical Specifications

- 2.1. Platform: Website
- 2.2. Programming Languages: JavaScript, HTML, CSS
- 2.3. **Stylistic Conventions:** camelCase naming conventions, function signature, commenting
- 2.4. **SDK:** React
- 2.5. **IDE:** Sublime
- 2.6. Tools/Interfaces: Google Chrome, MongoDB, Semantic-UI
- 2.7. **Target Audience:** Football viewers/fans

## 3. Functional Specifications

#### 3.1. Features

- User can login with Facebook credentials
- User can add and manage favorite teams, players and leagues
- User will receive push notifications about favorited teams/their matches
- User can search for league/team/player
- App displays match stats of live as well as past matches
- Match stats will have an event timeline
- App shows results or fixtures of leagues or teams
- Compare player stats or team stats from any season
- Show match line-ups

Filter or sort by league/country

## 3.2. Scope of project

Only users with Facebook accounts can sign in to enjoy the 'favorites' facility provided by our applications. The application does not provide news updates about the sport.

#### 4. Timeline:

#### 4.1. Week 1

### Savya

- Create schema in MongoDB for "player"
- Set up Node.js server
- o Set up file structure for development
- o Implement GET for "player" endpoint

#### Aakash

- Set up React for client
- Integrate MongoDB with React using Mongoose
- Create mock data for database
- Set up routes for API endpoints

## Gauraang

- Design navigation flow of website
- Sketch out page layouts for UI
- o Construct use-case diagram
- Implement POST for "player" endpoint

### 4.2. Week 2

#### Savya

- Create MongoDB schema for match details
- Create horizontal scrollable list display for popular teams/leagues
- Implement get for 'match' endpoint
- Create recyclable grid view for live match scores

## Aakash

- o Create page for teams
- Create page for player details
- o Create Team Schema
- o Implement Search Bar

### Gauraang

- Design page for League details
- Implement Header Component
- o Implement post for "match" endpoint
- Create Modal display for match details

#### 4.3. Week 3

### Savya

- Implement Team search
- Open Team stat details on click
- o Implement sort for Team search
- Fetch data from API

#### Aakash

- Add search feature to search for players
- o Open player details on clicking on search results
- o Implement sort for player search
- Set up mock testing environment for fetching player data from API

## Gauraang

- o Search for match based on date
- Create page for login
- o Implement Team Search Filters
- Implement Player Search Filters

#### 4.4. Week 4

### Savya

- Create homepage and show popular teams/players/leagues
- o Populate profile page with user favorites
- Show live matches in grid view and update on refresh
- Show match stats on clicking on live match

### Aakash

- Implement Facebook authentication
- o Implement User schema in database
- Store user Favorites in database
- o Highlight current team in league standings

### Gauraang

- Create user profile page
- Implement option to favorite a league, team or player
- o Change "Sign in" to "Favorites" after user logs in
- Navigate to homepage on clicking on logo
- o Implement animations to improve user experience

### 5. Future Enhancements

If we continue working on this project in the future, we plan on adding news updates to the application. Also, we would like to have our own authorization system to allow users without Facebook accounts to login and use the 'favorites' feature.