



**Volley Viction**

**Prepared by: Krishna Naik (1896930)**

**Lilu Odedra (1896615)**

**Urvi Arora (1895757)**

**Shivdeep Kaur (1896567)**

**Pulkit Sharma (1896330)**

**MAD-314**

Table of Contents

[1. Project Description 1](#_Toc3492)

[2. Requirements 2](#_Toc17018)

2.1 Functional Requirements 2

2.2 Non-Functional Requirements 3

3. Mockups 4

4. Use Case Diagram ………………………………………………………………...10 4.1. Fully Dressed Use Case Diagram …………………………………….11

5.Sequence Diagram…………………………………………………………………13

6.Class Diagram…………………………………………………………..…………16

# 

1. **PROJECT DESCRIPTION**

The volleyball management mobile app will function in Android mobile phones. Volleyball management application will cover every aspects of this sport. This Application will be designed in a way, that can be easily understandable to not only guests but also to league managers and team managers.

Basically, this application provides three types of roles, who can use this application such as league managers, team managers and guests. Where, league managers will be able to create and delete teams, seasons and also, they can create match schedules and can modify or enter match results. Team managers also have preceding role where he or she can edit information of their team. Every team have single team manager who can manage that team. Team managers have authority to add or delete their players. This describe very easy way, where each role can manage their duties effortlessly. And, Guests can use this application by keeping up with match schedules, winning teams, losing teams and other statistics. Guests have no authorities to make changes or make modifications to the application.

Here, we will be using Android studio to build our application. This application will be used by android phone users. We will be using SQL Server 2017 as our database which will collaborate with our app. Some platforms we will be using throughout building this application is GitHub, Android Studio etc.…

1. **REQUIREMENTS**
   1. **Functional Requirements**

The functional requirement provides the behavior of the system as it relates to the system's functionality. In simple words, it should be the ways in which the application should work.

This Application is classified between 3 users and so the functional requirements for all the users may vary.

1. **League Manager**

* League Manager have to login to the Application. Non-registered user or without logging in, they cannot access the application.
* Cegep Volleyball League is managed by League manager. User can organize seasons for the tournament. User can create schedules for the seasons.
* The League Manager can manage all teams in the tournament. User can add the new team to the season and/or can remove the team from the tournament and update team’s information like Name,Contact details.
* Add and/or Delete the player/s of any team, and can edit their information and also update information of the respective Team Manager.
* League manager is responsible to update the results of each match after every tournament.
* League Manager can manage their personal information like Contact Information.

1. **Team Manager**

* Team Manager have to be registered/login to the Application. Non-registered user or without logging in, they cannot access the application.
* Team Manager is bound to single team. User can manage only one team. One Team also has only one Team Manager.
* Team Manager can edit team’s information like Name, Color, Contact Information and ranking.
* Manager can update the Player’s information like Name, DOB, Contact Details and also can add/remove any player in the team.
* Team Manager can update his personal information, Contact information.

1. **Guest**

* Guest can view all the teams of the League. They can view the details of the teams like the leader board and rankings.
* Guest can able to see the events of the day. They can also able to check out the upcoming events for the league.
* The Guest can view statistics of all the teams in the tournament.
* Guest who uses the application has no right to make any modifications or change the information in the application.
  1. **Non-Functional Requirements**

The non-functional requirement shows the running characteristics of the system. The basic and foremost requirement is efficiency and effectiveness of the app. If the app does not run smoothly and fast then nobody would show interest in using the app. Apart from these other non-functional requirements are:

* + 1. Operation Requirement: Operation Requirement describes how well Volleyball Management Application performs the task.
* Access Security: Whenever a call is made to the system function: to prevent an unauthorized invocation.
* Usability: This application provides the user to operate and easily access the features and able to prepare the inputs and interpret the outputs.
* Confidentiality: Protects the sensitive data and allows only the authorized access to data. Say Team Managers can only access the data of their teams.
* Data Integrity: Resource Constraint: Processors Speed, Network bandwidth, Disk Space, Memory.
  + 1. Revision: Requirements for the system that must be analyzed and tested as the problem arise.
* Modifiability: The changes in the application is done by League manager and Team Manager both but the League manager has access to all the teams and so he can modify information for every team in the league.
* Optimization for Responsiveness can be handled by Multi-threading like in this application response from the API calls is handled and act accordingly.
* Verifiability: Verification and validation techniques through testing.
  + 1. Transition: Managing the upkeep of the system that is user is concerned with aspects such as compatibility with the other system.
* Portability: Device Independent: The application can be portable to android phones.

1. **MOCKUPS**
2. **MENU**

**A picture containing mirror

Description automatically generated**

**FIG 1: MENU PAGE**

This screen represents different actions, such as, teams, players, sign out etc. that the league manager, team manager or user can take.

**A. TEAM LIST B. ADD A NEW TEAM**

**A screenshot of a cell phone

Description automatically generatedA screenshot of a cell phone

Description automatically generated**

**FIG 3: ADD TEAM**

This screen adds a new team to the lists.

**FIG 2: TEAM LIST**

This screen displays different number of teams. League manager can also edit teams.

**C. TEAM DESCRIPTION D.TEAM MODIFICATION**

**A screenshot of a cell phone

Description automatically generatedA screenshot of a cellphone

Description automatically generated**

**FIG 5: MODIFY TEAM**

This screen display team and it’s coach information that we can edit, modify or delete.

**FIG 4: TEAM DESCRIPTION**

This screen displays the entire description of a particular team, such as, Team’s logo, team name etc.

1. **A screenshot of a cell phone

   Description automatically generatedA screenshot of a cell phone

   Description automatically generatedMODIFY PLAYER F. NEW PLAYER**

**FIG 6: MODIFY PLAYER**

This screen display a particular player’s information that we can edit, modify or delete.

**FIG 7: NEW PLAYER**

If a league or team manager wants to add a new player, then he/she can add the information in this screen.

**G. MATCH H. MATCH INFORMATION**

**A screenshot of a cell phone

Description automatically generatedA screenshot of a cell phone

Description automatically generated**

**FIG 9: MATCH INFORMATION**

This screen displays the entire information of a particular match..

**FIG 8: MATCH**

This screen displays different matches.

1. A screenshot of a cell phone

   Description automatically generated**NEW MATCH J. CREATE SEASON**

**A screenshot of a cell phone

Description automatically generated**

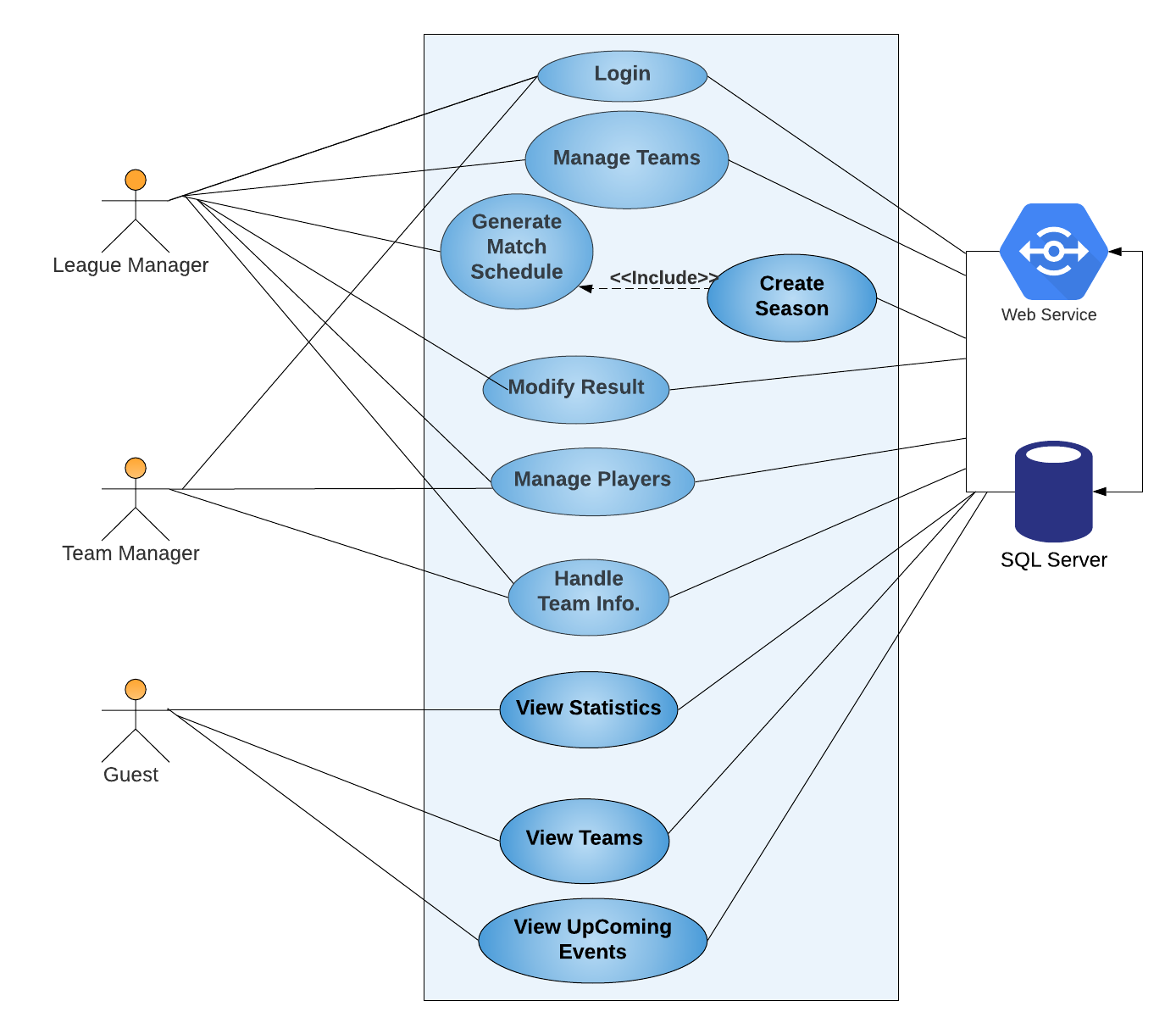
**FIG 11: Creating a new season**

This screen allows the league manager to create a new season.

**FIG 10: NEW MATCH**

This screen allows league manager to create a new match..

1. **Use Case Diagram:**



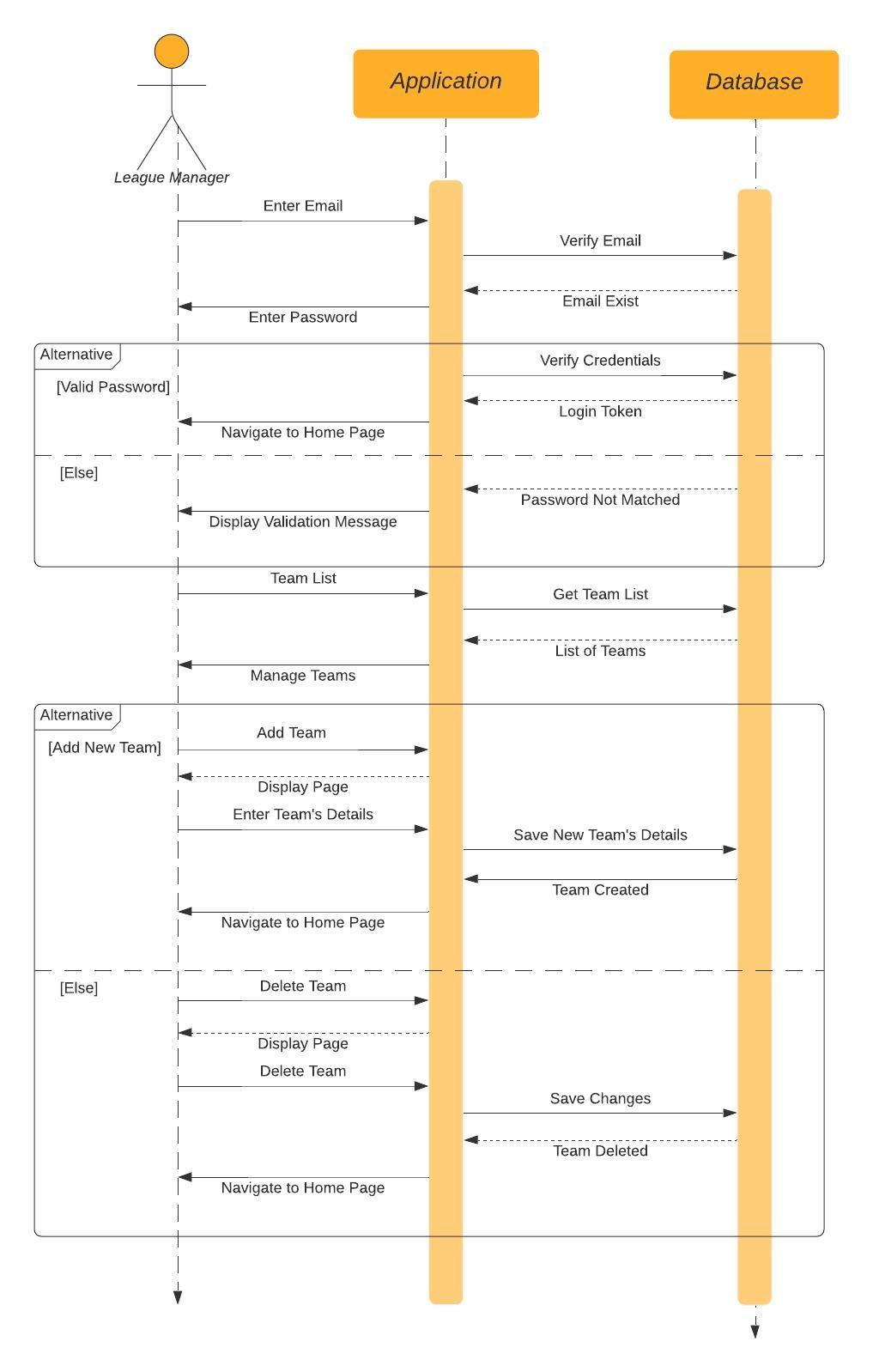
1. **Use Case Fully Dressed:**

|  |  |
| --- | --- |
| **Use Case Section** | **Comment** |
| **Use Case Name** | Manage Teams |
| **Scope** | Volley Viction Application |
| **Level** | User-Level |
| **Primary Actor** | League manager |
| **Stakeholders and Interests** | League manager: League manager must be able to access to functionality of an application. And, must be able to login to use an application. |
| **Preconditions** | League manager must be authenticated to an application and must have proper rights to access this application |
| **Success Guarantee (Post-Conditions)** | League manager must have created a page with all correct information. |
| **Main Success Scenario**  **(or Basic work-flow)** | League manager can add teams by adding information like team name, coach name, team logo etc. likewise league manager can delete team from the team list. |
| **Extensions (or Alternative work-flow)** | If League manager doesn’t know the flow of modifying then an application won’t move forward. |
| **Special Requirements** | League manager must have an android mobile. Touch screen UI on a flat panel monitor. Text must be visible from 1 meter. |
| **Frequency of Occurrence** | Every-time when the app is logged out or logging in as a league manager. |
| **Miscellaneous** | Can user do their activities offline? |

|  |  |
| --- | --- |
| **Use Case Section** | **Comment** |
| **Use Case Name** | Generate Match Schedule |
| **Scope** | Volley Viction Application |
| **Level** | User-Level |
| **Primary Actor** | League manager |
| **Stakeholders and Interests** | League manager: League manager should able to create schedule for matches. |
| **Preconditions** | League manager must be able to create a season, only that way application can proceed. |
| **Success Guarantee (Post-Conditions)** | League manager should have generated a page correct information with time, date and place. |
| **Main Success Scenario**  **(or Basic work-flow)** | League manager can create new match schedule where user can add information such as match timing, date, location, teams name etc. |
| **Extensions (or Alternative work-flow)** | If League manager doesn’t know the flow of creating a schedule for matches then an application won’t move forward. |
| **Special Requirements** | User have an android mobile. Touch screen UI on a large flat panel monitor. Text must be visible from 1 meter. |
| **Frequency of Occurrence** | Every-time when the user creates a new season for match. |
| **Miscellaneous** | Can user do their activities offline? |

1. **SEQUENCE DIAGRAM**

**League Manager**

****

**2. Manage Player**

**A screenshot of a cell phone

Description automatically generated**

**3.Create/Add Match**

**A screenshot of a cell phone

Description automatically generated**