A Football Social Network

Summary

The project will design and implement a social networking application for amateur sports players, supporting the discovery of users with same interests and the organisation of games based on features such as, e.g., proximity and intended scale of the event.

Motivation

The idea for the project is borne out of the need to provide a solution to amateur players that find it difficult to organize or participate in football games. The problem either arises due to the lack of awareness of a network of people having the same interest or the inability of those individuals to synchronize their schedules to enjoy the activity together. This project will aim to fill in both those gaps.

What is out there

The following applications deal with the same issues as this project:

- <u>Mitoo</u> This application facilitates team communication and league management while also enabling individuals to find organized leagues to play in. However, they do not enable amateurs to play outside of a rigid league structure or to set up non-official sports events.
- <u>FootyAddicts</u> This application allows users to organize and play amateur football games but is only limited to the location of London and a handful of other locations. Moreover, it only enables users to join in on a per-game basis instead of having further features for event and team organization.

Application Design

The project will mainly focus on user profiles, event organization and synchronization with other users based on location and time. The location feature may simply be a detail specified in the event planning but may incorporate known football playing locations or the ability to set those up through user input. The project will be a web application.

Architecture and Environment

The project should follow the basic three-tier architecture or MVC pattern. It will be a project with the preferred combination of having Java, SQL and Javascript. The Spring(Boot or MVC) Java framework will be used for the backend. For the frontend, I am considering using either Angular or React as the Javascript framework. All of these frameworks work with the MVC pattern. The database management system used will be Postgres which we were taught on the

course. With this implementation I will be able to use most of what we were taught in our modules during the course.

Implementation Issues and Challenges

As social networks can seem to have infinite features, implementing a wide arrays of them will be difficult in the short time available. I will aim to have some core features in the requirements that should be implemented successfully and other nonessential features and requirements that will be implemented if time allows it.

Evaluation and success metrics

The application will be evaluated against the following success metrics:

- Requirements satisfaction and achievement of initial aims and goals
- Usefulness of the tool to users
- Sustainability
- Possible improvements and upgrades

Timeline

Date	Expected outcome
20 Jun	Submit proposal
24 Jun	 Requirements and specifications. System Design UI sketches - first generation prototypes
01 Jul	 Begin implementation the MVC pattern. UI for website - second generation prototypes
08 Jul	 Complete the entire stack implementation with all parts from the database to the UI successfully interacting with each other. Start scaling up the application by adding features. Prepare for inspection week.
15 Jul	 Start writing tests for methods in different classes. Continue developing project.
22 Jul	Have the Server-Client part of the architecture fully functional with minimum development need further on.
29 Jul	Start drafting the project report.

05 Aug	Have the Database-Server implementation fully functional with minimum bugs.
12 Aug	 Have the UI completed and the entire stack fully functional and communication with each other. Debugging system.
19 Aug	 Create presentation and prepare for assessment and presentation. Test entire system for any lingering bugs.
26 Aug - end	Testing complete Compile Project report Project evaluation