

# **CMPT 470 - Project Proposal**

## **SFU Sports Clubs Website**

### **INTRODUCTION**

Most universities have recreational clubs, aimed at promoting extracurricular activities for students, with some of the clubs focusing on sports branches such as Football or Soccer. Sports clubs often have a recreational member base as well as a competitive team which consists of more advanced players. The ideal dynamics within sports clubs is to support and improve recreational players with potential, so that they can become an asset for the team in the future.

However, these clubs are run by students and managing both the team and the club is often difficult. Moreover, the clubs don't have a platform that facilitates management and maintenance. Most clubs use different platforms for different tasks, which is not only inefficient but also hard to keep track of. For example, some clubs keep their documents in Google Drive and update them manually. Documents eventually pile up and become difficult to manage. For communication with members, social media is the primary choice, but not everyone has social media accounts or check their account frequently enough.

Considering the problems described and many more similar problems, a platform which facilitate managing and maintaining these clubs can be an asset for executive members. Moreover, this platform would provide a robust source of information for members/players. We intend to implement such platform for the group project of this course.

### **FEATURES**

Shortly described, the platform allows students to login using their universities' login system. After logging in, students can either search for a specific club or see a list of registered clubs. Students can learn more about the clubs by visiting club profiles, register/subscribe to clubs and choose to receive various notifications about the clubs. Students can also update their profiles to provide information about themselves.

So far, the features listed are nothing special. The actual problem lies in creating, managing and maintaining the clubs. To facilitate these processes, the platform follows a permission-based membership system. In the platform, there are pre-defined actions for managing the clubs, such as posting an announcement, recording an expense or viewing certain documents and members need permission to perform each of these actions.

Club admins can create new roles or use role presets to encapsulate a set of permissions and assign roles to members, determining what actions each member is allowed to take. These roles follow a hierarchical structure, building on top of each other.

The principals in the membership system is extended to all other services for managing clubs. For example, types of expenses are created in a similar manner to roles. To create a type of expense, members need to specify “input fields” as well as “label fields”. In the future, any expense of the same kind can be recorded by filling in the appropriate information in the input fields. For example, a tennis club might have court booking expenses. To record these expenses, the club creates an expense called “Court Booking”. The expense can have input fields for, hourly fee, provider facility and the total booking time. By doing so, any court booking expense in the future can be recorded by simply providing a provider facility, hourly fee and the total booking time.

To wrap up, the focus of this platform is abstraction and automation. The platform aims to be abstract enough to fit the needs of every club; be highly customizable and provide enough tools to facilitate the setup/modification processes for management and maintenance. Ideally, once a club is set up, managing it (e.g. posting announcements, events, registration, assigning roles to members, tracking finances, etc.) is very easy and highly autonomous. Therefore significantly reducing the work over long periods with a slightly longer set up time.

## **IMPLEMENTATION**

Our team decided on using the LAMP stack for implementing this project, along with some helpful frameworks/libraries, namely:

- An MVC framework for PHP (To be decided)
- Bootstrap4 for responsive, consistent and fast UI design
- GULP as a tool for simplifying various development processes