

Architecture

The architecture models the basic structure of all processes that will be occurring in the background of the application. After meeting with the client, we have outlined the basic processes that are needed to take place in order to make the app sustainable. The app will be available for everyone to download. The average user (i.e. Student) should be able to create an account and use that account to sign in with. This means that the account information will need to be stored in a database. The API will allow communication between the user and the server/database. The user will also be able to look for events, sign up for events and mark attendance when going to events/classes. The mobile app will continuously communicate with the API when the user carries out any of these actions. There will also be admin accounts which have the ability to manage events i.e. create, cancel, etc. and send notifications to users about upcoming events. The processes occurring here are dynamic i.e. sending notifications to users. The architecture will include a file storage system. This is because, as mentioned in the client meetings, the user should be able to view timetables of fitness classes. These timetables are currently stored as pdf files. Therefore we would require some sort of file system in the back end. We have also discussed the possibility of a “social media/learning platform” that will mean users can store pictures and videos. This again will require the use of the file storage system.

The main API currently being used by the University’s sport services is known as “Legend”. Essentially, Legend allows users to view their membership status, make bookings, cancel bookings, etc. The API will allow admins to push notifications to all users about upcoming events. The API will be used to communicate with the file storage system and the database holding information about users.

