# **SEG2105 Final Project Report**

# Design and Implementation of Fitness Centre booking app

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SEG2105 Section A

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University of Ottawa

Faculty of Engineering

#### Introduction

This document finalizes the work completion throughout the implmentation of Fitness Centre Booking App. Two previous deliverables have been updated based on the marker feedback and team members and the completion of two deliverable contributors and the progress present as below.

Yolo Fitness app is a platform for fitness trainers and trainees to book appointments/ courses for fitness training. It has multiple functions including instructor changing course conditions, viewing all enrolled trainees' information and trainees' enrollment to desired courses. It also allows instructors to change time, level of difficulty of the course and the capacity to a large course.

#### **Progression within 3 deliverables**

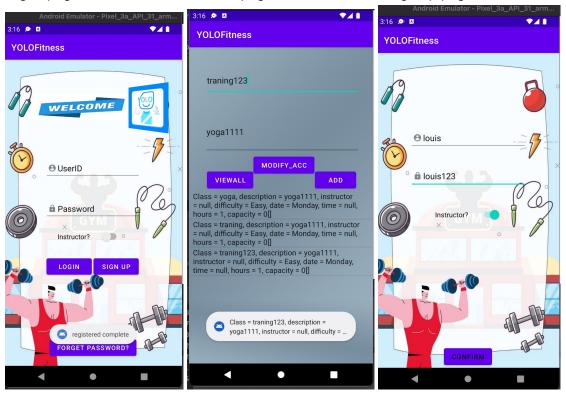
Contribution	deliverable
<ul> <li>App structure setup/UML update,</li> <li>-weifan Cai</li> <li>UI design-Qin, Haochen</li> <li>Signup page-Lyu, Jiazhi</li> <li>Login page-Wang, Weilin</li> <li>Display message-Yu, Wenbo</li> </ul>	Deliverable 1
<ul> <li>Updated UML,Instructor modify,cancel class-weifan Cai</li> <li>all validation field in the app-Qin Haochen</li> <li>instructor modify,instructor view class UI design -Lyu jiazhi</li> <li>instructor search bar-Wang weilin</li> <li>instructor view all classes -Yu wenbo</li> </ul>	Deliverable 2
<ul> <li>report, member enroll/unenroll classes-weifan Cai</li> <li>report, testing cases-Wang, wenlin</li> <li>member view all enrolled class,enroll time conflict,member will not be able to enroll course when reached full capacity -Lyu, Jiazhi</li> <li>UML update-Qin, Haochen</li> <li>Member time conflict &amp; display message-Yu, Wenbo</li> </ul>	Deliverable 3

### **APP Screenshot / code page**

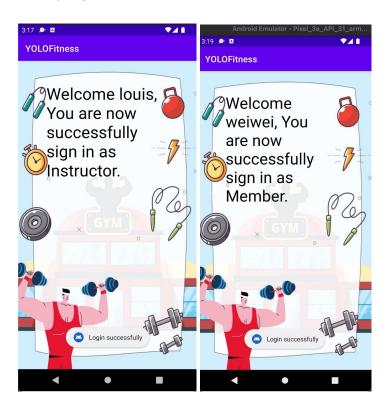
Log in page:



Sign up page:

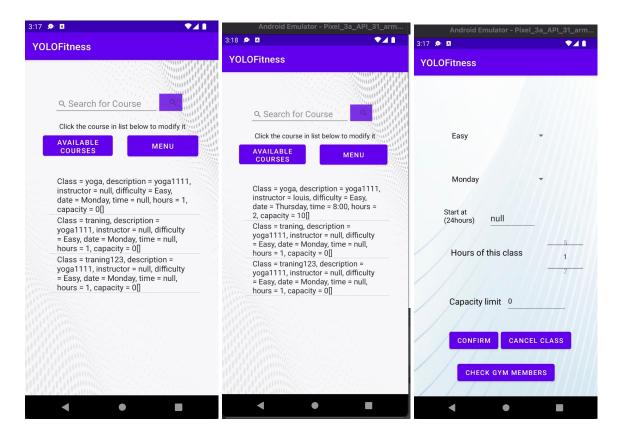


## Displaypage:



Instructor page:

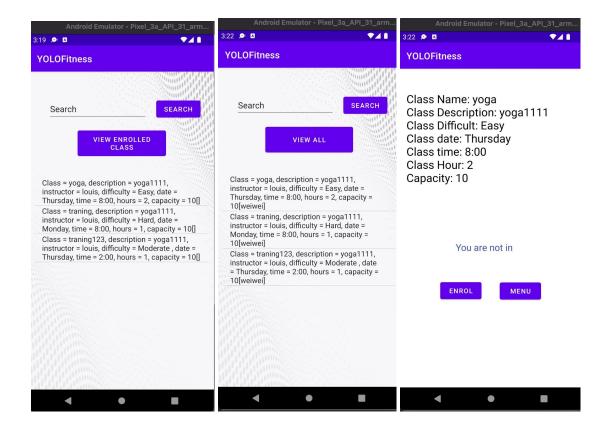
Instructor Modify class page:



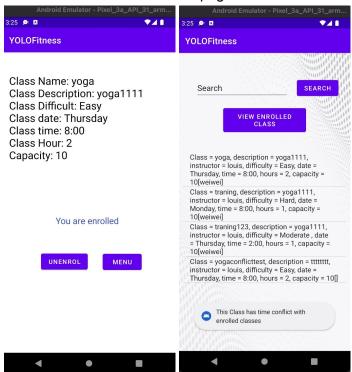
Instructor see student' name list:



Member enroll/view all class page:



## Member Unenroll/time conflict page:



#### **Challenge overcome /Lesson learned**

Database challenge- During the whole project design process, our team are experiencing issues from the database interface with all the activities. We are having difficulty when getting data from database, the error was that the data did not pass through to the app, whenever we tried to log in with an existing account. The app crashed. This challenge was overcomed in deliverable 2, we realized it was the set up problem with the database.

Data type challenge- During deliverable 3 design phase, we had an issue with setting time conflict display message, we struggled for 3 days about this and finally realized that this was we setted different data types about the compared object. In this case, we had to use other methods to compare the position in arraylist and solved this bug.

Challenge — The biggest challenge we encountered throughout the project was the junit test, we forgot to test it in deliverable 2, and our team expected to get the test done before the deadline. However, we spent a couple days on the junit test, setting up the code to test our project and all of the functionality. It did not work out as we expected before the deadline. We tried to use the android UI test together with the corresponding test code. We are still getting errors. We will continue work on the test after the deadline to get the test running. This is the biggest failure/ challenge encountered.

Lesson learned- learning of the use of android studio, learned the use of database, familiarized with the layout design and the app design logic and framework. From this project, we learned how to design an android application, and understanding sql database. After this project, we will be able to develop some basic android applications.