SEG2105 – Introduction to Software Engineering

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TA: Dharmin Sodwadia

Android Project: Mealer App

Group #21

Team members:

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I. Introduction

For this project, we were tasked with the development of a meal-sharing Android application. Through this, cooks can sell meals to clients directly from their home. In the application, there is also an administrator who oversees the activities of cooks and receives complaints filed against them, allowing the administrator to either temporarily or permanently suspend the cook based on the severity of the complaint. The development process for the project consisted of four phases:

Deliverable 1

In the first deliverable, we were introduced to GitHub. For this deliverable, team members joined the SEG GitHub classroom and created a repository which would contain all our files for the application. Through this deliverable, we became familiar with committing our changes, pushing said changes, and pulling our teammates' changes.

Deliverable 2

In the second deliverable, we were tasked with implementing the administrator features of the application. This was the deliverable where we were introduced to using a database. Using Firebase as our database, we stored information such as the user's credentials when they register, and a list of complaints that can be viewed by the administrator. We implemented the functionality of actioning the complaint (suspension or dismissal), in addition to providing a temporary or permanent suspension.

Deliverable 3

In the third deliverable, we implemented mostly cook features. This included features such as adding and removing a meal to either the menu or the offered menu lists. We used Firebase to accomplish the implementation of these features. Alongside this, we made it so that a suspended cook is not able to perform any action and is instead greeted with a suspension message.

Deliverable 4

In the fourth deliverable, we implemented the client features of the application. This meant allowing clients to search for meals, viewing the cook's information and ratings, submitting a purchase request, rating the cook (after ordering a meal from said cook), viewing the status of their order, and viewing their own profile and rating themselves.

II. UML Class Diagram

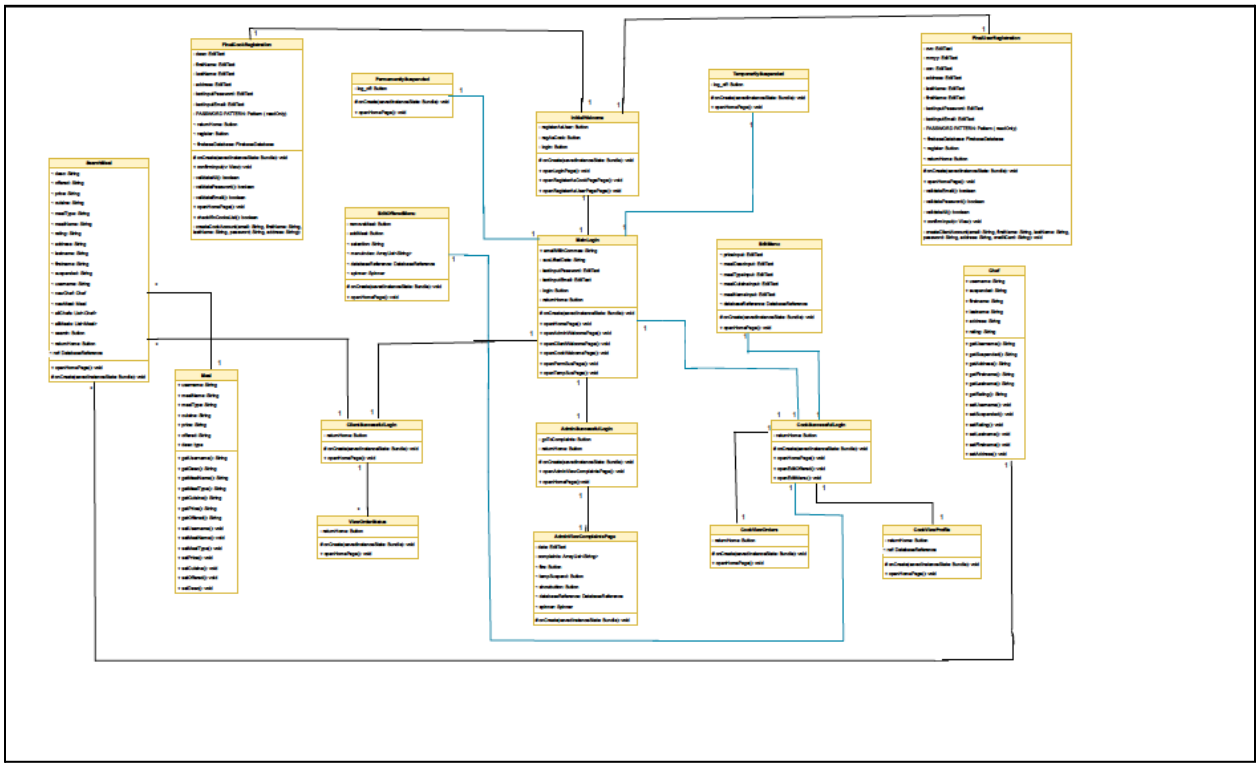

Figure 1: UML class diagram

(please see pdf attached)

III. Contribution Table

Team Member	**Deliverable 1**	**Deliverable 2**	**Deliverable 3**	**Deliverable 4**
Abdullah	• Field validation • UML Diagram • Added buttons and activities • Major Debugging • Coded buttons to connect application pages • Temporary XML files for testing	• Temporary XML files for testing • Major Debugging • Added actioning buttons • Coded field validation • Coded buttons to connect application pages • Unit test cases	• Temporary XML files for testing • Major Debugging • Added actioning buttons • Coded field validation • Linked all XML pages to go back and forth with buttons • Coded buttons functionality • Unit test cases	• Temporary XML files for classes • In-depth program testing and debugging • Coded Rating submission • Unit Test Cases • Coded heavy field validation • Linked all pages • Coded buttons functionality
Fatmah	• Cook Registration Pages XML and Forms • Coded hiding password when logging in • UML diagram	• Admin Dismiss and Suspend page XML • Assigned attributes to registry forms • UML diagram	• UML Diagram • Modified search meal xml page compatibility to fit on-screen	• Final report formatting and construction • Final UML Diagram
Saba	• Set up Firebase Database • Linked user registration to firebase and set attributes • Coded pre-registered admins	• Coded viewing list of complaints • Coded dismiss and suspend complaints	• Coded Adding Meals to Menu • Coded adding and removing meals from offered list	• Coded Searching for Meals • Coded showing only offered menu items • Coded viewing cook meal and information • Coded complaint submission • Coded Field Validation
Sophia	• Login: verified if user exists and if password is correct • Registration: prevented creation of account with a pre-existing email	• Verify cook suspension status and display message if they are suspended • Notify temporarily suspended cook when suspension is lifted • Unsuspend cook if suspension-lift date was reached	• Added log off feature to suspension message page • Allow cook to add meal to menu • Allow cook to remove unoffered meal from menu	• Allow cook to view pending orders and approve/reject them • Allow client to view placed orders and order status
Solin	• Github repositories	• UML Diagram • Admin Sign in XML	• Re-designed all the application XML files	• Created new XMLs for the new classes

	• Android Studio setup on team members laptops • Assigning Tasks • APK Submission • UML Diagram • User Registration XML	• View list of complaints XML • APK Submission • Assigning Tasks	• Assigning Tasks • UML Diagram • APK Submission	• Added appropriate buttons and text boxes • In-depth program testing and debugging • APK Submission • Assigning Tasks

IV. App Screenshots

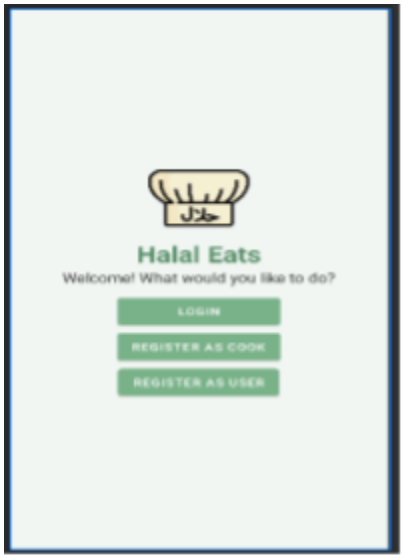

Figure 2 : Initial welcome page

Figure 3: Main login page

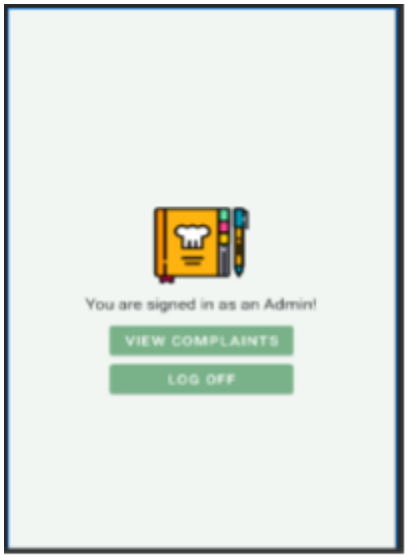

Figure 4: Admin successful login page

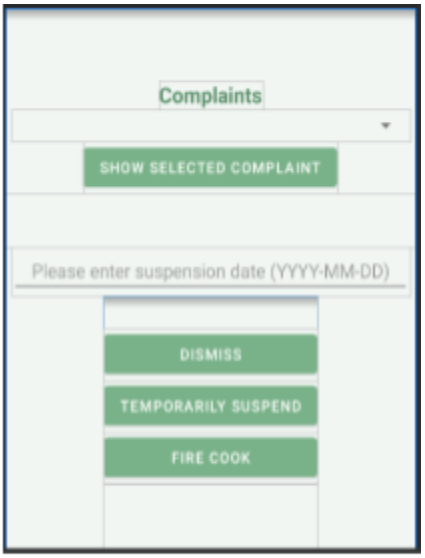

Figure 5 : Admin view complaints page

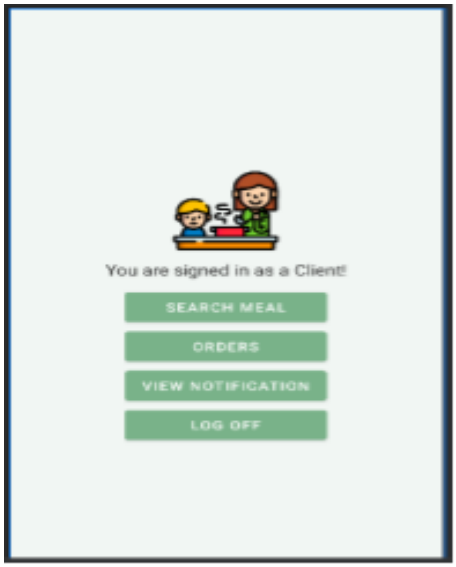

Figure 6 : Client successful login page

Figure 7 : Cook successful login page

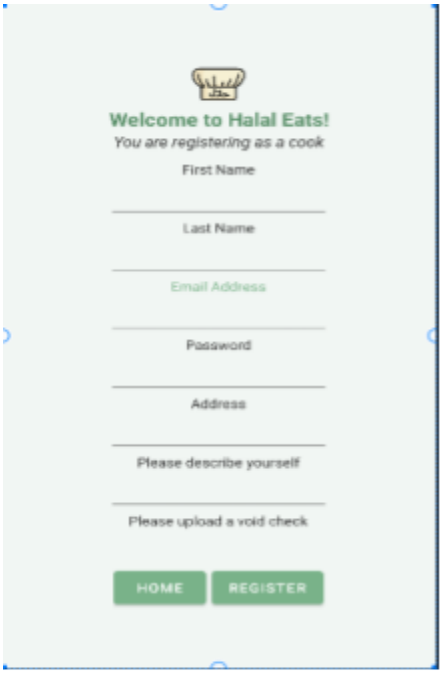

Figure 8: Final cook registration page

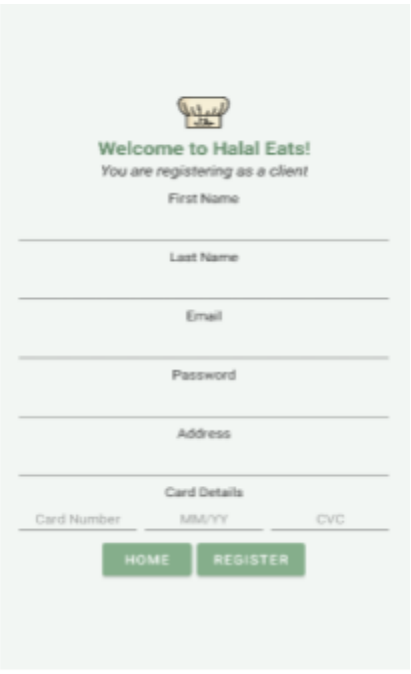

Figure 9: Final client registration page

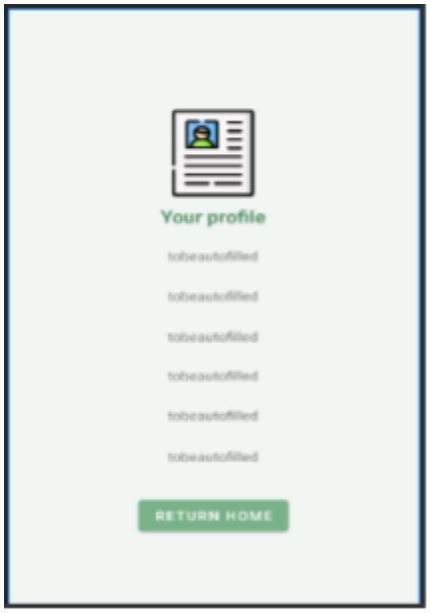

Figure 10: cook view profile page

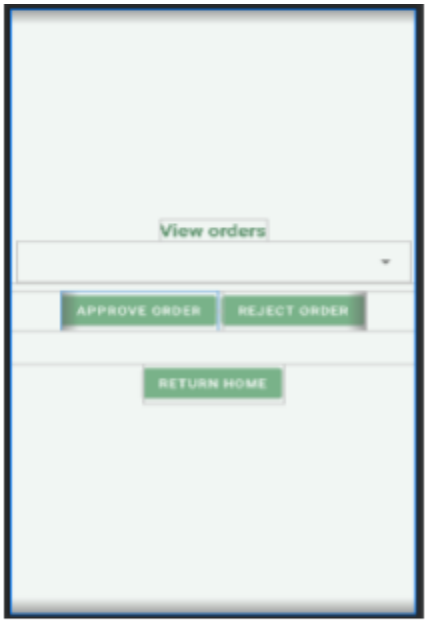

Figure 11: cook view order page

Figure 12: Edit menu

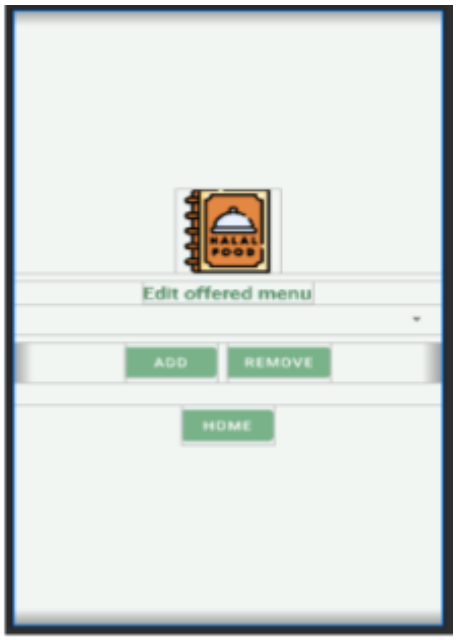

Figure 13: Edit offered menu

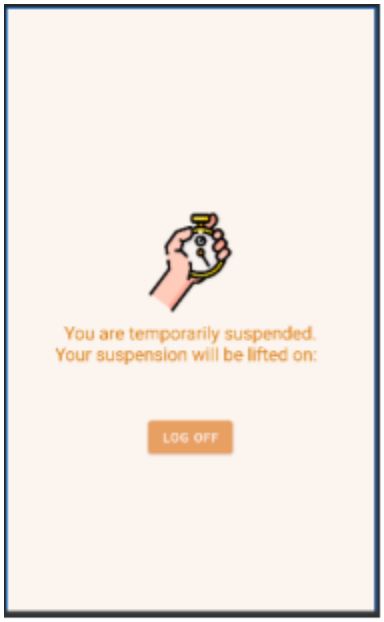

Figure 14: Temporary suspended page

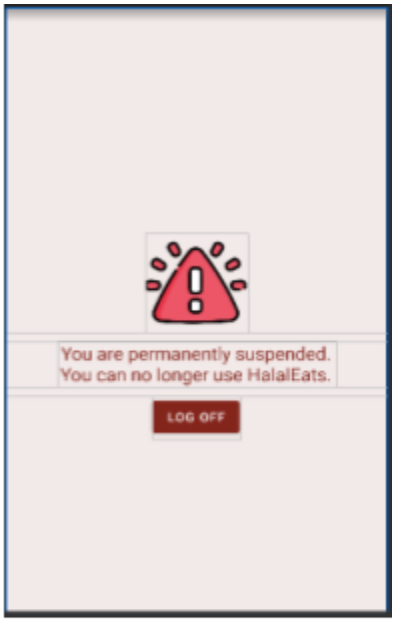

Figure 15: Permanently suspended page

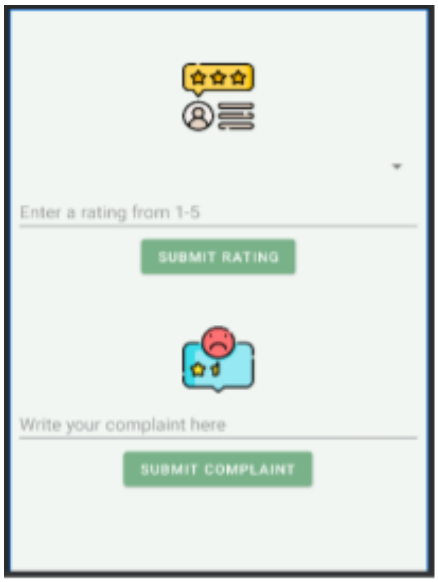

Figure 16: View order status page

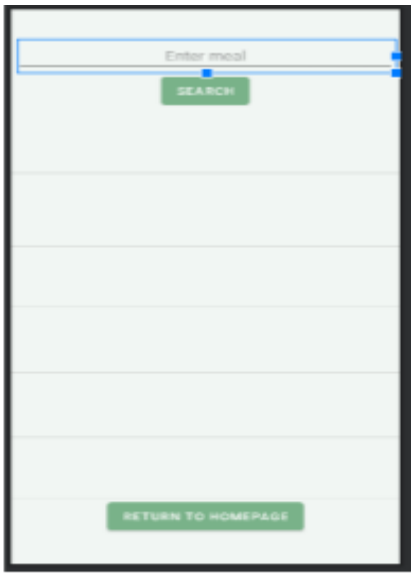

Figure 17: search meal page

V. Lessons Learned

In this project, we have learnt a variety of lessons, one being the importance of following the specifications of each deliverable of the project ahead of moving on to the next one. Some of the lessons we learned while working on this project include the following:

1. Working with GitHub

Because most of us have never used GitHub before. In our deliverable 1, we learned how to use GitHub. At the beginning of the semester, some of us had trouble working with GitHub. Meantime, after some time with the help of each other, we successfully overcame the problem. Ultimately, everyone is capable of using GitHub relatively easily.

2. Designing and developing a UML diagram

We have learned how to improve the UML diagram to better present the state of our code updates. We have utilized different software to help us implement the structure of the UML diagram. We have learned about classes, methods, instance variables, attributes, multiplicities, and associations. We have also learned how to update UML diagrams in each deliverable based on the code we implement.

3. Using a database for an application

Learning how to use firebase alongside android studio is one of the important things we have learned in this project. We have learned how to read and write from firebase. This is considered one of the most valuable skills we have learned in this project.

4. Collaboration, teamwork, and time management

Learning how to manage the workload successfully between us was the key for completing the project. Each member of the group has worked on different tasks, so we can manage to finish each deliverable on time. First of all, we start by discussing the demands of each deliverable and assigning tasks for each member. This allowed us to work definitely without conflict.