CSIS 3175-002
Introduction to Mobile Development
Class Project (Food Wastage Reduction Android App)
Total Weightage: 25%

Project Overview:

This course project aims to develop an android app to reduce food wastage by providing services of sharing food at low prices. The food wastage reduction App is designed to facilitate both customers and restaurant managers. The restaurant manager can upload extra food details by using this app. The customers can find the restaurant nearby and search for food available at low prices at the particular restaurant. Using this app, customers can interact with a restaurant and request food.

There are two modules one for the restaurant manager and the other for the customer/user.

The customers can register themselves, log in, view/edit their profiles, search for a restaurant nearby, choose a restaurant, view and choose available food items, choose delivery or pick-up service, view order details, receive a reminder for food pick-up or delivery, view order details and view order history/reports.

Restaurant managers can register, log in, add/remove extra food details, view orders, send reminders (for food pick up or delivery), and view and edit the order details.

In the Food Sharing app, each user will be required to register on the app. At registration time, the user will be asked for the information including name, address, cell number and email. The user will be provided with a user name/email ID, which will be used to maintain the record of each unique user. The app should start with a welcome screen. The app should ask a user to log in with a username and password. If a user is new, he/she should first register. Once the user is logged in, the app should display the “Search for a Restaurant”, “Order Food”, “View an Order Details and Status”, “View Order History”, “View/Edit User Profile” and “Log out” options.

If the user selects “Search for a Restaurant”, new activity should open asking the city to search for. Entering the city should display a list of available restaurants. Choosing one of the restaurants will open a new activity and will display a list of food items available from that particular restaurant along with discounted prices. Choosing one or more food items and clicking place the order button should take you to another activity and will ask for a pick-up and delivery option. After choosing all the required options, the app should confirm the order and the price.

If the user selects “Order Food”, it should take the user to the search for a Restaurant page/activity and proceed with the required steps.

If the user selects “View an Order Details and Status”, a list of orders should be displayed. Clicking one particular order should show order details and status.

If the user selects “View Order History”, order history if any should be displayed.

Selecting “View/edit user profile” should allow the user to view and edit the profile.

In the Food Wastage Reduction app, the app should ask a restaurant manager to log in with a username and password. Once the manager is logged in, the app should display “Add/Remove Food Items”, “View/Edit Food Orders”, “Send a Reminder”, “Generate Reports” and “Log out” options.

Selecting “Add/Remove Food Items” should allow a restaurant manager to add or remove food items. Selecting “View/Edit Food Orders” should allow a manager to view/edit an order. Selecting “Send a Reminder” should send a reminder (for food pick up or delivery) to the customer and selecting “Generate Reports” should display order details in a form of a report.

The app will be developed gradually during the term with more features added in. This project has two parts: part 1 (proposal) is to review existing apps, propose your app and write a report (5 – 15 pages, pdf copy). Part II is to submit a complete working app along with a report. The project is to be done on a group basis, with 3 or 4 students on each team. The team details are on Blackboard. The project must cover major aspects (covered in class) of Android app development. It is also encouraged you to explore more features that are not even covered in the class.

Actors: Customers/users and Restaurant Manager

Developing the project:

The project has two due dates:

1. **Project Proposal (5%): ---** one submission per group
   Review the existing apps, plan your app and submit a documentation report of 5 – 15 pages (pdf copy) due: Feb 4th, 2023 (11:59 pm PST). No late submission
   A. Review the existing apps
   B. Give an outline of your proposed app, and build the layout of the screens.
   C. Write a report including:

      - Give a title and a brief description of your project.
      - Features of your app including the features discussed above and additional features if any.
      - What are the general tasks, and project team roles, and who is doing which tasks?
      - Use case and sequence diagrams
      - Give an outline of the layout of your screen by specifying the main items/actions to be included on each screen (screen layouts could be android generated or any graphic s/w generated). Note that you are allowed to change the structure and the contents later if needed.
      - ER diagram to show normalized database model including all tables and their relationship

2. **Project final submission and Presentation (20%)**

   Due date: April 5th, 2023 at 9 am PST. No late submission.

   Project Presentations would be on April 5th and April 12th.

   Submit the final project along with a well-presented technical report discussing your project.

- Since you are working in a team, each team MUST indicate clearly the work that each team member has done and which part of the app each member is responsible for.
- You are required to write a summary section at the end of the project report to highlight
  - Number of screens in your app
  - the main features of your app
  - the names of Java classes and activities of your app
  - any features/tools/third party S/W that are not covered in class but have applied in the project along with the reference
  - Database details including the database name, table names and ER diagram
  - Use case, sequence and class diagrams

Submission:
Only one team member (the team leader) will submit the project on BB;

- Create a folder named TeamNumCSIS3175-section (e.g. T1-CSIS3175-002) and save your android studio project as well as a soft copy of the project report in that folder and upload it on BB.

Project name and activities name should be descriptive but names should not be too long.

NOTE:

- **The final project should be done using the SQLite database only.**
- **This is YOUR project and you are NOT ALLOWED to copy from other sources.**

Each project team will make an oral presentation about their project during class time. This presentation will explain and summarize the project. Questions will be asked by the other members of the class. The main idea is to present the highlights of the work done. A good presentation will summarize the main points of the work and bring up discussion issues. This presentation will be graded. There will be a number of presentations per class so students should plan on a 15-20 minutes presentation. This time includes questions and discussions.