CSIS 3175-003
Introduction to Mobile Development
Class Project (Car Service Android App)
Total Weightage: 25%

Project Overview:

This course includes a required course project. This project aims to develop an android app for vehicle owners by providing ease of services for the vehicle. The car Service App is designed to facilitate vehicle owners to interact with service providers to schedule a day and time for the servicing of their vehicles. The user can find the service center nearby.

There will be two modules one for the service provider and the other for the user.

The users can register themselves, login, view/edit their profiles, search for service providers nearby, choose a service provider, request a service (e.g. oil change) and book an appointment, choose drop off or pick up service, view appointment details, receive a reminder and view service details.

Service providers can register, log in, create a user, update user information, delete a user if needed, manage appointments, send reminders, add, view and edit the service details, and also generate reports.

In the Car Service 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 “Search for a Service Provider”, “Book an appointment”, “View an appointment”, “View service history”, “View/edit user profile” and “Log out” options.

If the user selects “Search for a Service Provider”, new activity should open asking the city to search for. Entering the city should display a list of available service providers. Choosing one of the service providers will open a new activity and will display a list of services provided by that provider. Choosing one of more services and clicking book an appointment button should take you to another activity and will ask for a drop-off or pick-up option. After choosing all the required options, the app should confirm the appointment.

If the user selects “Book an appointment”, it should take the user to the search for a service provider page/activity and proceed with the required steps.

If the user selects “View an appointment”, an upcoming appointment, if any should be displayed.

If the user selects “View service history”, service history if any should be displayed.

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

The Car Service app should ask a service provider to log in with a username and password. Once the service provider is logged in, the app should display "Create/view/edit user information", "Delete a user", "View/edit an appointment", "Send a reminder", "Add/View/Edit the service details/history", "Generate service reports" and "Log out" options.

Selecting "View/edit an appointment" should allow a service provider to view/edit an upcoming appointment. Selecting "Send a reminder" should send a reminder to the customer.

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. You should also explore more features that are not even covered in the class.

Actors: Users/customers and Service Providers.

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 6th, 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: March 31st, 2023 at 9 am PST. No late submission.

Project Presentations would be on March 31st and April 14th.

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-CSIS3175-003) 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.