## Project 1: The Lifestyle App

## **Teamwork Instructions:**

The project instructions are as follows:

- Your team will have a team lead, a design lead, and a test lead. You must decide these among
  yourselves. All three must share coding responsibilities equally, but must take the lead for
  different sections of the app. In the case of a deadlock, the team lead exists to break that
  deadlock. Part of the reason for this structure is that I want you to be able to convince your
  team lead effectively (if you need to).
  - a. The team lead will direct the software development of the app and be the final arbiter on any decision making for writing code, and for the overall direction of the app.
     However, they must not overrule the design lead and test lead without a good reason, and any overruling must be documented.
  - b. The design lead will make design decisions: font sizes, icons, colors, UI layouts. They will be communicated to the team lead, who will then decide the software architecture required to implement this functionality.
  - c. The test lead takes the lead in testing both at the class level and module level, and can direct the others to run specific tests that they don't have time to do themselves.
- I want you each to take brief notes of discussions when you meet and/or make changes. It is
  VITAL that you log any discoveries/decisions that lead to significant UI changes. You must also
  log any major bug discoveries and document this.
- 3. The team lead will draw up the class diagram for the app, with input from the others. You can do this by hand or using any tool you want.
- 4. The design lead will draw **neat** wireframe sketches of the layouts. You can do this by hand or with any tool you want. You must indicate margins, sizes of UI elements (even if just match\_parent or wrap\_content), colors, all on the wireframe sketches of the layouts. You are welcome to recruit other team members them for portions of the work.
- 5. The test lead will use the team lead's class diagram to develop tests, both for classes and modules. The full team will then implement these unit tests as directed by the tester. The tests must be sketched/drawn as an overlay on the class diagram in a separate document.

## **Checkpoint Instructions:**

For each checkpoint, schedule a time with the TA as a group, show the TA that you've completed 2 out of 6 of the required features.

## **Submission and Presentation Instructions:**

- 1. The team lead will submit the following in a zip file on Canvas: the APK, the wireframe sketch, the class diagram, and the test sketch diagram. You will also submit your project presentation slides in the same zip file. Your slides must be in PDF format.
- 2. The project presentation will involve 3 parts.
  - a. First, the design lead must introduce the app, talk about its overall design structure, the principles followed etc.
  - b. Next, the team lead must go over the class diagram, and explain it to the audience, focusing on:
    - i. data encapsulation,
    - ii. commenting on extensibility, and
    - iii. justifying class design choices to whatever extent possible.
  - c. Finally, the tester must discuss the kinds of testing that were required, any major bugs found, and why certain kinds of testing were chosen over others.