Project Phase 3 - High fidelity prototype (5 points)

This project task is the third of four that together take you through one iteration of the complete design process.

As a reminder, the overall goal is to design a smart phone app helping university students to plan their daily commute to the university from home and vice-versa. The app should support:

- Allowing students to plan their commute according to their calendars and timetables, taking into account transport mode (bus, train, ferry) and personal events.
- Helping students to find the ideal route, transport mode and stops depending on the time of day, start and end locations.
- Allowing students to provide real-time feedback and comments on buses, transport modes, routes and stops, so that other students can benefit from the information.

This submission will be graded out of 20, this will be scaled to 5% of your final unit mark.

Please keep all of your answers short and on point, and write them in concise bullet points. Please read the instructions for submission at the end of this exercise.

Tasks:

In this project task your goal is to create a high fidelity (hi-fi) prototype using the prototyping tool *Balsamiq*. If you are not familiar with Balsamiq, please have a look at the website: `https://balsamiq.com/wireframes/desktop/`. It is a well-documented product, with detailed guidance available at: `https://balsamiq.com/wireframes/desktop/docs/`

If you have not already installed Balsamiq, it runs on Windows, Mac, and Linux via Wine. Licence details are available for you to use on the UoS Canvas website: `https://canvas.sydney.edu.au/courses/18142/pages/balsamiq-software-licence`.

High fidelity in this unit refers to the level of interaction reflected in your prototypes, not to the level of visual detail. Your group's submission will be graded based on the implementation of features and on the level of success in providing a completely testable end-to-end prototype.

1. Cognitive walkthrough (0 points)
   (a) Read the following article on *cognitive walkthroughs* and watch the video. `http://team17-cs3240.blogspot.com/2012/03/cognitive-walkthrough-and-pluralistic.html`
   (b) While completing the following two tasks, you should show consideration to how the methodology of *cognitive walkthrough* will apply to your prototype testing. This will assist during Phase 4.
2. Horizontal prototype (7 points)
   (a) Based on your final paper prototype from project 2, create a horizontal hi-fi prototype. You should decide on one target mobile platform (iOS or Android) and design your app for that platform. This prototype should include:
      - The entry point to your application
      - A main menu to access the app's main functions
      - One level of depth for each menu point (i.e. one screen per menu item that is displayed when the corresponding item is clicked)

(b) Document and briefly explain design decisions beyond what was already done in the paper prototype (e.g. device or platform specific decisions, colours, etc.)

(c) Submit your exported Balsamiq prototype file in **PDF format**, not in the `.bmpr` format.

3. Vertical prototype (13 points)

(a) Extend your horizontal prototype from task 1 with a vertical branch covering the commute planning, visualising routes and giving real time feedback/sharing information.

(b) Identify the eight most important commute planning functions that need to be available prior to commute and while in the commute (i.e. waiting in the bus stop). These should include:

- Configuring beginning and destination.
- Configuring timing information.
- Managing frequent routes.
- Entering and visualising of shared information.
- Utilising calendar information and personal preferences.
- Visualising real time information.

(c) Using your concept from *Project Phase 1* and sketches from *Project Phase 2*, identify all screens you need to implement for a user to click through the scenarios.

(d) Implement these screens using Balsamiq and incorporate them into your prototype from task 1. As Balsamiq cannot capture data from your test users, you should build your scenarios around predefined 'dummy' data, that corresponds with the persona(s) prepared by your group. The important aspect is that a user can click through each scenario, with realistic user information included where necessary.

(e) Document and briefly explain the three most-important design decisions regarding the vertical prototype.

(f) Submit your exported Balsamiq prototype file in **PDF format**, not in the `.bmpr` format.

Instructions for submission:

- Only one student per group needs to upload the submission to Canvas
- You can upload your submission to Canvas multiple times ahead of the due date/time. The final submission will be marked.
- The report and prototypes will be submitted to Canvas no later than **Friday, October 25 11:59pm**.
- All submissions should be in PDF format. You will need to submit 3 files:
  - Your written design decisions for both the horizontal and vertical prototypes
  - The horizontal prototype PDF exported from Balsamiq
  - The vertical prototype PDF exported from Balsamiq
- If one of your group members is not contributing to the project work, you must inform your tutor well in advance, not after the assessment deadline.
- This is a creative exercise. Innovative ideas and solutions are rewarded in grading.
- Please include your report responses into a single document, with any research findings attached as an appendix.

- You should include the following details on the report cover page:
  - The names and unikeys of your group members
  - Your group name or number
  - Which tutorial you attend (i.e. R10A)