



FACULTY OF SCIENCE AND ENGINEERING
SEMESTER 2, 2014

INN348 - Mobile App Development

Assignment 1: App Design and Prototype

Due Date: Friday (Week 7)

Submission Method: In-class (Digital Files & Presentation)

Weight: 40% Overall Grade

DECLARATION

You must sign below. By signing this form you agree to the following:

- I/We declare that all of the work submitted for this assignment is our own original work except for material that is explicitly referenced and for which we have permission, or which is freely available (and also referenced).
- I/We agree that QUT may archive this assignment for an indefinite period of time, and use it in the future for educational purposes including, but not limited to: as an example of previous work; as the basis for assignments, lectures or tutorials; for comparison when scanning for plagiarism, etc.
- I/We agree to indemnify QUT and hold it blameless if copyright infringements are found in this work and the copyright owner takes action against QUT that is not covered by the normal terms of Educational Use.

The assignment should be attempted in a team of 2-3 students, and it is highly recommended that each team has the device you are developing for. Individual submission or a group of more than 3 is strongly discouraged. Consult with your tutor and unit coordinator if you have any issues.

| Team Member Details | | |
|---------------------|--------------|-----------|
| Student Number | Student Name | Signature |
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Part A: Review of Current Mobile Apps (30 marks)

Background: Designing and developing a mobile application that is worthwhile of user's time and will attract positive reviews is challenging. One of the best methods for design inspiration is by exploring, analysing, and evaluating existing applications.

Task:

1. Review 10 related mobile applications (cross-platform recommended). For each application, provide the name of the app, its category (e.g. utility), and attach some photos (while you use it), screenshots, or a thorough description on its functionalities. Then, provide your summary (bullet points acceptable) of the positive and negative aspects of the app, from design (interactivity), features, or functionality perspectives. It is required that you include references (APA style citations) on materials you referenced.

Note: If you found more than one very similar app (e.g. app with same features and similar interaction design), you should count them as one application.

High achievement indications: For each app, include at least 2-3 detailed **critical** explanations of its merits and demerits. Report presents a comprehensive, and **critical** discussion of reviewed apps. Quality of work is not measured by the amount of words or pages, however, as a guideline, 1.5 pages for each app (standard 12 point font, single line spacing) is sufficient.

Recommended resources to use:

Mobile interface and interaction design principles and materials (books, forums, web pages, articles etc.)

2. Discuss your summary of reviews (2-3 paragraphs to one page), in terms of what you would personally perceive as a well-designed and executed application. Draw from your own experience on why you would want to regularly use certain applications, even if it was converted from free to paid version.

You can discuss it from the perspective of design (i.e. aesthetic), usefulness, and usability (e.g. easy to use)

3. Describe your application development goals and success criteria
Based on this summary, please list in bullet points what you envisage as a good application, and what metrics can you gather from your app to how you gauge your success and achievements.

Part B: Functional Prototype (60 marks)

Background: During the semester, you will need to develop a real application that is deemed worthy to be put on the App Store, and for the scope of this unit, a fully functional beta product is expected.

Scope: A mobile app is usually not graphically complex (3D graphics and fully customised interface is not necessary), with very focused (small number) but well-executed functionalities. On average most students produce a simple but effective interaction flow of 6-10 screens.

Tasks:

1. **Describe your app in 'executive summary' style:** INN assignment requires a component that showcase innovations. For example shirtsize app innovates the use of image capture to measure height and size of collars, etc.
2. **Describe the innovative feature:** its name, features and functionalities, and who the intended users are. This should be a paragraph or two.
3. **Discuss the use case scenario** and how the screens are used to accomplish tasks.
4. Describe your **information architecture:** how the information flows from user inputs, storage and processing.
5. **Static prototype of the entire app's interaction flow** (common submission formats include OmniGraffle, Adobe Photoshop, Adobe Illustrator, Xcode Storyboard, etc.).

For each screen, clearly show the interface and how the user will interact (gestures, keyboard, camera etc.) on that screen.

You should demonstrate the use of various UI components such as (**iOS:** "Tab Bar Controller", "Navigation Controller", "Table Views" etc.; **Android:** "Toast", "Action Bar" etc., **Windows:** "Radial Menu", "Hud Tile" etc.).

It is expected for you to show us that the interface design and interaction flow to be completely fleshed out and thought through in the static prototype.

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6. Produces **Interactive Prototypes** for 2 key features in your app. For example if you are creating a note taking app, one prototype can show how the app handles creation and deletion of notes, second prototype can show the interaction of applying text style (bold, italics) to text in notes.

Interactive prototypes need to be running on the simulator and/or on the actual device you are developing for.

7. **Discuss how your design would meet your development goals and success criteria.**

Part C: Market Your App (10 marks)

Background: The best way to ensure your idea is 'ready for production' is to present it to your classmates. In week 7, you will be given a 7 minutes 'elevator pitch' opportunity to advertise your product: what it does, how it would look like, and why we should invest on it.

Aim: At the end of each presentation, the class will have up to 3 minutes opportunity to ask questions and give suggestions. This will be a very good opportunity to obtain early feedback and cater some good suggestions to improve your design.

Task:

1. Present in week-7 tutorial (smart casual attire recommended): You may use 3-5 slides. Use them effectively. You will be marked simply based on have you effectively communicated your product? If it is foreseen that you will be away in week 7, you need to consult with us how your product will be represented.

2. Create a well-designed and attractive poster that embodies your app design (teaser for key functionalities) and gets people interested in your app.

3. Participate actively by asking constructive and critical questions during presentations. **Provide satisfying answers** during your own presentation session.

Assignment Submission

Assignment should include all parts listed above, color-printed on A4 paper and stapled/bound with cover sheet (first page of this document) on the **first page** of your assignment. Penalty applies if any of the requirements have not been met, as well as late submission.