

ECE 1778 – Creative Applications for Mobile Devices
September 2016
Specialist Assignment S2

**Practicing Creativity, App Design Principles, Moqups, Critical Feedback
and Thinking**

The goal of this assignment is to practice idea creation, and to learn how to use an app ‘wireframe’ design package that is often used in industry.

1 Basics of Moqups

Moqups is an online software package that allows you to design the look and parts of the activity of a smartphone app. It gives you the ability to ‘draw’ the different screens of your planned app, and to say what buttons link the launching of one screen from another.

Go to this website: <https://moqups.com> Click on ‘signup & pricing’ on the upper right, and select the free plan that is offered on the bottom of that popup (the ‘free’ plan is not in the main table of options, it is in the words at the bottom).

Spend an hour learning how to use the tool, either by doing what the first page suggests, or reading the help FAQ. Be sure to learn the following:

- To create a new page
- To duplicate a page
- To change the size of the page, and its length to width ratio.
- To place a text field on a page
- To resize text
- To place a button on a page
- To draw a line
- To change the colour of a line
- How to resize objects
- **How to make a button (or anything else) link to another page**
- How to preview your design to see how it works (and then go back to edit mode)
- How to share your design with someone else
- How to make a Pie Chart and Bar Chart, and to set the size of the regions/bars
- How to create a web link that shares your project with someone else.

2 Reading About Design

The following web page gives a description of the *overall design* of applications, in the Android context: <http://developer.android.com/design/patterns/app-structure.html> Read it to learn about some notions of design.

Next, to learn from the experts at Apple, go to here: <https://developer.apple.com/design/tips/> and here:

3 Assignment

In this assignment, the goal is to gain skills in the design *and* conception of an application. The application you conceive will be based on the following capability: assume that there already exists a software capability that can look at a video, find the faces in it, identify a specific face (by the name of the person) and characterize the emotion that each person's face is currently expressing. The set of emotions are the following:

1. Neutral
2. Happy
3. Sad
4. Angry
5. Fear
6. Humility
7. Surprise
8. Joy

If you wish, you can add in more emotions, as this list is not complete.

So, a smartphone or tablet with a camera (either front or back-facing), can capture live video and feed it to this software, which every *second* will return the set of names of the people and their current emotion.

You are to conceive of an application that makes use of this capability, and to mock it up.

Next, you should present your application to three people, and ask them for their critical feedback on your application.

So, you are really being asked to do these **four** things:

1. Be creative in making use of this capability to design an app that does something interesting. **It must be beyond the obvious app of simply displaying the result of the emotion measurement**, making use of the capability perhaps (but not required for this exercise) within your field of expertise.
2. Design the app's layout and structure, from a user interface perspective, using what you learned from Part 1 and Part 2. When you describe the design, you will need to make reference to the design concepts you read about in Part 2.
3. Find three people, present your app and mockup to them individually, and ask them for critical feedback on it. (For example – what did they like about it, not like, suggestions for improvement, would they buy it ...)

4. Do your own analysis of the App: Describe its strengths and weaknesses.

Along with a **moqups** mockup, you should hand in a maximum 1500 word document that describes:

1. What your application does (*roughly 500 words*), and why
2. Why you ‘designed’ it the way you did (*roughly 400 words*). You should make reference to the principles of good design you read about in Part 2. Include a link to the mockup that you have created.
3. The results of the interviews with the three people. (*roughly 300 words*)
4. Your own critical analysis of your idea. (*roughly 300 words*)

The grading scheme/rubric will be as follows:

- 2 marks for the ‘what’ in step 1 above – we are looking for a creative use of the emotion recognition capability
- 2 marks for the ‘why’ in step 1 – looking for logical justification for why this would be used by someone
- 2 marks for mockup quality and design rationale in step 2 - looking at aesthetics and some form of credible design as related to Apple/Google design guidelines
- 2 marks for the interviews in step 3 – looking for evidence that you sought real and useful feedback, and described it well.
- 2 marks for step 4 – looking for insightful and critical reflection on your creation

We also expect the writing to exhibit high quality grammar and clarity and logical flow. The grades given in in each step will be influenced by this expectation.

Due date: Monday October 6th, at 6pm, Marked out of 10, 0.5 marks off every hour late.

Submit your document on the Blackboard Course Portal link Specialist Assignments, under Assignment S2.