ECE 1778 – Creative Applications for Mobile Devices
January 2014
Programming Assignment A2, for Appers

App Design Principles, Mockingbird & Practice

The goal of this assignment is to learn how to use an app 'wireframe' design package that is often used in industry, and to use it to create a specific layout.

1   Basics of Mockingbird

Mockingbird 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 the website https://gomockingbird.com/ and sign up for a free account (which is in a kind of hard-to-find link at https://gomockingbird.com/signup/free/).   A free account allows you to have one active 'project' that is all you need for this assignment. (You can archive or delete practice projects).

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 'screen' or *page* as Mockingbird calls it
  • 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:

https://developer.apple.com/library/ios/documentation/userexperience/conceptual/mobile hig/ - //apple_ref/doc/uid/TP40006556-CH66-SW1

Each of the sections provides Apple's latest view of user interface and experience – somewhat new and different with iOS7 vs the older versions of iOS.

3   Assignment

In this assignment, you are to gain skills in the design and conception of an application. The application will be based on the following capability: software that can 'listen' through the microphone, and determine the fraction of the conversation that each person in a conversation can take up.   You are to conceive of an application that makes use of this capability, and to mock it up.

So, you are really being asked to do two things:
  1. Be creative in making use of this capability to design an app that does something interesting. It should be beyond the obvious app of simply displaying the result of the measurement.
  2. Design the app's layout and structure, from a user interface perspective, using what you learned from Part1 and Part 2.

Along with a Mockingbird mockup, you should hand in a maximum 1000 word document that describes 1) What your application does (*approx. 300 words*), and 2) Why you 'designed' it the way you did (*approx. 700 words*). It would help to make reference to the principles of good design you see in Part 2. The document you hand in should contain the link to the Mockingbird mockup that you have created.

Due date: Tuesday January 28th, at 6pm, Marked out of 10, 0.5 marks off every hour late.

Submit your document on the Blackboard Course Portal. Be sure to submit it to the 'A2' Assignment, listed under Assignments.