Raymond Elward

CSC 540

Prof. Steele

2 February 2012

Project Proposal

**Brief description of the project**

Gesture based software has come to prominence in the last few years. This is because of the increased market share of smart phones with only screen interfaces and tablet computers. Each of these devices and operating systems has been creating their own gesture based apis for developers to use. I am concerned with a solution to make a cross platform application that will utilize gestures on many different platforms. In this project I will survey cross platform tools for implementing gestures and then I will implement the LIOLI application as a cross platform mobile application. LIOLI will work good as an example because it is user generated content that needs to be easily utilize gestures to scroll through or swipe through from one entry to the next. For more information about LIOLI specifically visit http://lioli.net or the source code at https://github.com/rayelward/lioli or https://github.com/rayelward/LIOLI\_iOS.

**Project participants and their roles**

Raymond Elward – Lead Developer and Researcher

**Questions the project will address**

* What are the best practices for multiplatform mobile development when concentrating on a gesture application?
* What kind of gestures can be accomplished across all platforms?
* What is currently the best framework for working on mobile devices implementing gestures?
* How many and which platforms can I deploy my multi platform gesture application to?

**Activities that need to be preformed**

Some research still needs to be done on the best way to implement gestures to multiple devices. I am leaning heavily towards using the html5/css/javascript combination with jQuery mobile and phonegap as the base frameworks for gestures and deployment to multiple native devices. I want to compare this solution to others like that of gesture works and what makes them different from using the native implementation.

A lot of the implementation needs to be completed. I have just begun developing a jQuery extension that hooks into the json service coming from http://lioli.net that I created a few months ago. After that is completed I will follow best practices to mimic a version of the current iOS application but I will add gesture support for getting from entry to entry making it compatible with native device phonegap will allow as well as using the knowledge I’m researching on cross platform gesture development.

**Results that needs to be collected**

The biggest result will be having an application that I will release into the iTunes app store, the android marketplace, and any other mobile application distribution network that will allow it.

I will also include a short portion with findings from my research and some best practices guidelines for wanting to create a cross platform mobile application that will feature gestures to manipulate user submitted data for reading.

**How the results will answer the project’s questions**

The results will give precise answers to what worked best in these specific gesture situations. Through my learning and development I will be able to establish a list of best practices for dealing with gestures across multiple platforms.

I will present a comparisons between two or more frameworks for multiplatform gestures. Gesture Works will be evaluated on its practical use versus jQuery mobile / phone gap and I will present explanations for why jQuery mobile is the best choice. I will also easily learn and see which devices I will be able to deploy too.

**Information that still needs to be researched**

At this stage the research that still needs to be done revolves around the appropriate apis that need to be accessed in frameworks for developing the application. I need to understand the development process of html5 and jQuery with out the normal help from php that I am used to. Under the jQuery mobile / phonegap development principles I will need the application to be fully dynamic from JavaScript, which is a little out of my php element.

**A timeline for the completetion of the project**

2 February 2012: Submit Project Proposal

16 February 2012: Present Project Progress – implementation 75%, paper 15%

23 February 2012: Present Draft of Project – implementation 100%, paper 40%

8 March 2012: Project Presentations – implementation 100%, paper 80%

15 March 2012: Final Project Report Due – implementation 110%(extra 10% is for being released in all major mobile application stores.), paper 100%

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