EECS 118 Weekly Report

Week 8

Group name: My Hero on the Go

Group members: Quan Chau, Raul Madrigal, Jon Apostol and Ryan Morrison

# System Description

Our group is working on a native Android app running on Android Smartphone for My Hero. Our app will allow the user to do the following functions:

* Get the content from MyHero.com including stories, arts and movies
* Upload personal content to MyHero.com including stories, arts and movies
* Get a daily reminder of a random hero stories in the morning

# Design

The system will include three main areas:

* An http server to serve the contents and receive uploaded content
* An Android software module to communicate with the HTTP server in both ways: receiving and uploading content
* An Android software module to display the received contents on the phone

# Division of Work

In order to complete the project, we divide the work in our group in the following fashion:

* Quan: implement the http server to feed and receive contents to the phone
* Raul: implement the Android module to communicate with Quan’s HTTP server
* Jon: implement the Android module to display stories and arts
* Ryan: implement the Android module to display movies and the daily reminder of a random hero story

# Milestones

We divided the milestones into three main areas:

## HTTP Server:

1. Simple HTTP server that says hello world
2. HTTP server can feed the list of stories
3. HTTP server can feed the stories contents
4. HTTP server can feed the list of arts
5. HTTP server can feed the arts contents
6. HTTP server can feed the list of movies
7. HTTP server can feed the movie contents
8. HTTP server can receive stories and add to database
9. HTTP server can receive arts and add to database
10. HTTP server can receive movies and add to database

## Android module to communicate with HTTP Server:

1. Phone could receive list and show contents of stories
2. Phone could receive list and show contents of arts
3. Phone could receive list and show contents of stories
4. Phone could send the server a new story
5. Phone could send the server a new art
6. Phone could send the server a new movie

## Android module to display the contents:

1. Phone could display list of stories
2. Phone could display content of stories
3. Phone could display list of arts
4. Phone could display content of arts
5. Phone could display list of movies
6. Phone could display content of movies

# Weekly progress

For week 8, we were able to achieve the following:

* Android phone can display the list of stories and content of stories, and is able to display art as well. The information displayed is actually data from the MyHero website.
* Created android video player with controls (play/pause/FF/rewind) to stream vids from MyHero. Tested with various streaming videos online and worked with some, not with others. Did not work with MyHero vids!
* Researched the problem and found that android is very particular about the file formats for streaming—just because it is .mp4, doesn’t mean it will work—has to do with the way the file was encoded.
* Took another route by creating a second video player specifically to stream Youtube vids (idea being that we will create a channel and populate with MyHero vids). Ran into problems with this as well—in order to stream YouTube videos on android, you need to use YouTube API and this leverages the actual YouTube app. Meaning the YouTube app must be installed on device in order to test/run. I don’t own android phone and the simulator does not allow installing the YouTube app…
* Third approach is now to go back to original video player, download vids from MyHero, re-encode them and upload to Quan’s server and stream from there

# Group Activities

During week 8, our group had a meeting on Tuesday after class. We discussed about the tasks we accomplished and the problems we ran into. Quan was able to get all the content from MyHero and convert it to a JSON format that allows Raul to pull the JSON array and parse it as a Java object so that Jon and Ryan can use the information to display it on the android phone. The main problem we ran into is that Android is picky about what type of video format can be played to the phone and currently the videos on the MyHero website cannot be displayed on an Andriod phone. We estimate our progress to be about 70% and once we get videos playing the only thing left to worry about is how we want the design of the App to look like.

# Plan for next week

For week 9, we plan to get the Android phone to play movies from MyHero. We think we might have to download the MyHero videos and encode as a different format and upload them to Quan’s server to stream. We also plan on making the App look nice by adding a theme(s) and just making the App look nicer overall.