**Final Project**

**Phase 0: Brainstorming**

Five Ideas:

1. Interactive Resume – Display information about me, resume, projects, and personal achievements. Will heavily utilize scroll views and use a navigation drawer activity to organize content and pages.
2. A 432 Hz sound player that converts a media file (.mp3 or .wav) to a 432 Hz output instead of the standard 440 Hz. More information about this idea can be found here:
   1. <http://recreatingbalance1.blogspot.com/2014/09/how-to-easily-convert-any-music-to.html>
   2. <https://attunedvibrations.com/432hz/>
3. Comprehensive fuel efficiency tracker. Hope to utilize navigation drawer activity to organize content. Pages to store information about car and other pages to track miles/fuel used.
4. Calculator that displays all inputs as you type them, making big long equations that can be solved. Aim to include scientific methods as well but will start out with the basic operators first to get a handle on things.
5. Android variation of the Flood It! Game.

**Phase 1: Proposal**

In my list of five ideas above, item corresponding to the number 1 is the specific project I will be describing and hoping to do for my final project. This project will is described as an interactive resume. My idea behind this is to have an application that mimics my personal website (<http://pages.iu.edu/~mrlonis/home.html)> while also demonstration an understanding of how to make an Android app to showcase in interviews to future employers or as a resume item that future employers can view on an Android device.

I want to use the default Navigation Drawer Activity to layout my project pages since Android doesn’t have a pre-built tab bar layout like iOS Xcode features. The first initial page will be an about me page that gives the viewer some information about me, a professional picture of myself, and details what the rest of the application will contain. The second page in my navigation drawer will be a resume page where I will show my current resume either as a zoom able pdf inside a scroll view, or as a label based scroll view that is not zoom able, only scrollable. The third page in my navigation drawer will be a project page where I intend to use this a master/detail flow activity. Each detail in the master/detail flow will be a title of a course or personal project. I will feature things such as my A290 Visual Studio with C# programming project, some CSCI-C 343 projects, my personal website, and various other projects I have completed inside or outside of IU.

To give an idea of what this will look like, if the user is to click on the detail pane for the A290 Windows Programming with C#, the user will be taken to a page that displays some information about the project I did in the class (in this case I would show off my final project) and will include a WebView that will show the GitHub page for my final project. The reason I choose the GitHub page is because GitHub will allow the user to see the source code in the app. This makes it convenient to not only detail a project, but to also provide source code to validate the work I’ve done and show my programming technique.

I plan on including a settings menu if time permits that will allow me to try out things such as changing the background color for the entire application. As I think of other settings I could possibly add I will try to add them to the application but for now this is up in the air.

I believe this will be a useful application to myself personally to not only have an Android app to show to future employers and have it contain my other work, but it’ll also allow me to get acquainted with scroll views and WebView in the Android environment. From my experience with iOS programming and apps in general, many apps utilize scroll views to display content that is larger than the screen of the device. Many also use WebView to show web content, something I have not had experience with in iOS or Android. It will be a large app with many pages and will allow me to work hands on with a large sized app.

I am confident I can successfully complete this in the allotted time because I already have a very clear idea of what is going to be inside my application. I know the things I need to learn to implement this project and the rest will be coding. Already knowing EXACTLY what I want to be in my app saves me time on design and interface building and allows me to get right into the coding for the Java and XML and jump into the project early.