**Laker Legacies**

**Team:**

*Kyle Peltier*

Ever since I fell in love with programming in 2009, I've been motivated to continually grow in the world of Computer Science. I love learning new things, especially if I can apply the knowledge in my life. I have experience tutoring C as well as Java at Grand Valley. I have the pleasure of working as a framework developer at School Zone Publishing (Grand Haven, MI), where I have been for a complete year now. On a day-to-day basis, I work mainly with C++ but frequently come across C, Java, and Unix scripting languages. My technical experience has grown tremendously through SZ and I love learning new things every day. I am looking forward to the Laker Legacy Android application as I continue to grow in the field. Through this application I am looking to grow in my knowledge of databases, improve my knowledge about Android products & design, and learn more about how code is written in industry.

*Technical Strengths:*

* Programming in C, C++, and Java
* Unix bash scripting
* Subversion programs (Git, SmartSVN, TortoiseSVN)
* Microsoft Visual Studio, Eclipse, XCode

*Matthew Williams*

After two years of studying Computer Engineering, I realized I liked the software aspect of computers more. Since then I have switched to Computer Science and have learned to be proficient in C, Java, and C++. I also have experience with Unix bash scripts, SQL, HTML, PHP, XML, JavaScript, and various web development skills. I have been working part time at Belcan Engineering (Kentwood, MI) for just about a year and have learned how to work in a professional environment. I have written visual basic scripts for Microsoft Excel and Microsoft Outlook. Also was involved with GE Aviation over the summer and helped to test software on a Bells AH-1Z Cobra helicopter. I hope to improve my experience with professional programming, Android development, database skills, and incorporating all of these things together.

*Technical Strengths:*

* Programming in C, C++, and Java
* Some experience in HTML & PHP
* MySQL and Oracle.
* Writing technical reports

*Samantha Williams*

At Grand Valley I have written code in C, C++ and Java. I have taken all the required courses in the Computer Science major and I have some Bash Scripting experience from taking the Systems Programming class. During the course of my internships, I have written scripts in VB Script and C#. In my most recent internship at Meijer, I got the opportunity to design and develop a database to centralize the configuration files for their Point-of-Sale machines. In my spare time, I take tutorials on web programming.

*Technical Strengths:*

* Programming in C, C#, C++, and Java
* Database

*Improvements:*

I don't have much experience with documentation or developing mobile applications, so I plan to improve my skills in both through this project.

**Laker Legacies – Android Project**

**About**

The Laker Legacies application is meant to inform the community about GVSU monuments (buildings, statues, etc.) as well as major contributors to those monuments. The application does this by mapping major donors/contributors to their respective campus monuments. By doing this, GVSU students, alumni, faculty, and visitors will be able to learn more about the GVSU campuses and their history. The Laker Legacies application is also meant to encourage people to give back to the college by presenting a place where users can donate to the university.

This particular project is to make a recreation of the Laker Legacies iOS application, previously implemented by another senior project group. As a result, the GUI design of the application has already been completed; It is the job of the team to mimic the current application. Although an iOS version exists, the team has room to slightly modify the GUI design of the application to conform more to the Android operating system and conventions.

**Features**

The Laker Legacies application has several features that are split into the following view-groups: Home, Map, Directory, Near Me, and Donate. These view-groups are split into visible tabs on the application screen so the user can easily navigate between them.

In order to maintain information within the application, a database will be used. The database will keep track of major building contributors, the buildings themselves, and which buildings each contributor is associated with & vise versa.

*Home*

This view will cycle through images of major building contributors, welcoming the user to the application. A potentially additional feature is to add an “About the application” section to this Home view. Also, another potential feature is to add a trivia section, where small trivia texts could cycle along with the images.

*Map*

The map view will query Google Maps to highlight all GVSU buildings/monuments in the application’s database. This feature would access the user’s GPS location and display campus buildings relative to the user’s location.

*Directory*

The Laker Legacy database will be maintained mainly for the directory view. In this view, GVSU buildings will be listed along with their associated contributors. By selecting an item in the list, navigation moves to a detailed description of the major contributors of the selected building. There is room for a couple additions to the application in the directory view. One additional feature could be to add the ability to sort the list by building name, contributor names, city, campus, etc. Secondly, a scavenger hunt feature could be included here to create an interactive experience between the user and the buildings.

*Near Me*

This view will access the user’s GPS location and display a list of buildings in order of distance closest to the user.

*Donate*

Finally, the donate view will navigate the user to a GVSU webpage where the user can donate money to the university. This view is meant to encourage the user to give back to the community and their alma mater.