Grand Valley State University

Laker Legacies

Milestone 1: Progress Report

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Date: 02/20/2014

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CS 467

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Introduction

Laker Legacies is an application solely advocating Laker for a Lifetime and the legacies previous Lakers and genuine affiliates have left on the Grand Valley community. The application is meant to give users a mobile tour of campus buildings named in honor of historical figures that have left a mark on Grand Valley. Users will be able to navigate Grand Valley's campuses via Google Maps, learn about buildings, learn about past Lakers, and be able to give back to Grand Valley. Application development began in January of 2014 and this report reflects the current progress of the project.

Intended Progress (*see attached Gantt Chart*)

To date, we hoped to have created a navigational template layout, created all of the known app activities, integrate Google Maps APIs, create our database, have queries written for the database and have the donate page finished. We also wanted to start working on linking the application views together so the app is "navigational".

UI Layouts

Per UI layouts, the team hoped to have each of the screens designed and created in code. On top of each individual screen, the team wanted a template set up for each view to have and to navigate between them.

Google Maps

When it comes to Google Maps, we would have liked to have our Google Maps screen rendering actual maps and displaying our current location. This would include being able to zoom in and out on the map and move around with finger movements.

Database

By this time, we wanted to have our hands on all of the information necessary to build the database. Secondly, we wanted a tool that would autonomously parse data files and build a database for us so we wouldn't have to do manual entry. This would also help the future caretakers of the application.

Donate

We would have also liked to have Grand Valley's donate page displayed within the app, fully tested and working.

Progress To Date

UI Layouts

Unfortunately, minimal progress has been made in terms of developing UI layouts for the application. This partition of application development has been set back by a few unseen issues, to be overviewed in the next section.

Database

A large setback for creating the database has been a lack of information. However, this week we were able to get about 90% of the required information to build the application. Despite this setback, we have have been able to create a subset of the information into parsable files. Application code has been written to parse these data files and insert the data into a database automatically. With

the small database subset, the team has been able to make progress towards building the directory of the application. Thus far, the database subset is queried, a collection of custom views are generated, and the information is displayed on screen in a scrollable ListView object (Figure 1).

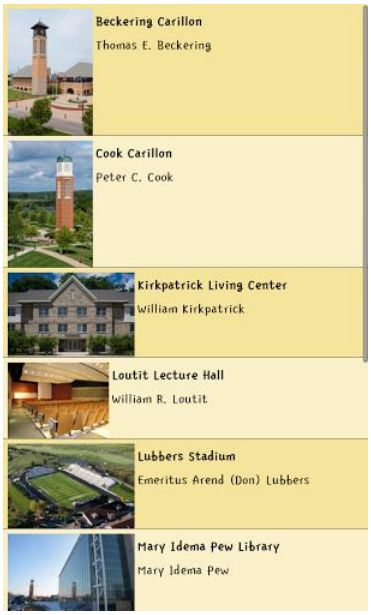


Figure 1: Screenshot of current Directory. Database subset built, queried, and displayed.

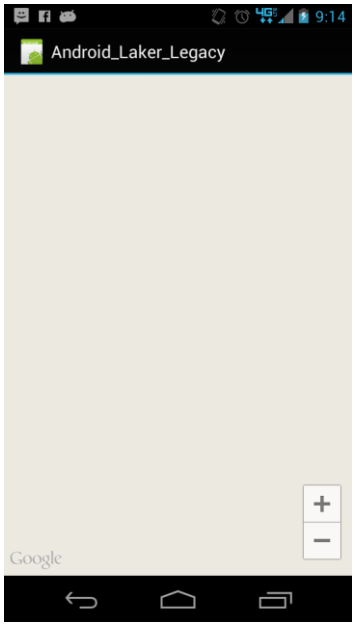


Figure 2: Screenshot of current Google Maps View.

Google Maps

Progress has been made on integrating Google Maps into our application. A Google Maps key has been generated and testing has been underway trying to implement the Google Maps add-on to our application. There has been trouble getting the Google Maps application to connect with Google Services. But now the application is displaying the Google Maps screen without rendered images, shown in Figure 2.

Donate

Work has been started on the Donate segment of the application, however we're not sure if it displays properly because there are still a few bugs with the internet connection, so the page doesn't actually load for testing.

Major Setbacks/Roadblocks

General/UI

Some issues have risen with trying to set up Android devices and sync them with our computers in order to test the application on a real device. Compatibility issues with drivers have been resolved and progress is being made towards testing on each Android device our team possesses.

Brainstorming UI design as a team and with the client has set back development. We were unsure of what exactly the customer wanted with each of the screens. After our latest meeting, we have confirmed what we will be doing and can move forward with development.

Google Maps

In order to implement Google Maps into our application, Google requires an authorization key in order to connect to the Google Services satellites. Currently we are working with Google Maps V2. There has been some setbacks with trying to get the authorization key to connect correctly. We have got past the authorization part and now are working on debugging why it will not connect to Google Services.

Database

As noted earlier, database generation has been set back by lack of data. The team recently received about 90% of database information whereas to start we only had about 20%.

Projected Progress

In the next project phase, we plan on putting all of the donor and building information into XML files. Once we have all the information, we will finish creating a script to parse the XML and add the information to the database, and ensure the donors are associated with the correct buildings.

We also would like to have the Google Maps integrated smoothly into the application. This won't have the full functionality of the application just yet, but to get the Google Maps fragment to show up on the screen and function as-is, we will be pleased.

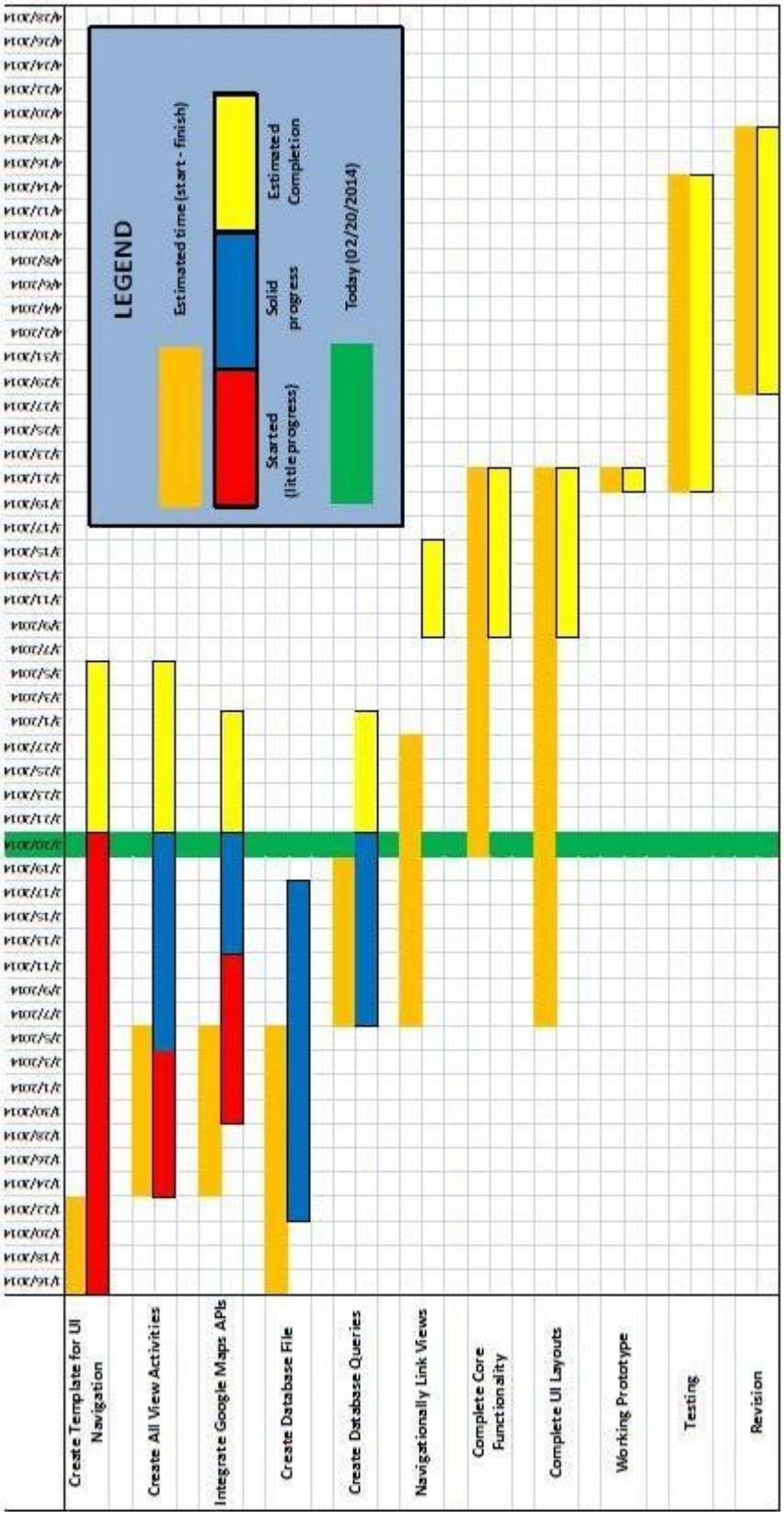
By the next milestone we would like to also have most of the application screens finished with basic navigation features. We want to be able to navigate through all of our tabs.This includes creating an activity file (.java) for each screen we would like to create. Also, this will include XML files for each screen as well, which is used for the GUI. The donate tab will be fully working as it doesn't depend on the database information.

The team plans on increasing development hours each week in order to meet the projects expectations in deliverable deadlines. Since there have been more setbacks on small tasks, we will need to plan ahead for our next milestone.

Conclusion

Although we have been set back in several areas of the project, we want to bounce back and work diligently to meet our goals on time. With these major setbacks behind us, we hope to produce solid progress in the application by the next milestone.

Gantt Chart


LEGEND
Estimated time (start - finish)
Started (little progress)
Solid progress
Estimated Completion
Today (02/20/2014)
Create Template for UI Navigation
Create All View Activities
Integrate Google Maps APIs
Create Database File
Create Database Queries
Navigationally Link Views
Complete Core Functionality
Complete UI Layouts
Working Prototype
Testing
Revision