Ryan Abel
Jason Terpstra
Ray Oesch
CIS 467-01

System Description

Our project is to build an iOS App that will utilize a database in order to provide a GPS-based classified style advertising system with a focus on eco-friendly and artisan products. The system should allow for short-term listings as well as methods for businesses to set up a permanent presence on the system. The main two components of this system will be the back-end database software and the front-end Apple mobile user interface.

The database will contain all of the seller information. This includes each seller's name, address and contact information. The database will also contain status and highlights information such as new offerings, hours and seasonal changes. For each listing, the database will store photos and links. The system should also allow clients to log into the server to update their listings and information on their own, without needing an administrator to update the database.

The interface app will contain a main menu consisting of the selections MAP, EDIBLES, GOODS, and FREE. The menu screen will also contain a search bar with an advanced search option, as well as links to: a login screen, favorites that the user has tagged previously; a news feed for updates, locations and hours; and the system's website. The MAP selection should also be available from any search page, and will display listings that are close to the user on a map. The EDIBLES, GOODS and FREE selections will pull up listings that fall into either the edible, goods and free categories, respectively, and also provide the user with the option of filtering the listings. Each listing should also contain a REPORT button that notifies Local Drive-Buy so that they can determine whether or not to pull the listing. Listings will be permanent until removed by Local Drive-Buy early in the product life-cycle, and will have a time limit once the product matures.

Team

Ryan Abel is in his final semester at Grand Valley. He works at Atomic Object LLC in Grand Rapids. He has primarily done work in web application development. He has worked with CoffeeScript, JavaScript, node.js, Java, Ruby, and Ruby on Rails. This project will force Ryan to become proficient in Objective-C. It will also challenge Ryan to master the Model-View-Controller design paradigm. Ryan would also like to familiarize himself with Core Data throughout this project.

Jason Terpstra is also in his final semester at Grand Valley. Currently working on Grand Valley’s Allendale campus for their Computer and Technology Support department, Jason is familiar with using and supporting Linux, Windows, and Macintosh operating systems, though has only worked in Linux and Windows, so is looking forward to learning Objective-C and the Xcode integrated development environment. Jason is proficient in Java and C++, while also having programmed in Python, Visual Basic, C and SQL. He is also looking forward to learn how to apply his user experience knowledge to a mobile Apple device. This will be his first experience programming for a mobile device, and his first introduction to Objective-C’s Model-

View-Controller paradigm, which should prove an exciting challenge.

Ray Oesch is in his final semester at Grand Valley as well. He is somewhat familiar with the Model-View-Controller design paradigm. He has worked with the C, C++, Java, Visual Basic and Python programming languages. Through the development of this project, Ray hopes to learn about the Objective-C programming language and become familiar with mobile app development in general, and iOS app development in particular. Ray would also like to learn more about designing user interfaces to be easily usable.

Features

- GPS-enabled so the app can tell what listings are near the user
- Searchable database interface, with simple text as well as an advanced category search
- Listing database
    - keep track of every seller's listings, as well as information about the seller, such as where the product can be found, and photos
    - Includes news updates, hours of availability, and phone number
    - website where seller's can go to to manage their listings and information
    - Link to the seller's blog or website
    - Stores reviews of the product
- User profile database
    - Users can log into a personal profile; login credentials, email, Facebook info
    - Find updates from sellers and listings they have tagged
    - Rate and review sellers and listings
    - Stores uploaded photos
    - Can be logged into using Facebook
    - Tag sellers and listings they like/want to keep track of
- App allows login through user-created credentials or their Facebook account
    - options such as password reset and account creation