Senior Project Proposal

Food Cart Tracker

Clint’s Cool Dev Team



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# Revision History

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| Author | Company | Version | Date | Comments |
| Clint Jellesed | Clint’s Cool Dev Team | 0.1 | 5/12/16 | First draft of the proposal |
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# Signatory Page

This document accepted by:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_

Signature (Calvin Caldwell) Date

This document submitted by:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_

Signature (Clint Jellesed) Date

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# Introduction

## 6.1 Purpose

The purpose of this paper is to provide all of the necessary information related to this project to the teacher of my senior project class and those in it.

## 6.2 Scope

The scope of this project is limited to project management, general system discussion and a description of the projects requirements. This will describe the intended design features and functionality. The document will not elaborate on specific functionality of modules, or other discrete details in the design specifications.

## 6.3 Intended Audience

The intended audience for this document includes Calvin Caldwell, Clint Jellesed, and any third part that wishes to review it out of curiosity or interest.

# Project Management

## 7.1 Change Management Procedure

In order to make a change to the project, the CAT team needs to be contacted. The change request must follow the information provided in the following section.

## 7.2 CAT Team, Medium, Protocol, Time Lines, Impact Analysis, Archive

CAT Team – The CAT Team will consist of the senior project instructor and me (Clint Jellesed). The team will evaluate the impact changes will have on the production of the system. Submitted changes can be accepted or rejected by the team with a brief statement to explain why.

Medium – Any changes must first be filled out of the “change Form” (Appendix A) by either the instructor or me. No digital version will be accepted. The form will need to be printed out for each requested change. Two copies must be provided, one for the senior project instructor and one for me.

Protocol – A copy of the change request form will be submitted to Calvin Caldwell and myself, these forms will be evaluated and a response will be emailed to the requestor. These changes will then be reviewed and either accepted or denied. In the case that the change is accepted the timeline will be updated accordingly.

Time Lines – The Change Form will be processed over a period of two to three business days. A response will be sent to the e0mail provided on the Change Form.

Impact Analysis – Before changes can move forward, the time line changes must be acknowledged. If it pushes the time line out of bounds the change is automatically rejected. Otherwise the change can be accepted.

Archive – In the case of an accepted change, the timeline will be updated accordingly. This can increase or decrease the time frame.

## 7.3 Software Delivery, Installation and Acceptance Criteria

Software delivery will be distributed to all parties for evaluation. The deliver will include an installation package, written documentation of system requirements, and a Read Me test file to help with the installation process prior to release. Upon the full release it will be accessible from the apple store

## 7.4 Documentation and On-Line Help

Software documentation will be available in the form of paper documentation. This documentation will describe system requirements, installation instructions, and operation of the software.

## 7.5 Project Risks

Software risks include the successful operation of the software on apple products. This includes IPhone’s and Apple tablets. The other risks involve the limited time frame allotted to complete the project.

## 7.6 Customer Responsibilities

The customer is responsible for evaluating the performance and usability of the software. This includes providing the necessary feedback for the continued evolution and development of the project. The customer is responsible for delivering this information by the requested date.

## 7.7 Status Reporting

### A. Work Completed This Week

Use cases and sequence diagrams will be delivered to Calvin Caldwell each week detailing the progress thus far. A document detailing the week’s tasks and the following week’s tasks along with any additional information will also be included.

### B. Work To Be Completed Next Week

Work to be completed next week will be documented in the weeks tasks and include the estimated hours to complete.

### C. Issues

Issues will be recorded in the use cases supplied each week detailing the extent of the problems and instructions to recreate the issue.

# System General Description

## 8.1 Problem Statement

The problem approached by this project is the difficulty in tracking down individual food carts. I have personally spent up to an hour trying to tack a specific food cart down before I finally gave up and ate at a different place. There is a growing trend for food carts in the town of Klamath Falls and it will only get worse as time goes by. This problem is only accentuated when food cart owners forget to update their locations on their website which happen more often than not.

The project I am proposing will have the option for the businesses to quickly post their location via GPS or street address in addition to posting a wealth of additional information such as hours, menus, and coupons. Another key feature will be the option for customers to update the location settings in separate sections in case the owners forget to update things themselves. Hopefully this app will make finding food a lot smoother process for everyone.

## 8.2 Perspective

### A. History/Prior Release

There have been no prior releases for this project.

## 8.3 Major Subsystems

A mySQL database will most likely be hosted by a web provider sometime in the future. This will be used to store user information and data related to the individual food carts as well. PHP scripts will be used to communicate between the app and the mySQL database. The PHP scripts will be passing JSON objects in order to safely store the information. I will also be looking in to adding a Google Maps extension in order to facilitate the Food Cart tracking.

## 8.4 Relation of System to Existing Systems

N/A

## 8.5 Hardware Platform Description

* IPhone 6
* IPhone 6s
* Ipad (specifications coming soon)

## 8.6 Software Platform Description

The application will be written in Swift using the xCode development kit. xCode is the native IDE for all apple devices and is the only option when it comes to development. Some other platforms offer plug-ins for apple support, but it all ends up going through xCode in the end. xCode supports two languages, Objective-C and Swift. I chose Swift because it has become the new standard for apple development and it is a lot more user friendly. On top of that you are not really losing any power or flexibility using Swift over Objective-C

# Product Requirements

## 9.1 Functional

1. **User Accounts**

1.0 All users will make a normal, food cart or admin account

* 1. Users will have a unique username.
  2. Accounts will have a password that meets designated requirements
  3. Users can rate food carts between 0 and 5 stars
  4. User will be able to favorite Food Carts and see them in a favorites list containing all the basic information and a link to their homepage.
  5. User will have a personal profile page that shows their reviews, tracks their favorites, has a news feed showing information from their favorites list.

1. **Business Accounts**
   1. Average user rating will display the amount of stars from 1 to 5 and will support fractions of a star.
   2. Food Carts will have personal profile pages showing hours, location, menus, posts from the company etc.
   3. Food Carts can post their menus
   4. Food Carts can post their Location as an address on their homepage and as a dot on the map portion of the app.
   5. Food Carts can post their hours that will update on their homepage and the widget in the Food Cart lists
   6. Food Carts can post their specials such as coupons and new menu items in text views that work like twitter or other social media.
2. **System**
   1. There will be an Apple UI
   2. A color blind mode that will change the entire applications UI to colors easier for people to see. Text buttons and backgrounds.
   3. Persistent User Settings such as color options, sound settings carrying over when opening the app again.
   4. Logins using Keychain which is an IOS feature storing passwords and possibly implementing finger print passwords as well.
   5. A map will display all Food Cart locations. Most likely a Google Maps plug in that will use the drop pin features to display carts and information.
   6. Map will display specific Food Cart locations. This will display search results and or Food Carts in the favorites list for the user.
   7. There will be a page with the sorted Food Carts. This will be a scroll list using custom widgets displaying the name, hours, rating and possibly address of the Food Cart. It will also be a link the Food Carts home page.
   8. The list from 3.7 will have alternate sorting methods such as by rating, location and name
3. **Database**
   1. Read to the database using PHP scripts
   2. Write to the database using PHP scripts
   3. Security verifications must pass through a tier of PHP scripts that are not accessible to normal users.
4. **Moderator Tools**
   1. Ban users, remove accounts, block posting and rating rights.
   2. Ban Business’s , remove accounts, block posting and rating rights.
   3. Delete posts
   4. Reset Ratings

## 9.2 Third Party Libraries

N/A

## 9.3 Performance

Performance is a high priority, the application should load up in seconds and allow users to get the information they want in as few clicks as possible. This should be a resource light application and will likely have no slow portions.

## 9.4 Reliability

The reliability of the product should work 98% of the time. It will not require frequent updates after release and will only need minor updates over time as the device platforms progress.

## 9.5 Data Descriptions

User preferences will be stored on their device in a persistent settings file. Account information for users and businesses will be stored in the mySQL database.

## 9.6 Security/Safety

N/A

## 9.7 Constraints

The applications should fall within all civil and federal laws with the use of cell phones. The application will follow the use of xCode and Swift.

# User Profiles

Users of this application will fit one or all of the following profiles:

* An interest in Eating
* A desire to track a specific food cart
* A desire to read reviews of certain food carts
* A desire to find coupons

# Glossary

N/A

# Appendices

Please see the following attached page for the “Change Form”

Change Form

Name (Print) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Response E-mail \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Request of Change:

Purpose of request of change:

Additional Comments: