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Project Proposal - Rough Draft

Company: The Deconstructors

Submitted to: Todd Breedlove

Submitted by:

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Email:

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REVISION HISTORY

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SIGNATORY PAGE

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ Author: Michael Remley Date

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ Author: Codey Winslow Date

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ Author: Kacey Balabin Date

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ Author: Jared Glasser Date

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ Author: Jihyuk Chung Date

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_ Reviewer: Todd Breedlove Date

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1. INTRODUCTION
   1. **PURPOSE**

The purpose of this document is to propose the design and implementation of the [product] application. The section and subsections following are dedication to defining and describing the format of this document or the intended design plans.

* 1. **SCOPE**

The scope of this document is limited to project management, general system discussions, and a description of the product requirements which will describe in limited detail the intended design features and functionality. Also, it includes the specific functionality of modules and otherwise discrete functionalities that may later be added to the system.

* 1. **INTENDED AUDIENCE**

The intended audience of this document includes everyone, including children and any third party interested in this project.

1. PROJECT MANAGEMENT
   1. **CHANGE MANAGEMENT PROCEDURES**

Should a change to this product become necessary, the Change Administration Team, (CAT), will convene and discuss the requested change. The CAT team will consist of Kacey Balabin, JiHyuk Chung, Jared Glasser, Michael Remley, Codey Winslow, (The Deconstructors), and Todd Breedlove, all of whom will consider the ramifications of the requested change to the product. Any requested changes are subject to rejection. The change request form can be located within Appendix B and will contain all relevant details from the following section.

**Medium** – Any changes must be submitted in the format presented by the Change Request Form (Appendix B). Submission is to be physical copy only – digital submissions will not be accepted.

**Response Time** – The Change Request Form will be processed over a maximum of one business week. Responses will be emailed to addresses detailed on the submitted Change Request Form.

**Impact Analysis** – Before a change is accepted, the impact that it will have on the system’s development timeline must be analyzed. If the suggested change causes the project to go significantly over or under its scope, the Change Request Form will be denied.

**Time Frame** – If a Change Request Form is accepted, future sprints must be analyzed and modified to accommodate the new change.

**Archive** – All changes, whether accepted or denied, must be archived in the Revision History section of this document (see page *i* for reference).

* 1. **DOCUMENTATION**

All documentation for the product will be provided alongside the app at <https://github.com/CodeyWinslow/deconstructors/>.

* 1. **CUSTOMER RESPONSIBILITY**

The customer will be responsible for providing their mobile device and access to an internet connection.

* 1. **SOFTWARE ACQUISITION**

The latest version of the product will be available at the GitHub address, throughout the product’s development.

* 1. **PROJECT RISKS**

The risks associated with this project include the following: learning a new programming language (Kotlin), finding suitable API’s, managing time, managing workloads, and navigating the agile workflow.

* 1. **STATUS REPORTING**

Once per week, Kacey Balabin, JiHyuk Chung, Jared Glasser, Michael Remley, Codey Winslow (the Deconstructors) will meet with Todd Breedlove to report on the project’s progress. Items to discuss include:

* Progress on the current sprint
* Future sprints
* Individual performance reports
* Identify problems/risks and discuss how to mitigate or remove them.

1. SYSTEM GENERAL DESCRIPTION
   1. **PROBLEM STATEMENT**

Develop a product that streamlines activity planning in a social context. This product should allow quick and easy creation of schedules for recreation or responsibility with optional collaboration. This will come in the form of a mobile app, and it should be designed in an open enough way to allow the user to use it in a way that fits them best.

* 1. **PERSPECTIVE**
     1. **History / Background / Prior Releases**

[product] encompasses features that have existed in many organization software products over time, but this app will be able to bring more focus to the planning process that those could not. Other apps that attempt to serve the same purpose follow more of a spreadsheet-like design which is not the direction [product] will go. There will also be more of an emphasis on connecting users of [product] via its social interfaces.

* + 1. **Relation of Development to Existing Systems**

[product] will not be built upon any existing system.

* 1. **MAJOR SUBSYSTEMS**

The application is comprised of two major subsystems: the user interface, and the database.

The user interface will consist of a login screen, a home page, several pages for plan construction and scheduling, an options menu, and a social interface. The database will hold information about activities nearby, the user’s plans, and the user’s login info.

* 1. **HARDWARE PLATFORM DESCRIPTION**
* Android phone
* Internet access
  1. **SOFTWARE PLATFORM DESCRIPTION**

[product] will be a smartphone application downloadable from the Google Play Store.

* 1. **THIRD PARTY LIBRARIES**

The use of third party libraries will include:

* Google Maps API
* Various libraries native to Android Studio

1. PRODUCT REQUIREMENTS

This section serves the purpose of detailing all requirements the final product must meet upon launch. The functional requirements are grouped by broad areas of requisite and detailed further in subgroups. They describe the features within the app we want to deliver directly to the user.

* 1. **FUNCTIONAL**

1. **Login**

A method to enter identifying information for personalized use of the application. These methods described below show the many ways in which one may tailor their experience from the first click.

* 1. Local Database  
     Our local database will contain information for users that wish to solely use our application without connecting to Facebook, or Google, but would still like to use our online service. (Users may still connect to their favorite social platform in later settings)
     1. Username and Password entry via textboxes
  2. Google  
     Using the Google login method allows one to sign in to our application via Google services and provides access to any Google contacts, or otherwise useful features that pertain to the many social aspects of our app.
     1. Google embedded login button
  3. Facebook  
     Using the Facebook login method allows one to sign into our application via Facebook services and provides access to any Facebook friends, or otherwise useful features that pertain to the many social aspect of our app.
     1. Facebook embedded login button
  4. Offline option  
     Allows the option of bypassing all online features, whether that be to test the application and its features before signing up, or to purely use the app as an activity planner.
     1. Offline login button
  5. Sign-up  
     Provides users that have not yet signed up to our local database and do-not wish to use any of the other log in options.
     1. Sign-up button
     2. Prompt for data entry
        1. Username
        2. Password
        3. Email (optional)

1. **Activity Bank**
   1. Custom Activities
   2. Geological activities
   3. (Stretch) Tags
2. **Cloud Activities**
   1. Cloud Storage
   2. Cloud Communication
3. **Plan Construction**
   1. New Plan
   2. Edit Plan
   3. Delete Plan
   4. Duplicate Plan
4. **Plan Visualization**
   1. Time Centric Presentation
5. **Friends**
   1. Add Friend
   2. Remove Friend
   3. Friend Group
   4. Messaging
6. **Collaborative Planning**
   1. View Friend Plans
   2. Group Plan
   3. Share Plan
   4. Request to Join
7. **Geo Capability**
   1. View Friend Location
   2. Local Activities
   3. Attach Location to Activities
8. **(Stretch) Plan Generator**
   1. Generate Using Tag Structure
9. **Notifications + Reminders**
   1. The system will have a notification and reminder system
      1. The system will notify the user of upcoming events through push notifications
         1. The system will use the android’s native push notifications and banners
      2. The users will be able to disable messaging notifications
10. **Settings**
    1. The system will have a settings tab containing app preferences
       1. The system will allow the user to edit how they are reminded about upcoming events.
    2. The system will have a privacy tab containing privacy preferences
       1. The system will give the user choice to always be online & discoverable
       2. The system will allow the user to edit privacy settings
       3. The system will allow the user to disable private messages
    3. The system will have a cloud tab containing save preferences
       1. The system will give the user choice to save plans to the cloud
       2. The system will give the user choice to share plans with friends
11. **Graphic User Interface**

The application’s main interface and button layout

1. The system will display login page
2. The system will have adjustable time frames for selected activities
3. The system will have visual aids for constructed schedules and plans
4. **Installer**
   1. Create Installer for android devices
      1. (Optional) Add ability to change language
   2. (Optional) Create a Website for PC users
5. **Error Handling**
   1. Create custom error module
6. **Platform**
   1. Android Studio development
   2. Application and server code written in Kotlin
   3. Database management with SQL Server
   4. **PERFORMANCE**

The application will operate some minor loading time primarily due to database access for the user, network communication, and location information. Anytime the application needs to load data, it will display a loading symbol so that the user understands what is happening.

* 1. **RELIABILITY**

Software reliability is, without a doubt, one of the most important aspects of software. There will be software reliability tests to measure the application’s ability to function. The goal is to maintain 98% reliability based on this equation: 1 - (number of failing cases / total number of cases under consideration).

1. USER PROFILES

The users of [Product] are everyone who is interested in a new application to manage and organize their localized activity alone or with friends or colleagues.

1. APPENDIX A – GLOSSARY OF TERMS

[Product] – The proposed project, which is and planner application for everyone to help manage daily life and localized activities better.

1. APPENDIX B – CHANGE REQUEST FORM

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date Requested: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Description of Proposed Change:

Reason for change:

Comments: