Development Environment Guide

Mouseville

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**Contents**

Revision History…………………………………………………………………………………………………………………………1  
Introduction……………………………………………………………………………………………………………………………….2  
Project Setup……………………………………………………………………………………………………………………………..2  
Navigating the Project……………………………………………………………………………………………………………….3  
Running the Project……………………………………………………………………………………………………………………3  
Third-Party Software………………………………………………………………………………………………………………….4

**Revision History**

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| --- | --- | --- | --- |
| Name | date | reason for change | version |
| Ben Ng | 4/18/2014 | Initial Draft | 1.0 |

**Introduction**

The purpose of this guide is to explain how to set up and navigate the development environment for the Mouseville application project as well as how to perform some useful development-related tasks.

This guide assumes the reader has access to a copy of the project as well as a computer with the OSX Mavericks operating system installed.

**Project Setup**

This section explains how to setup the development environment and open the project within that environment. You may skip it if you have already setup the project.

**Installing the primary development tools**

This project requires two primary tools for development:

1: Xcode 5  
 2: Git  
 3: Line commands

**If you do not have XCode 5 installed,** go to the app store and search, “Xcode.” It should be the first item to show up. Click the install button, and download the software.

**If you do not have Git installed,** go to <http://www.git-scm.com/download/mac>, and download the package there.

**After XCode is installed,** install the command line tools by going to Xcode > Preferences > Downloads and downloading Command Line Tools under components.

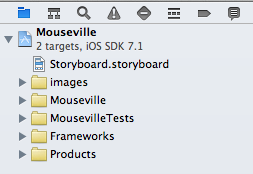
To get the project onto your computer, bring up the terminal, navigate to your desired project location, and type the following command:

git clone http://www.github.com/mouseville/mouseville

After the project is downloaded onto your computer, open the Xcode file.

**Navigating the Project**

This section explains how to navigate and understand the structure of the project in Xcode. The navigation pane is how you will navigate through the various source files. It is located on the left hand side of your screen. Apple software does not allow you to change the general layout of Xcode, so it will always be there by default.



It is possible to hide it by using the icons in the upper right corner.

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Aside from general Xcode navigation, there are a few things of note:

* Most images are kept in the images folder
* The core files for the application are in the Mouseville folder
* Database files are in Mouseville > CoreDataFiles folder
* Storyboard.storyboard is the graphical interface for the app. It’s where you can see what the app looks like

**Running the Application**

This section explains how to run the application, assuming you have already set it up in Xcode. You may either run the application on a physical device if you have a developer’s license, or you can use the virtual simulator already installed with Xcode.

**On the on-board simulator**

This option is set by default. Though to be sure you have the correct device, verify it says iPad > iOS 7.1 in the settings. If it doesn’t, click it to bring up a menu and change it.D:\SkyDrive\Mouseville\documentation_images\sim.PNG

Once the correct setting is picked, press the play button to the left of the setting you just changed, and the simulator will start.

**On a physical device**

You can run the application on a physical device in your possession, though this will require the use of the appropriate cable to connect it to your computer. Before running, be sure to connect the iPad to your computer.

Similar to the on-board simulator, check that the settings are correct, though it is more than likely that if you haven’t been using an iOS Device to test the app on, they are not correct. Change the setting from the simulator to iOS Device by clicking on it.

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**Third-Party Software**

The application is developed using the following third-party software in one way or another. *This list is intended to be used for reference only. For instance if you are a developer of the application and wish to refer to some documentation.*

* Xcode - <https://developer.apple.com/xcode/>
  + The entire application is developed using Xcode
* SQLite - <http://www.sqlite.org>
  + This is a type of database used for the local databases on the device.
* Core Data - <https://developer.apple.com/library/mac/documentation/Cocoa/Conceptual/CoreData/cdProgrammingGuide.html>
  + The Core Data framework provides generalized and automated solutions to common tasks associated with object life-cycle and object graph management, including persistence.