Programmer's Manual

Vision Statement

The No Kill Louisville Pet Food Bank Mobile App is designed to help the No Kill Lousville Pet Food bank on operations day. Operations day is usually the first Saturday of every month. Several willing volunteers welcome pet owners and load their cars with pet food depending on their needs. This is usually a very busy day with few hands to help.

Introduction

The application is currently designed for mobile Android devices. It allows for clients to more easily schedule appointments.

Component Overview

User View

The user view allows the user to:

- Create an appointment to pick up food
- Look up the day and time for their appointment
- Upload additional documents to No Kill Louisville

Admin View

The admin view allows volunteers to:

- View uploaded document
- View list of appointments on a certain day
- Confirm if a client has checked in

Tool Overview

Kotlin

Kotlin is the main programming language used for this application with Android Studio being the IDE used for app development.

Acuity

Acuity is a scheduling platform used by No Kill Lousville to schedule pick up of pet foods by clients. The application uses the Acuity API to access the list of appointments for a certain day to help volunteer check in clients more efficiently.

Firebase For

Firebase is a hosting server. Its use for this application is to provide authentication for both clients and volunteers as well as providing a way for clients to send in additional information to the No Kill Louisville group.

Project Repository

Software

Aside from the main application itself, Acuity and Firebase are used extensively. They are mainly accessed via API keys.

Test Cases

The Acuity API test cases mainly focused on testing API calls to ensure the call works, email/phone number regex, and file saving/loading.

Firebase test cases focused on testing authentication, file upload, and separating views between client and volunteer. Firebase test cases are in the test folder.

Documentation

Acuity API functionality is documented within the source code of the Acuity section (https://developers.acuityscheduling.com/) .

Firebase has extensive documentation for authentication such as Google authentication. Documentation also includes testing and all the functionality that Firebase is used for. Please check out Firebase documentation (https://firebase.google.com/docs) .

Test Platform Description

Firebase and the application interface is tested within the Android Studio and its emulator.

Acuity is tested separately from the rest of the application to ensure that the function works.

Test Scripts

Test scripts are found in the test folder given in src folder.

Installation for New Install

The program will be installed from the Google Play store.

Installation for New Platform

When the client or volunteer installs on a new platform, their data will be saved if they successfully authenticate through Google sign in. The data is saved within the Acuity and Firebase server rather than the application itself.

Further Development Statement

If development were to continue for another year, a possible focus is to add notification to the application. This would remind the clients the date of their pet food pick up. Other useful developments would include strengthening the security of the app by clearly separating user view from admin view.