

Software Design Documentation

Project Name: SmogLog (Project 3)

Date: 27-04-2021

Written By:

Introduction

The project aims to make an Android Application - using an OOP framework for Mobile

System Overview

Developing an Vehicle – Technician management Application that requires assembling a solution out of modular classes, giving each class a good API for its client(s) and testing.

Design Considerations

Issues that need to be addressed before creating a design solution

Efficiently use algorithms to save, delete and manipulating data.

Proper use of either the GPS, Camera, Microphone or GyroScope and its Android API in the application.

Architectural Strategies

The strategies that will be used.

- Strategy 1

"Divide and Conquer" a strength of OOP design that lets you use modularity and encapsulation to divide a problem into more than one smaller problem.

- Strategy 2

Develop Unit Testing Code - taking in part advantage of some Test Driven (maybe we should call it Test Assisted) Design/Implementation

- Strategy 3

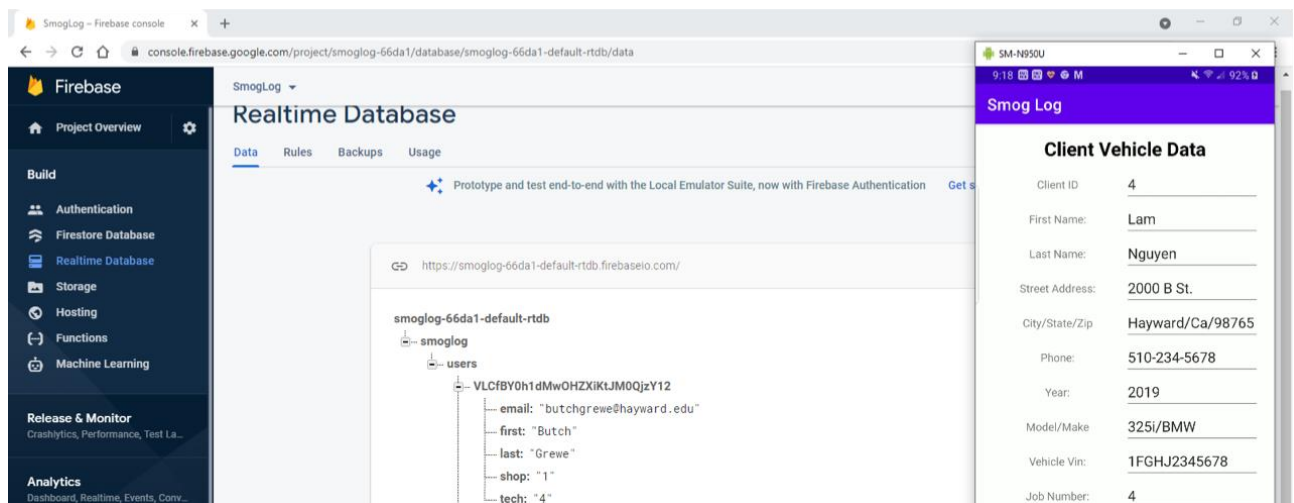
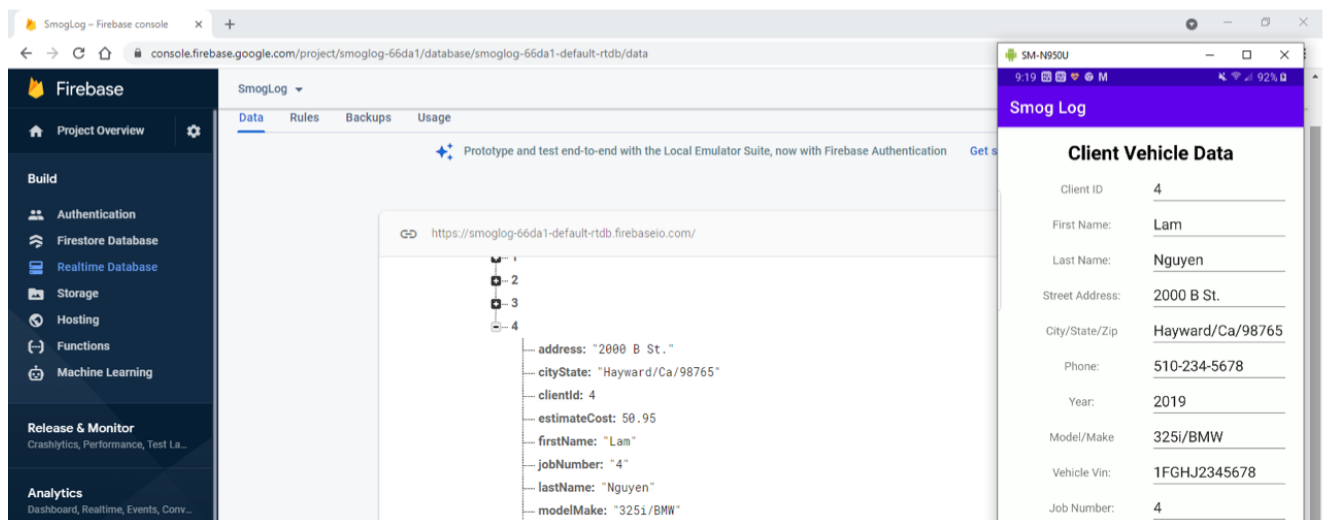
Use Collections in Java to implement Data Structures need.

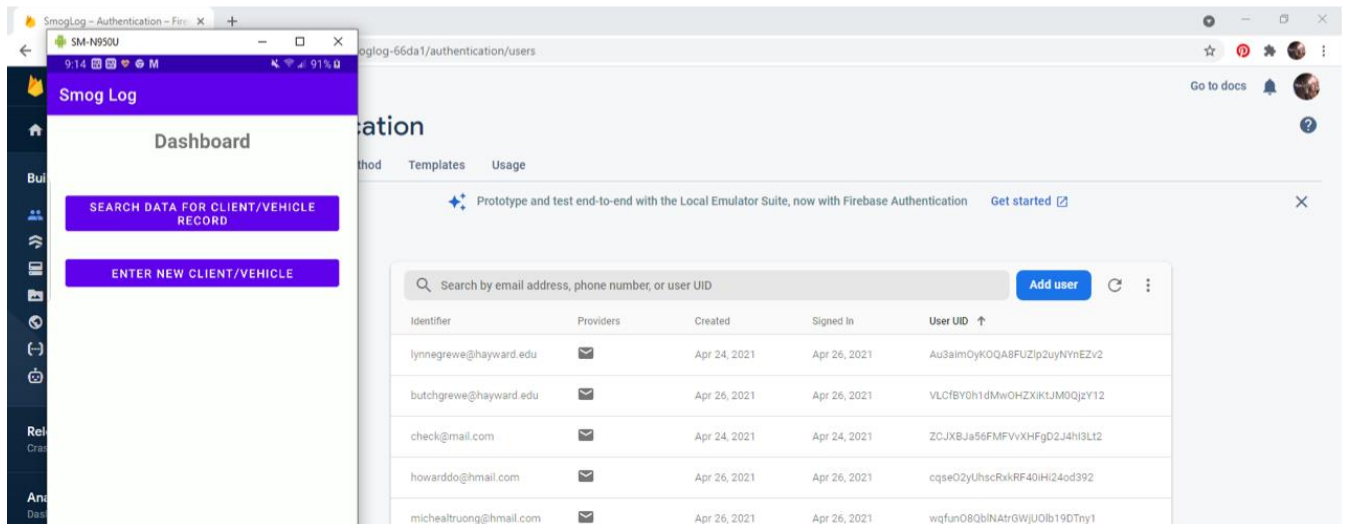
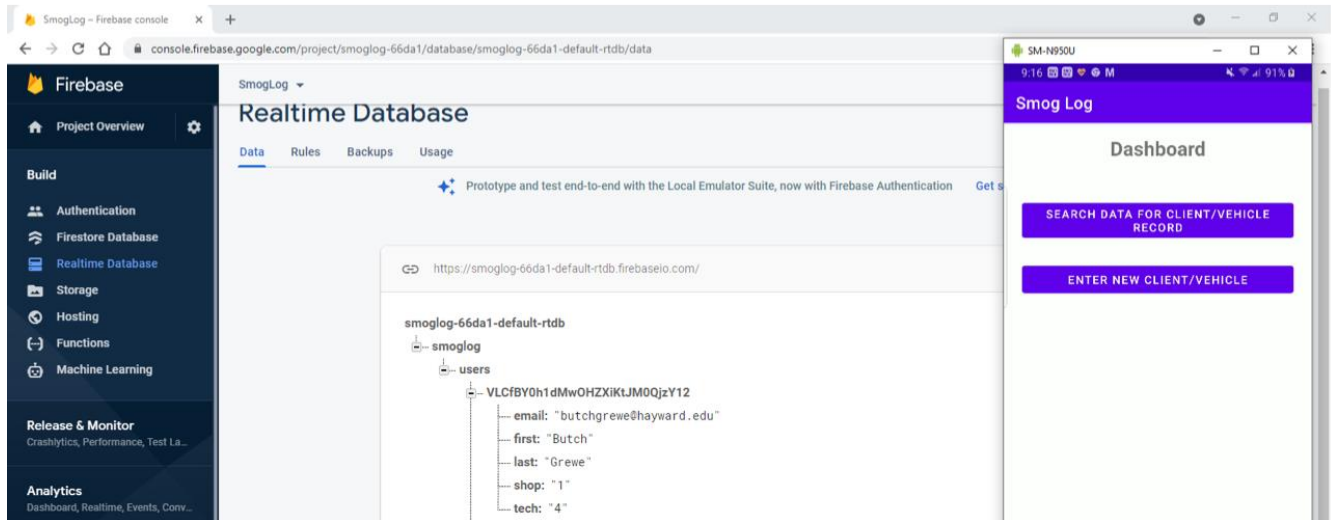
System Architecture

An overview of how the functionality and responsibilities of the system were divided and assigned to subsystems.

- Firebase is user for storing and retriving data

Screenshot/Proof of Code





SmogLog - Authentication - Fir... X

console.firebase.google.com/project/smoglog-66da1/authentication/users

Firestore Database

Realtime Database

Storage

Hosting

Functions

Machine Learning

Release & Monitor

Analytics

Authentication

Sign-in method

Templates

Usage

Prototype and test end-to-end with the Local Emulator Suite, now with Firebase Authentication

Search by email address, phone number, or user UID

Identifier	Providers	Created	Signed in	User UID
lynnegrewe@hayward.edu		Apr 24, 2021	Apr 26, 2021	Au3aimOyK0Q...
check@mail.com		Apr 24, 2021	Apr 24, 2021	ZCJXBJa56FM...
howarddo@gmail.com		Apr 26, 2021	Apr 26, 2021	cqseO2yUhsCR...
michealtruong@gmail.com		Apr 26, 2021	Apr 26, 2021	wqfun08QbINA...

9:13 AM

Smog Log

User Registration

Email

grewe@hayward.edu

Tech ID:

4

Last Name:

Grewe

First Name:

Butch

Shop ID

1

Password:

.....

Re-enter Password:

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