

PROJECT DOCUMENTATION

Author: Rahul P A

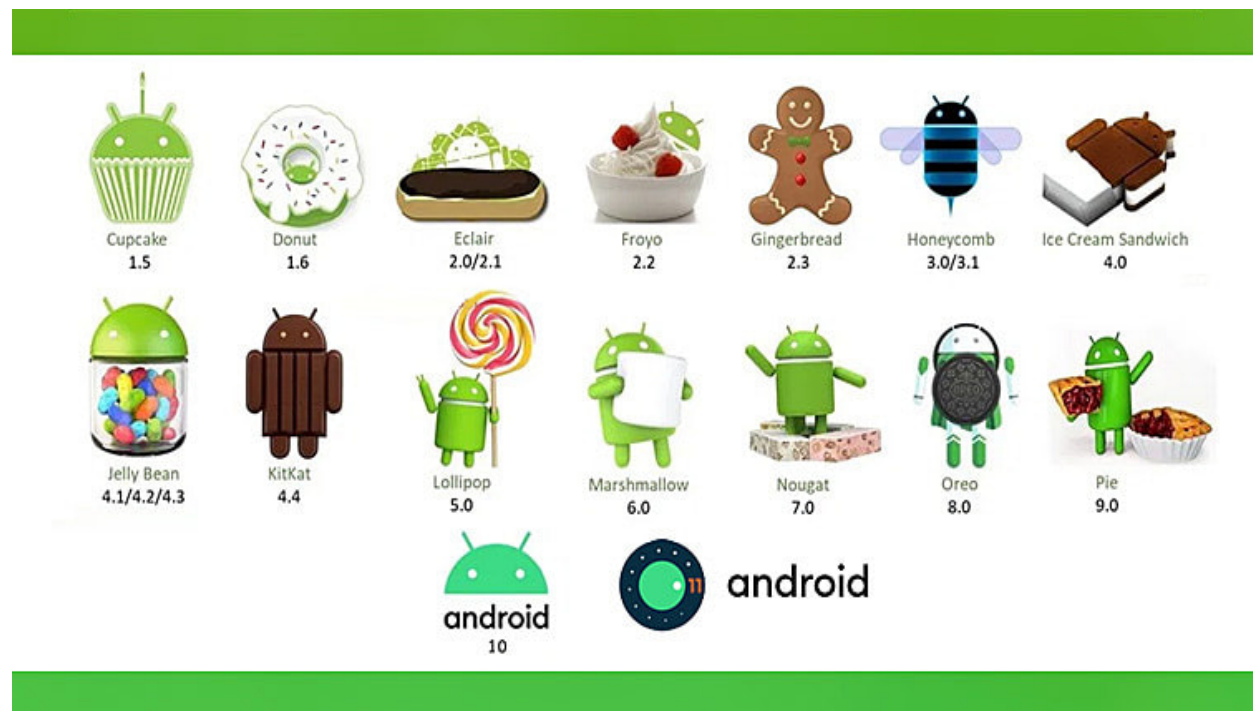
Project Titles: NearBySearch App, Grocery App

OBJECTIVES

1. To build an android application to search near by business using Kotlin
2. To build an android application to make a list of the groceries

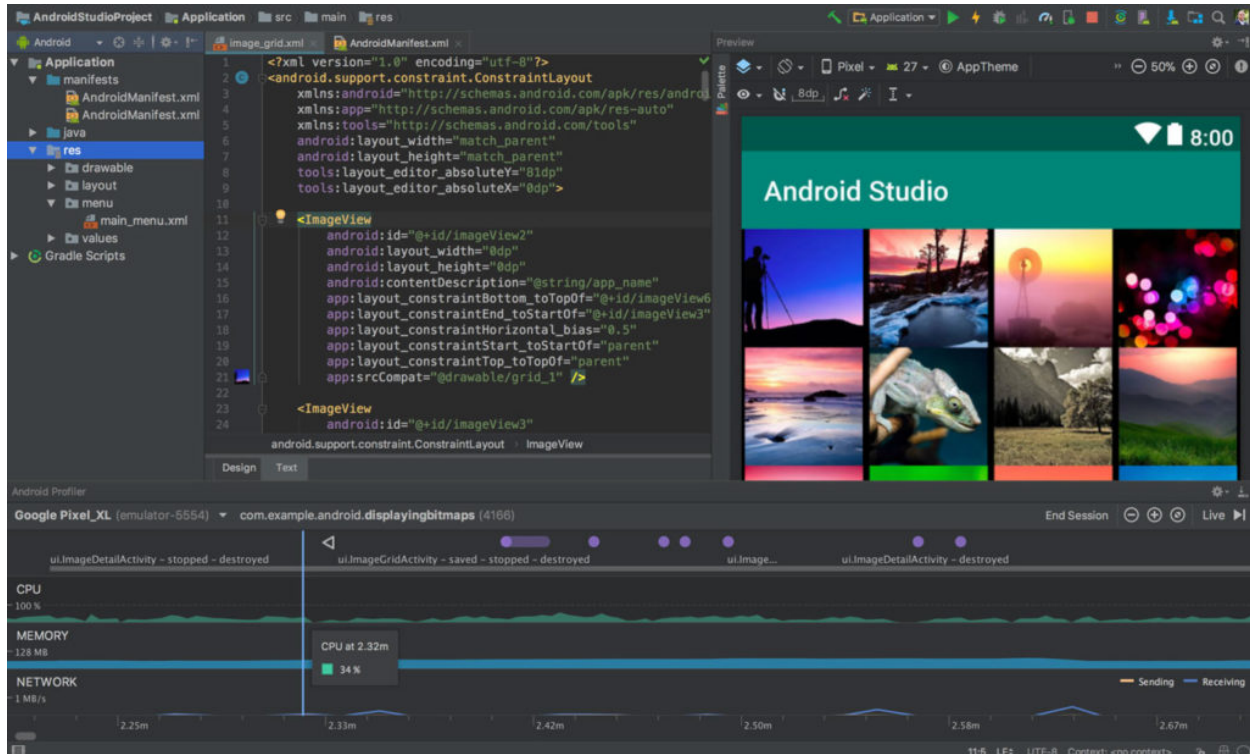
THEORY

Android is a Linux-based operating system designed primarily for touchscreen mobile devices such as smartphones and tablet computers. Initially developed by Android, Inc., which Google backed financially and later bought in 2005. Android is open source and Google releases the code under the Apache License. This open source code and permissive licensing allows the software to be freely modified and distributed by device manufacturers, wireless carriers and enthusiast developers. Additionally, Android has a large community of developers writing applications ("apps") that extend the functionality of devices, written primarily in a customized version of the Java programming language.



Android software development is the process by which new applications are created for the

Android operating system. Applications are usually developed in the Java programming language using the Android Software Development Kit. ADT (Android Development Tools) is the software used to develop android apps. It basically encases Eclipse IDE,which is a multi-language Integrated development environment (IDE) comprising a base workspace and an extensible plug-in system for customizing the environment.. The latest version comes with ADT plugin preinstalled and bundled to the IDE.



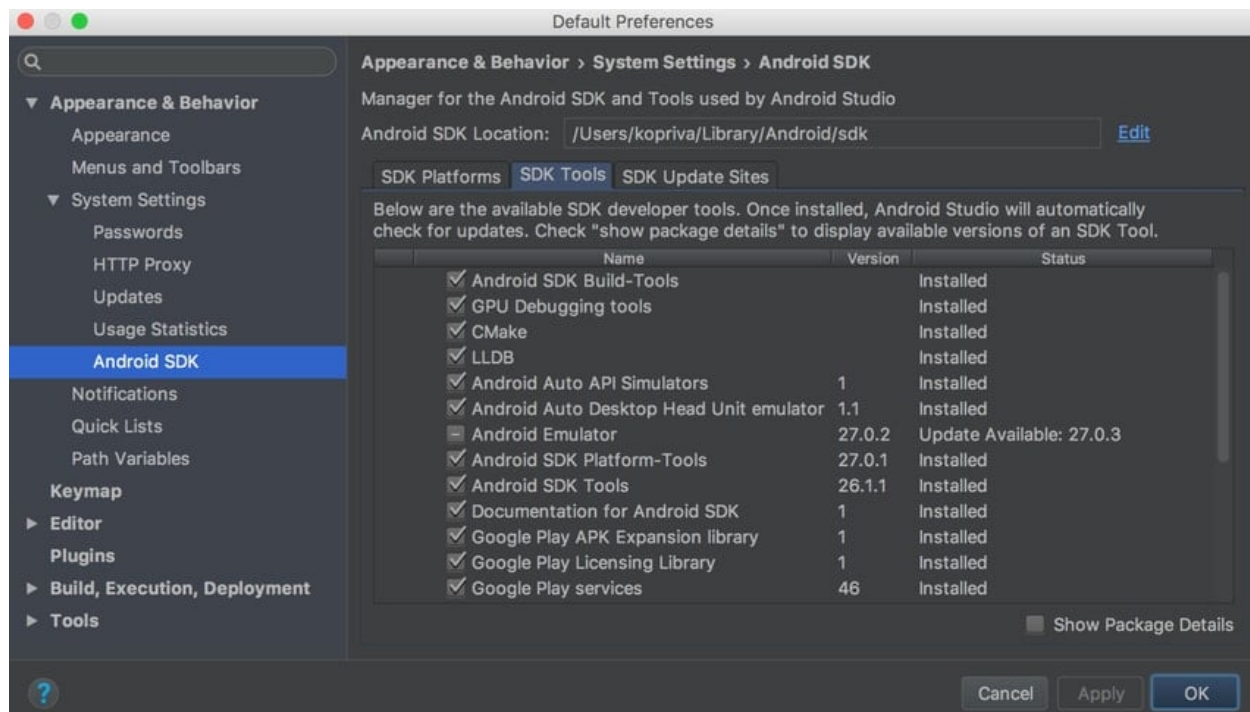
Application programming interface (API) specifies how some software components should interact with each other. In practice in most of the cases an API is a library that usually includes specification for routines, data structures, object classes, and variables. An API specification can take many forms, including an International Standard such as POSIX, vendor documentation such as the Microsoft Windows API, the libraries of a programming language, e.g., Standard Template Library in C++ or Java API.

Google APIs

Google APIs can be downloaded from Google Code, Google's site for developer tools, APIs

and technical resources. The Google Data API] allow programmers to create applications that read and write data from Google services. Currently, these include APIs for Google Apps, Google Analytics, Blogger, Google Base, Google Book Search, Google Calendar, Google Code Search, Google Earth, Google Spreadsheets, Google Notebook, and Picasa Web Albums.

SDK (Software Development Kit or "devkit") is typically a set of software development tools that allows for the creation of applications for a certain software package, software framework, hardware platform, computer system, video game console, operating system, or similar development platform. It may be something as simple as an application programming interface (API) in the form of some files to interface to a particular programming language or include sophisticated hardware to communicate with a certain embedded system. Common tools include debugging aids and other utilities often presented in an integrated development environment (IDE). In the latest version of ADT, the android SDK adds on to the IDE automatically as soon as you unzip and load the IDE. SDK Manager enables us to download Google APIs and use them in our code



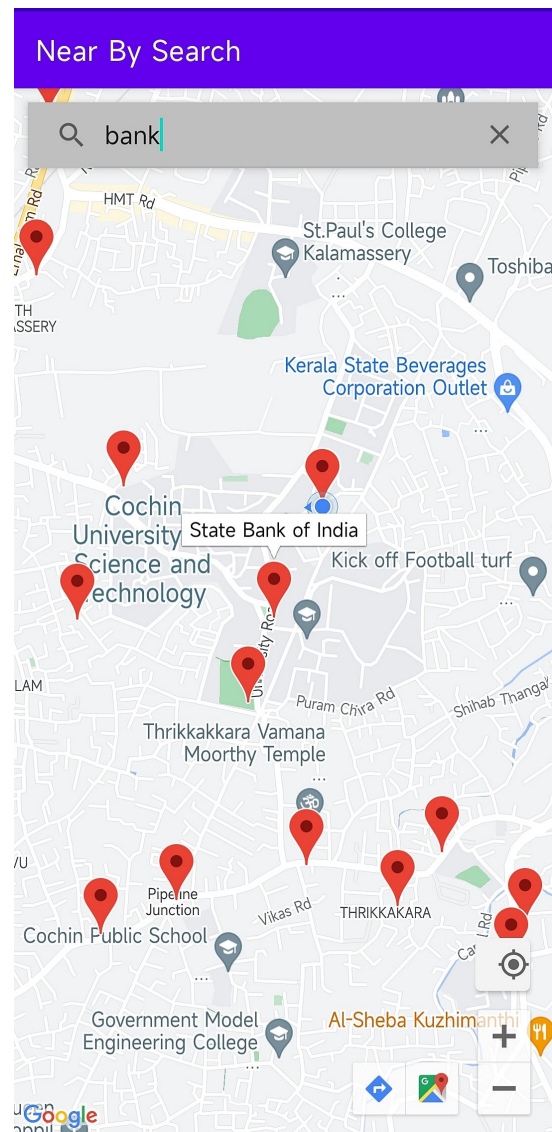
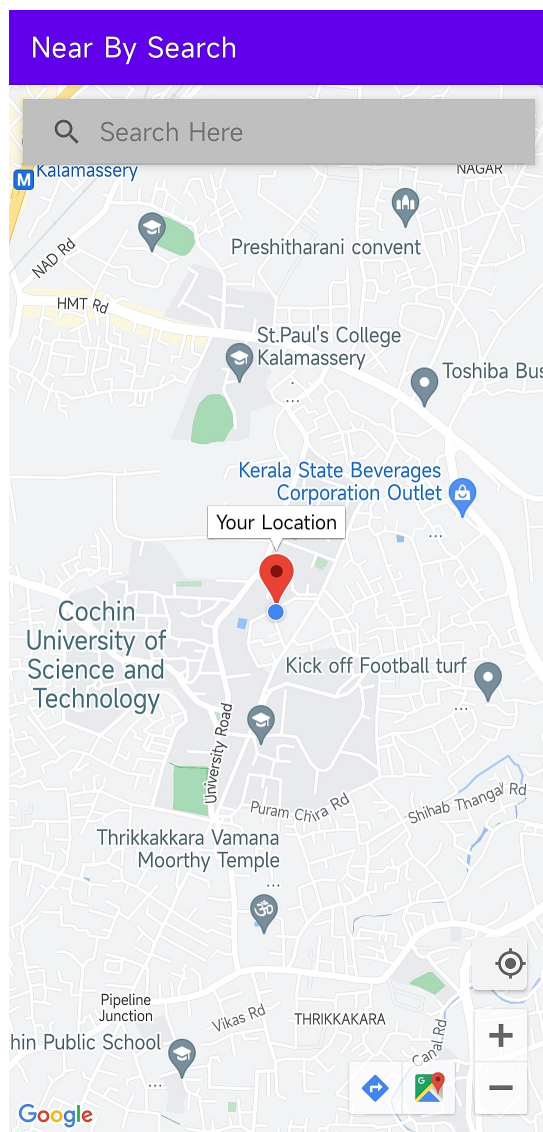
Android Virtual Device (AVD) manager enables us to launch virtual android devices/ emulators in our PC and run the app in the emulator, and at the same time we can track and debug each app activity from the Logcat in our IDE.

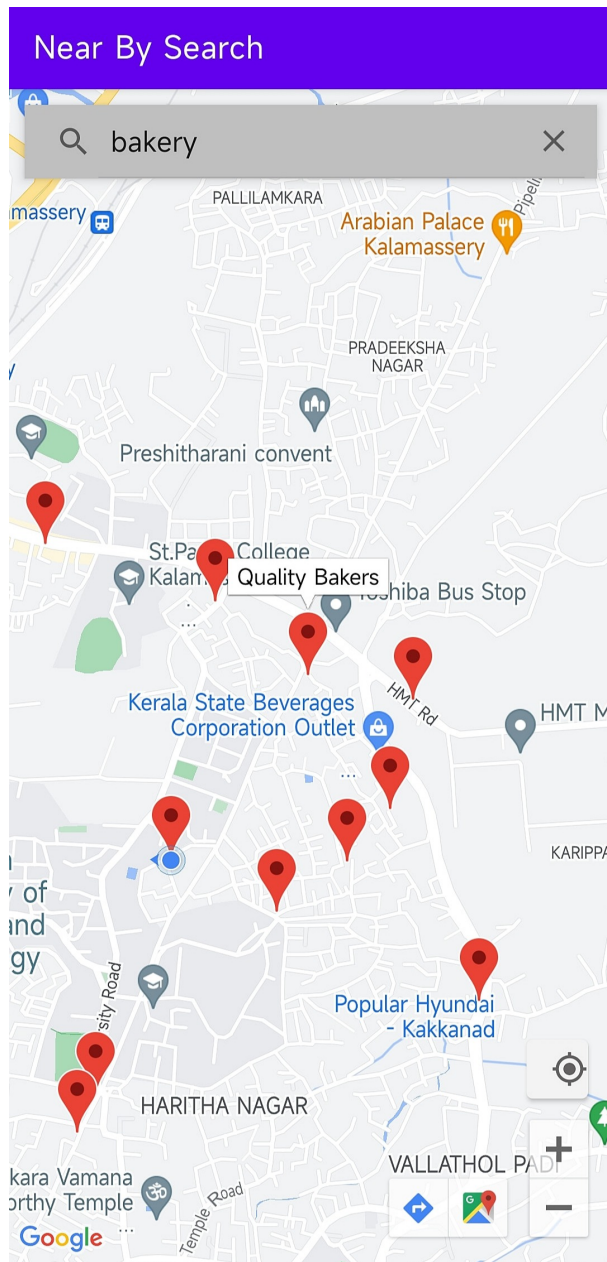
PROJECT 1 - NEARBYSEARCH APP

Overview

NearBySearch is an android application where the user can search for his nearby locations based on his requirement. Whenever the user gives input of business type like a hotel, petrol pumps, hospitals, etc. using Place API and as a response we obtain the co-ordinates that are marked on the Google map.

Screen Shots





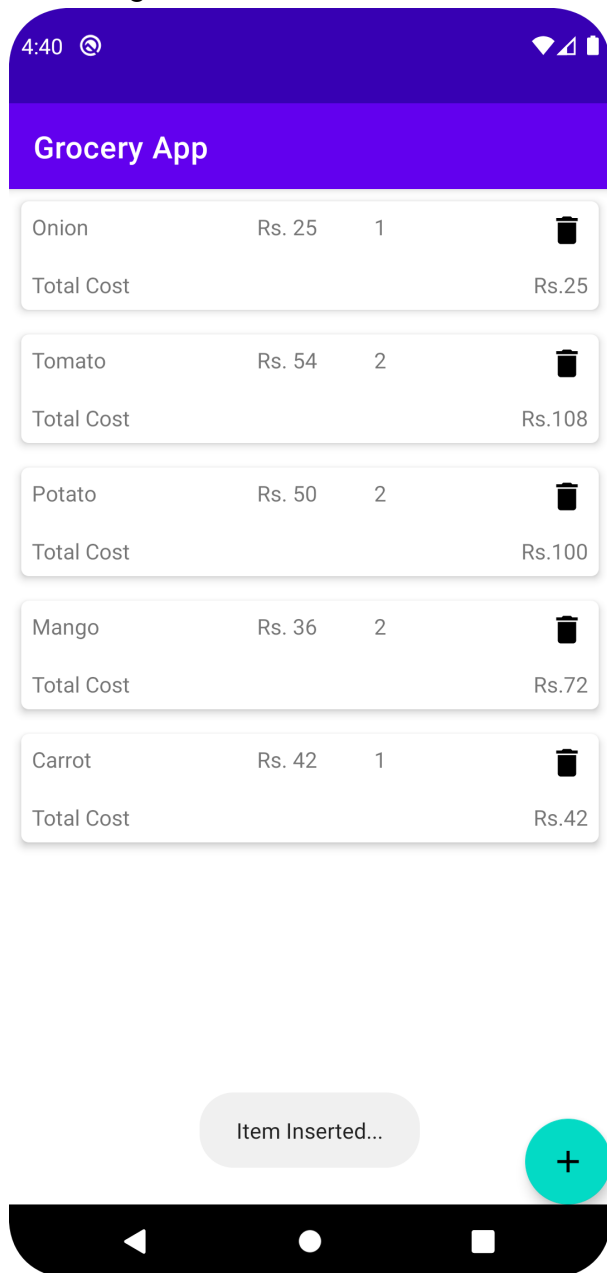
PROJECT 2 - GROCERY APP

Overview

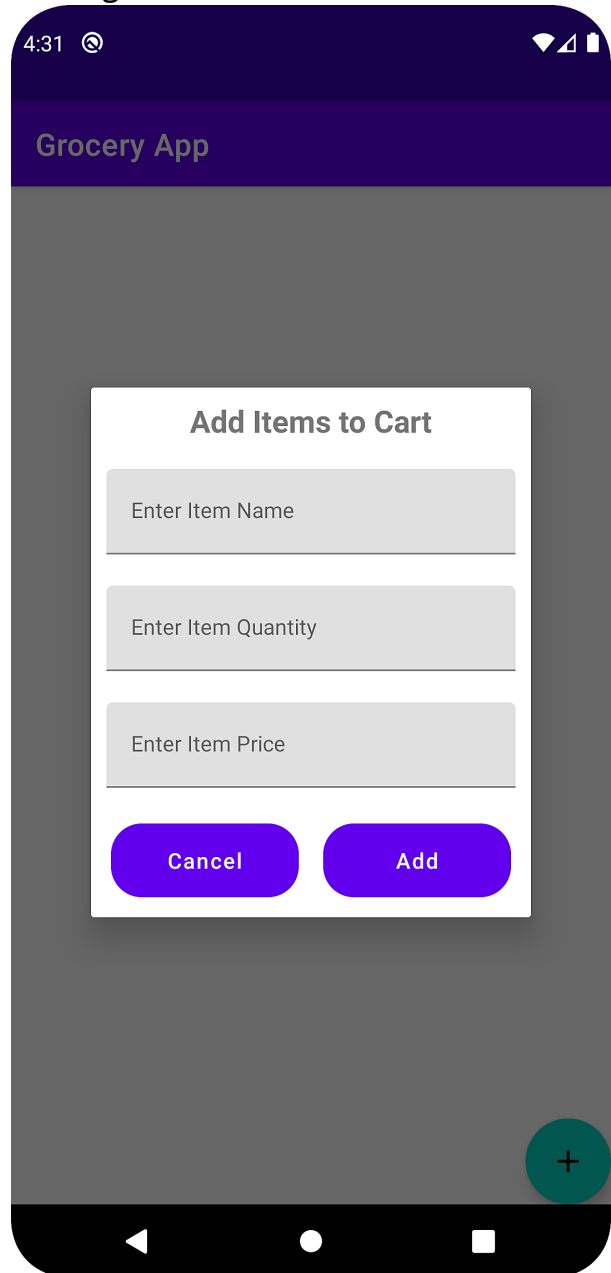
As we can't remember everything, users frequently forget to buy the things they want to buy. However, with the assistance of this app, you can make a list of the groceries you intend to buy so that you don't forget anything.

Screen Shots

Home Page



Adding an item



Deleting an Item

