A

Report

On

RETAIL-SHOP APP using Android Studio

In the partial fulfillment of the term-work for

Course: Mobile Communication System (Sem-VII)

In

Final Year EXTC Engineering

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INTRODUCTION:

Android is an open source and Linux-based Operating System for mobile devices such as smartphones and tablet computers. Android was developed by the Open Handset Alliance. Android offers a unified approach to application development for mobile devices.

Android powers hundreds of millions of mobile devices in more than 190 countries around the world. It's the largest installed base of any mobile platform and growing fast. Every day more than 1 million new Android devices are activated worldwide. This growth is due to the various features:

- ➢ Android OS basic screen provides a beautiful and intuitive user interface.
- ➢ It also provides various connectivity such as GSM/EDGE, CDMA, Bluetooth, Wi-Fi, LTE, NFC, WiMAX, etc.
- ➢ The storage in Andriod devices is managed by SQLite, a lightweight relational database.

Building a basic E-COMMERCE app which helps you to buy electronics & furniture online.

ABSTRACT:

This work deals with development of android-based e-commerce app which basically helps users to be organized during their shopping. This app is developed keeping in mind the ease for people to order furniture and electronics from the comfort of their home. Just by clicking on the product and adding it to the cart the user is able to manage their shopping without keeping track of the price and totaling each product prize in the end; this is because the app developed handles all these requirements thus making the experience Hassell free. The retail shop app also generates a graph corresponding to the product frequently bought.

SOFTWARE USED:

Android Studio

Android Studio is the official integrated development environment (IDE) for Android application development. It is based on the IntelliJ IDEA, a Java integrated development environment for software, and incorporates its code editing and developer tools. To support application development within the Android operating system, Android Studio uses a Gradle-based build system,

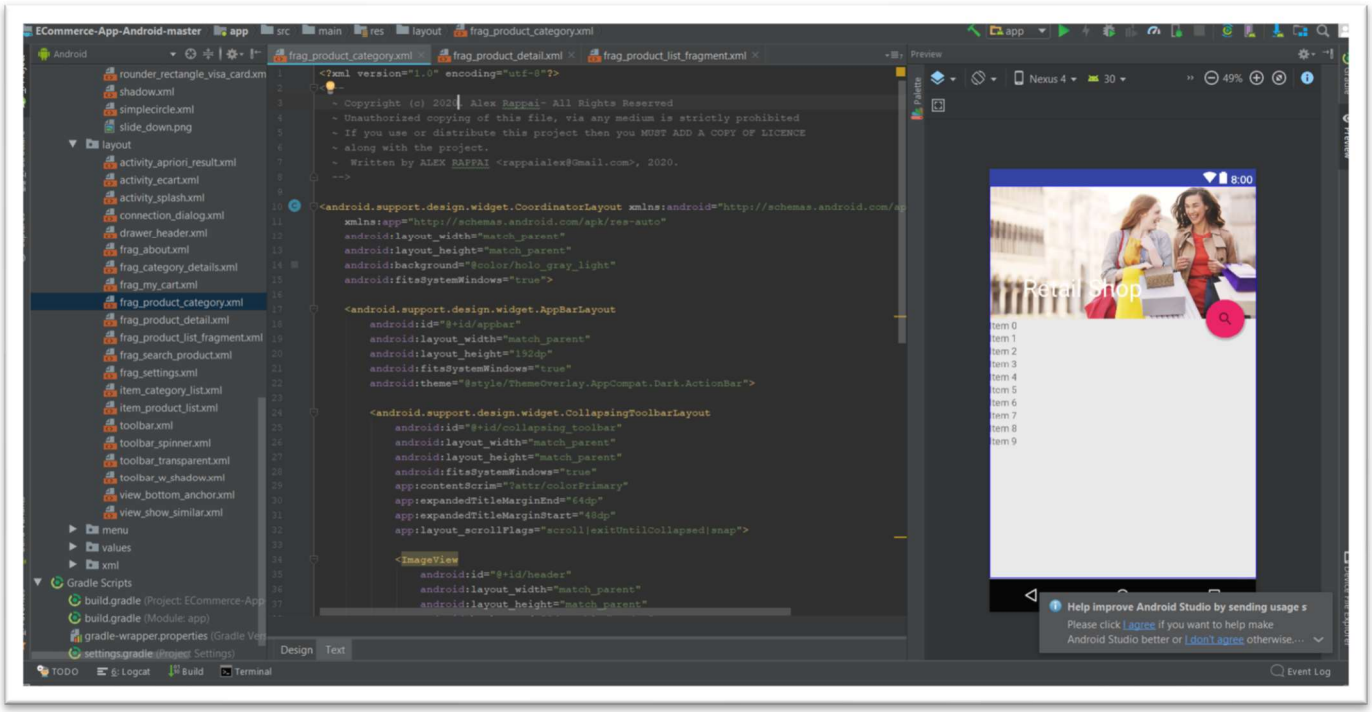
emulator, code templates, and Github integration. Every project in Android Studio has one or more modalities with source code and resource files. These modalities include Android app modules, Library modules, and Google App Engine modules.

INTERFACE AND CODING:

In this app, we have 5 Menu options:

1. HOME:

This option will redirect the user to the homepage of the app where he/she will encounter the categories offered by the app. Currently the app offers two categories **ELECTRONICS** & **FURNITURES.**

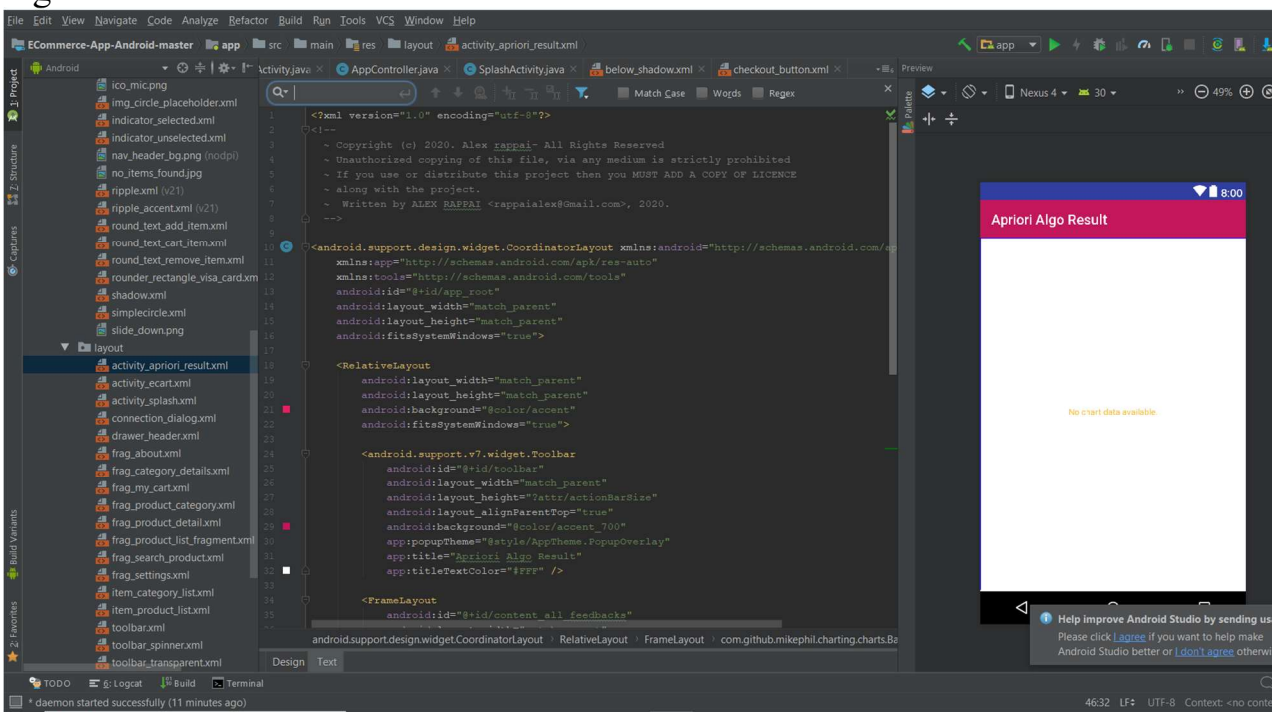


2. My Cart:

This section consists of products the user wishes to purchase at the end of the shopping spree. The My Cart section also calculates the overall price of the products that the user has purchased.

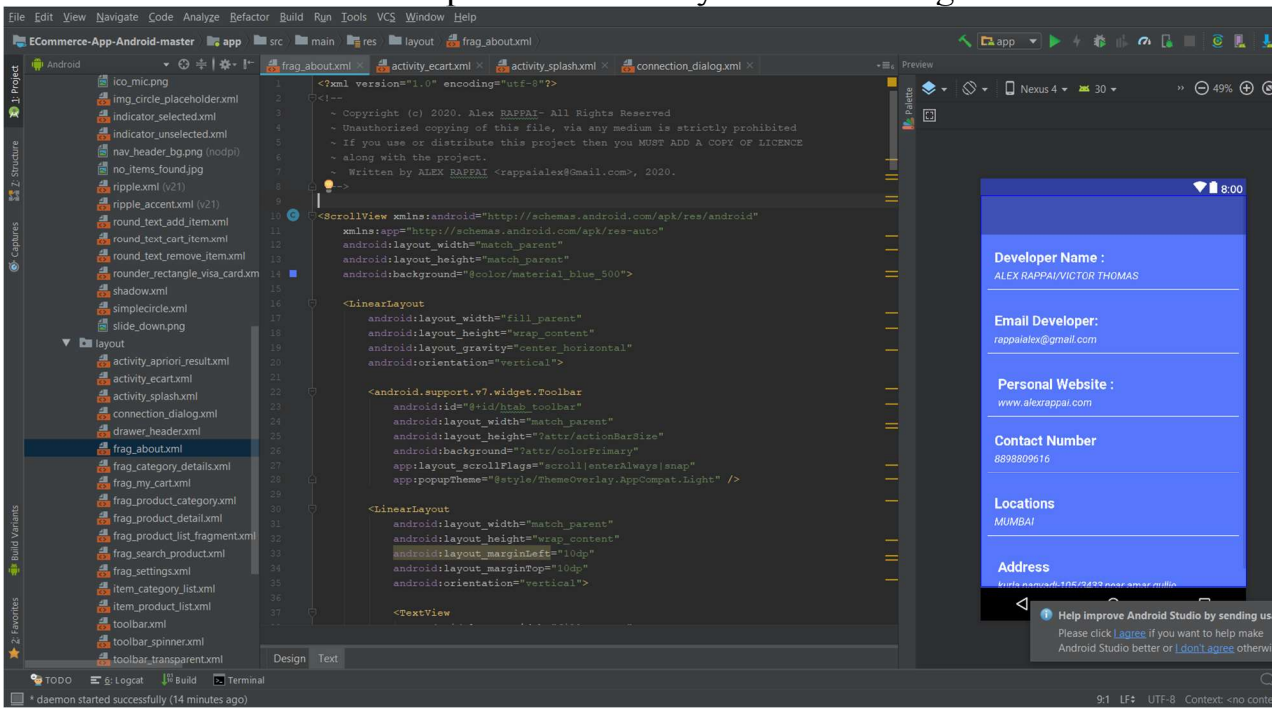
3. Apriori Mining Result:

This is a very unique section that we decided to include in our app. This module provides an analytical insight for the products. Basically what it does is it provides a graph of products that customers buy together. So it mines user data and provides a graph of products that are frequently bought together.



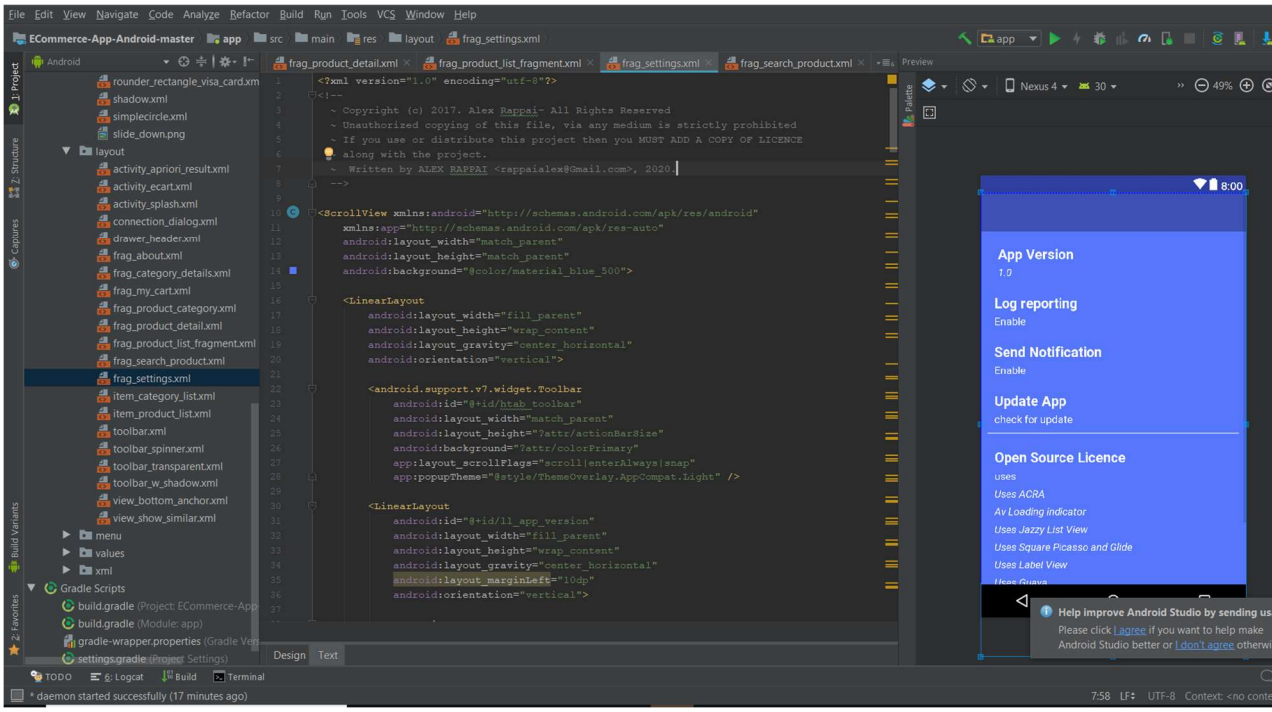
4. Contact Us:

This section is for customer service only. It provides the users with the contact information of developers incase of any difficulties or grievances.



5. Settings:

This option provides the version info and accessibility for the app. Here options like log reporting, notification, app update can be enabled and disabled.

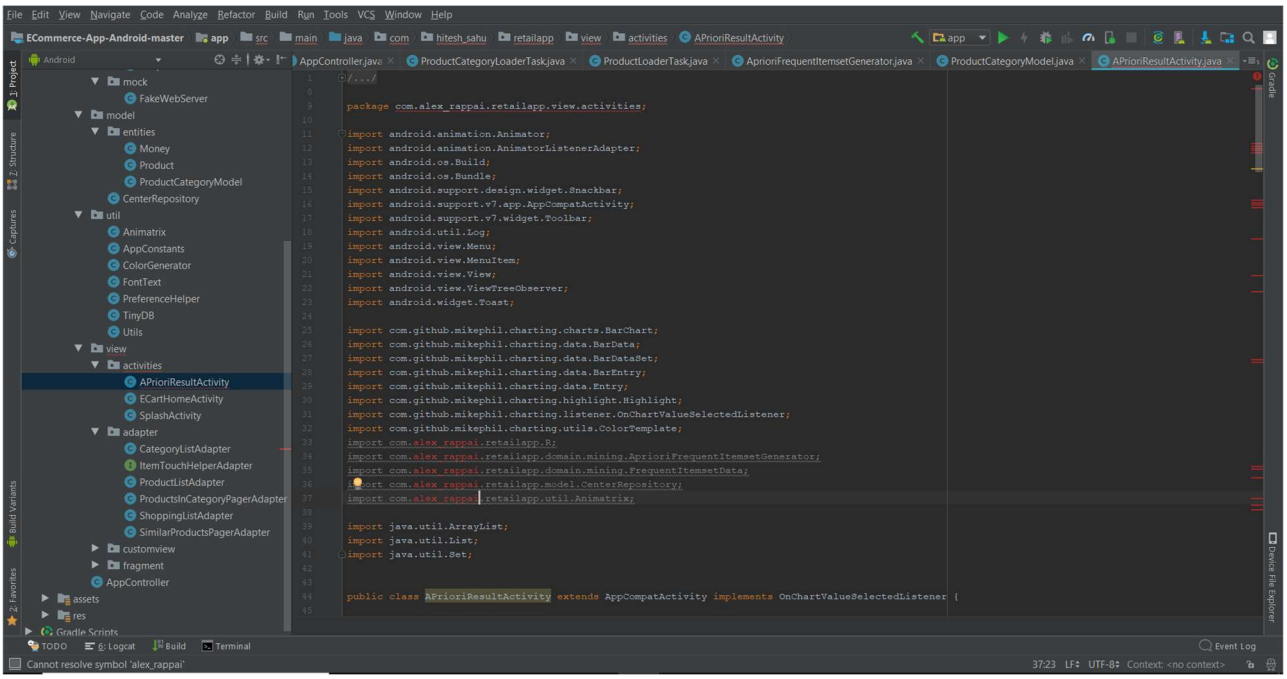


BUTTONS:

Here, each of the above mentioned options have their own buttons; other than these buttons there is a checkout button, when clicked on it will give you a order confirmation popup.

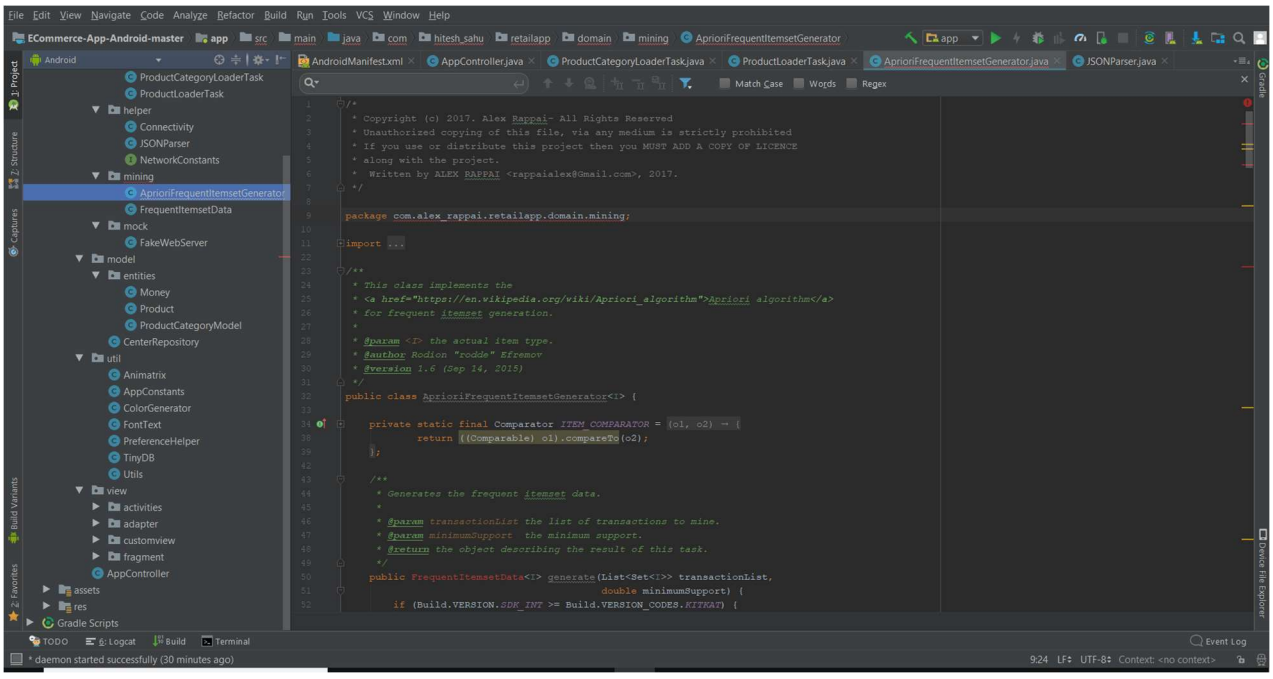
Adding Apriori function in our app

AprioriResultActivity.java

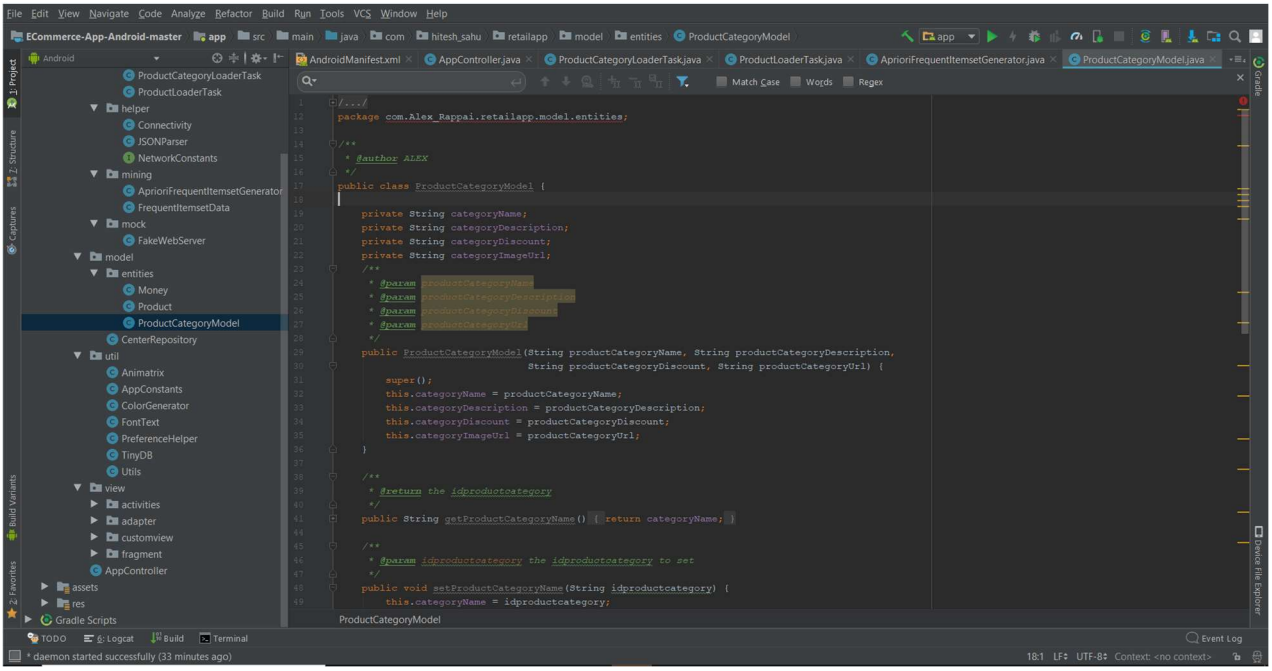


Writing a code for apriori function

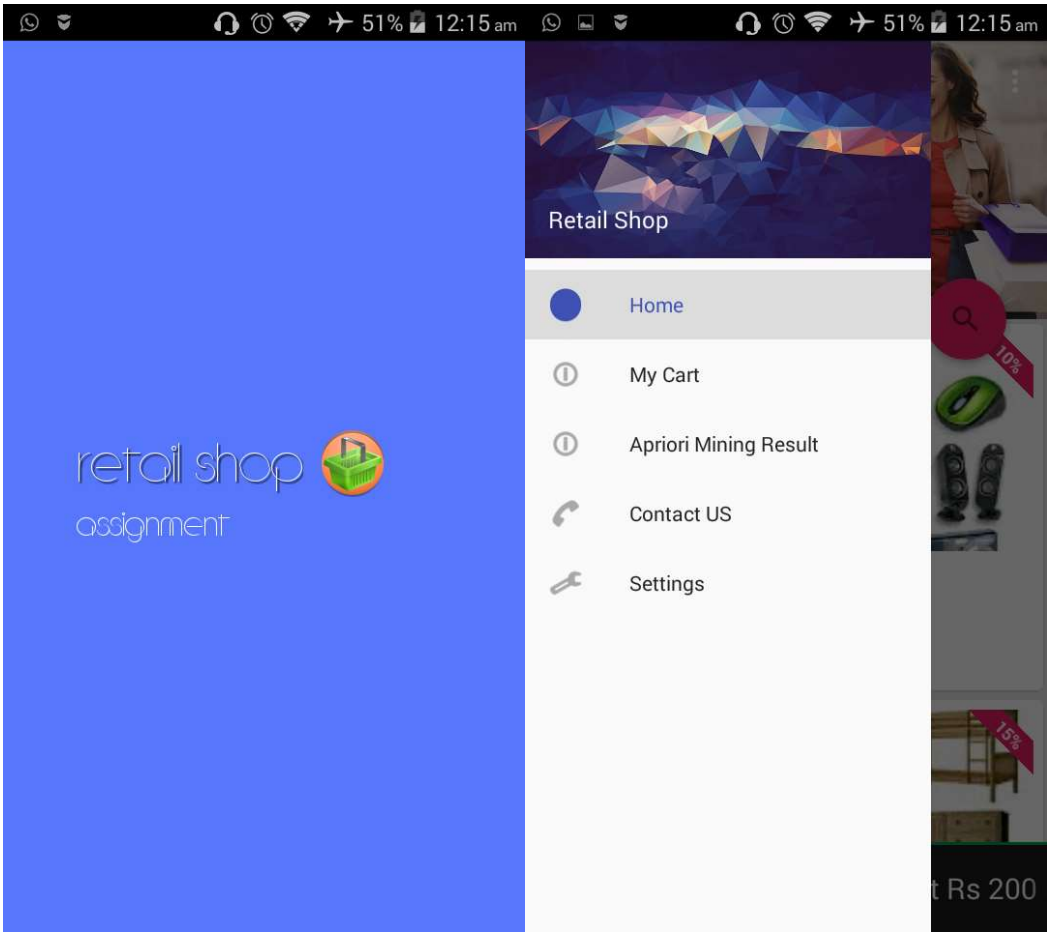
Apriori is an element used by vast number of big companies to improve their customer experience and increase sales by recommending products to customer that are frequently bought together by other users.

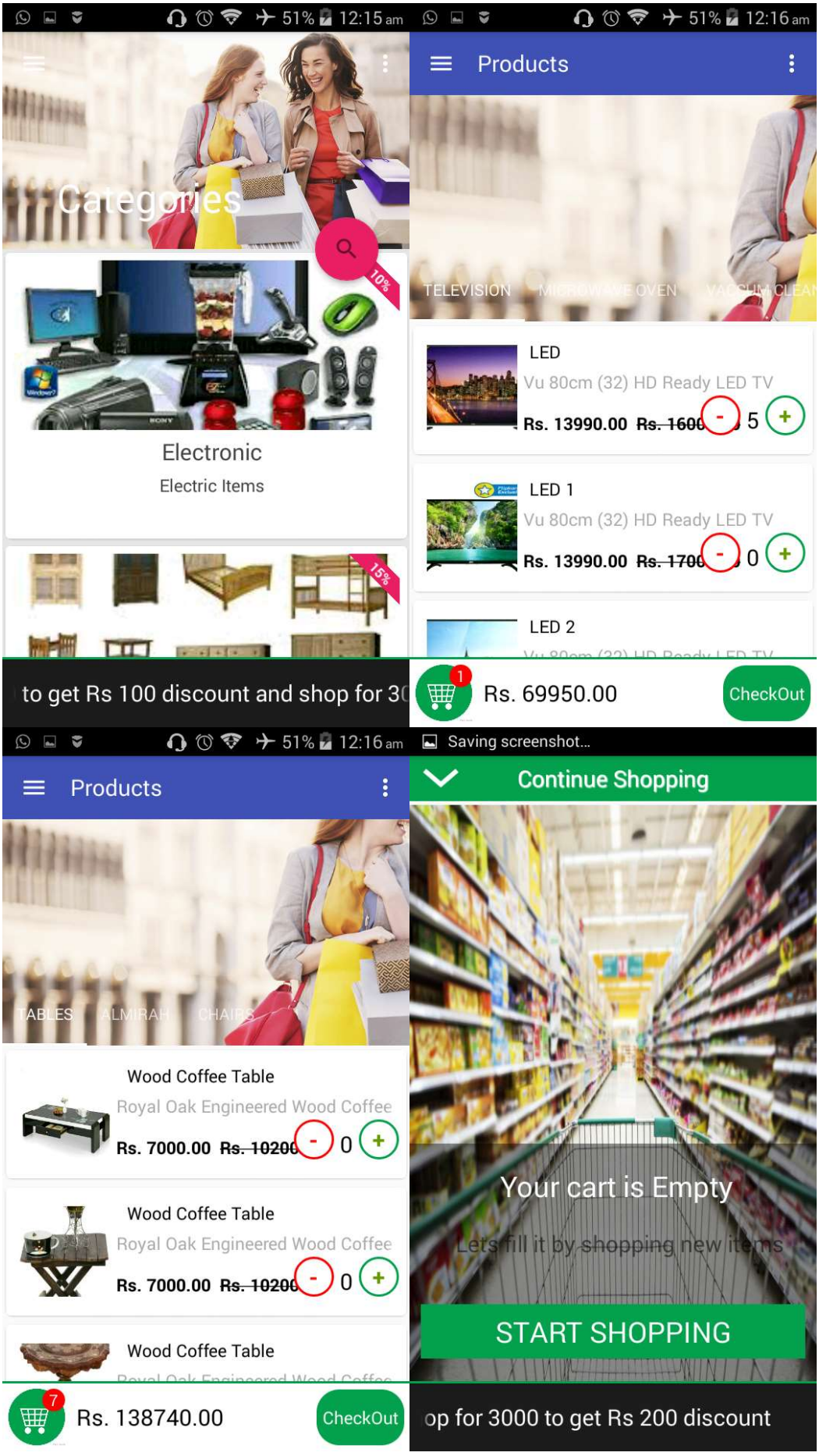


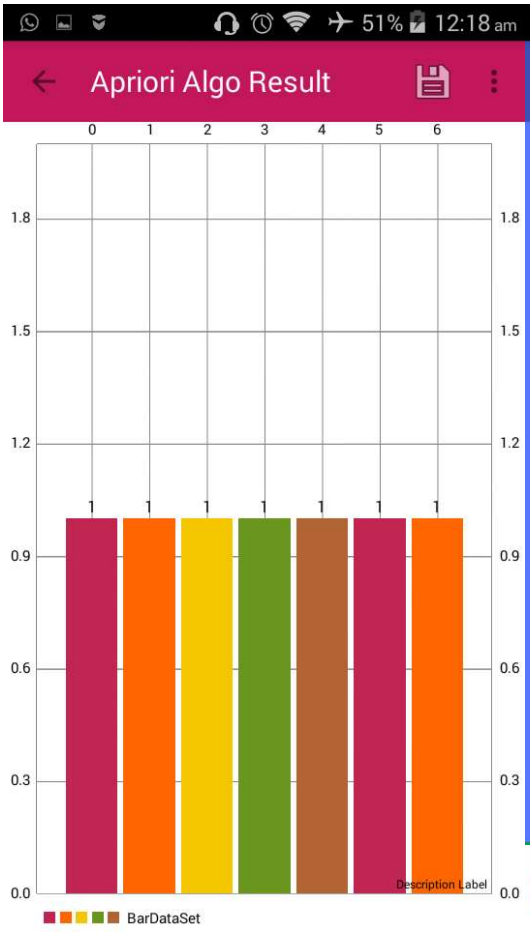
Writing a code for product categorys



OUTPUT:




51% 12:15 am
Categories
10%
Electronic
Electric Items
15%
to get Rs 100 discount and shop for 30
51% 12:16 am
Products
TELEVISION
LED
Vu 80cm (32) HD Ready LED TV
Rs. 13990.00 Rs. 1600
5
LED 1
Vu 80cm (32) HD Ready LED TV
Rs. 13990.00 Rs. 1700
0
LED 2
Rs. 69950.00
CheckOut
51% 12:16 am
Products
TABLES
ALMIRAH
CHAIRS
Wood Coffee Table
Royal Oak Engineered Wood Coffee
Rs. 7000.00 Rs. 10200
0
Wood Coffee Table
Royal Oak Engineered Wood Coffee
Rs. 7000.00 Rs. 10200
0
Wood Coffee Table
Rs. 138740.00
CheckOut
Saving screenshot...
Continue Shopping
Your cart is Empty
Lets fill it by shopping new items
START SHOPPING
op for 3000 to get Rs 200 discount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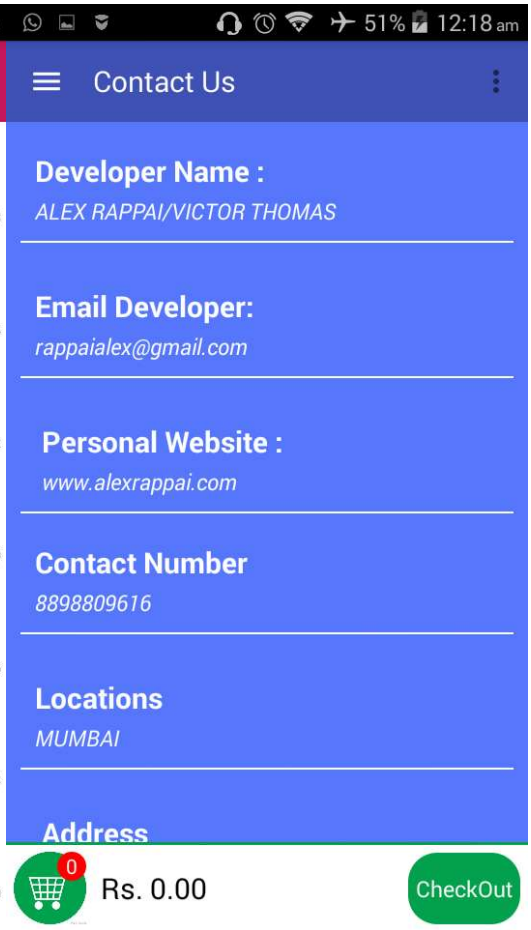
Apriori Algo Result
0 1 2 3 4 5 6
1.8
1.5
1.2
0.9
0.6
0.3
0.0
1 1 1 1 1 1 1
Description Label
BarDataSet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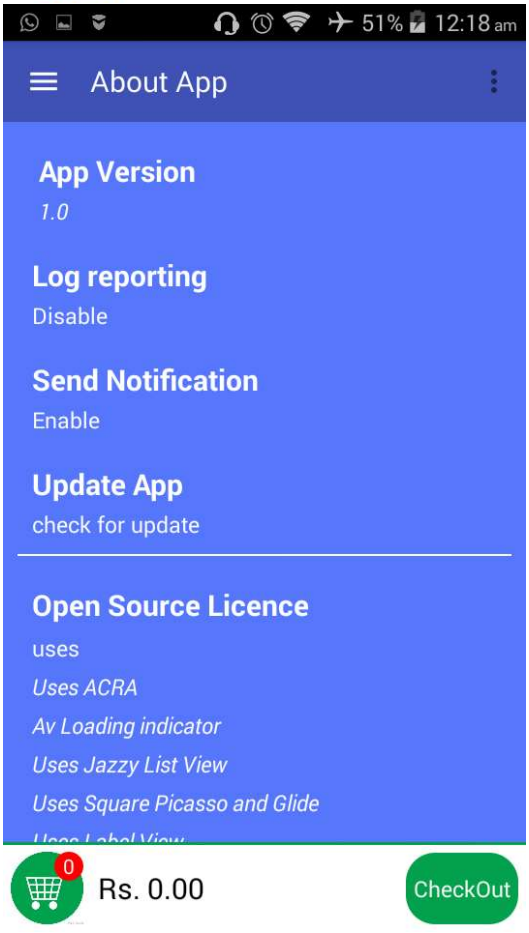
Contact Us
Developer Name :
ALEX RAPPAI/VICTOR THOMAS
Email Developer:
rappaialex@gmail.com
Personal Website :
www.alexrappai.com
Contact Number
8898809616
Locations
MUMBAI
Address
0
Rs. 0.00
CheckOut


51% 12:18 am
About App
App Version
1.0
Log reporting
Disable
Send Notification
Enable
Update App
check for update
Open Source Licence
uses
Uses ACRA
Av Loading indicator
Uses Jazzy List View
Uses Square Picasso and Glide
0
Rs. 0.00
CheckOut

CONCLUSION:

The application developed can be used for e-commerce purpose and also allows the user to look at the analytical graph and decide which other products are being bought by other users making it easier for the customer to make a one time purchase thus qualifying for discounts. We can add other categories in this app, and build a web api for the same.