



East West University

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Section : 01
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Submission Date

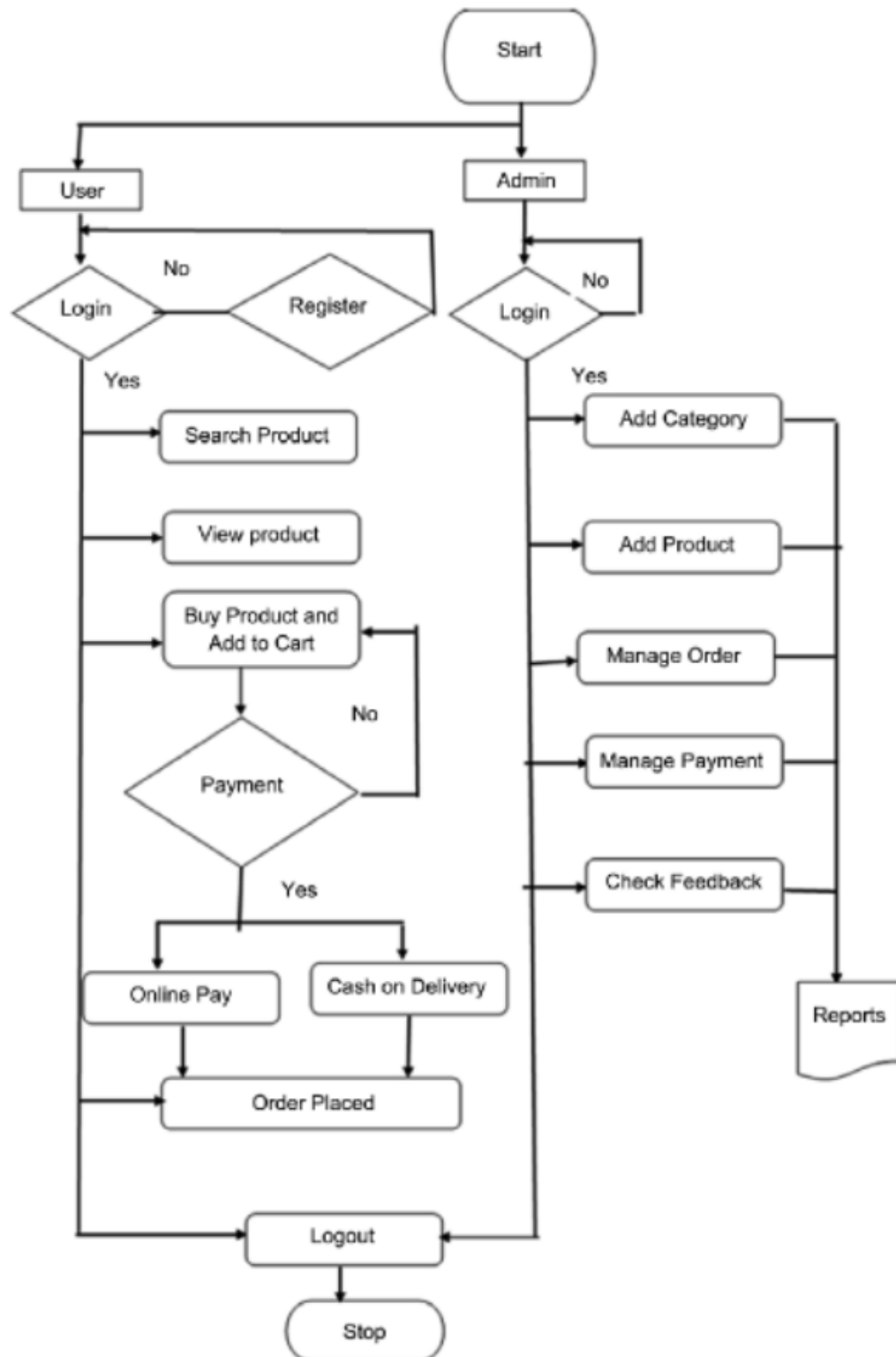
May 8, 2022

Title: Srotodhara E-Commerce client App

Introduction: The term electronic commerce or e-commerce refers to any sort of business transaction that involves the transfer of information through the internet. It also means using the internet and the web for business transactions, commercial transactions, which typically involve the exchange of value across organizational or individual boundaries in return for products and services.

When we first saw a random e-commerce app where you could purchase your favorite items or necessary items very easily (just with a single click), it piqued our interest and thus we tried to make our own version of an e-commerce app named 'Srotodhara'. 'Srotodhara' is a client app where we use firebase for storing data and file.

Flowchart:



Component:

1. Relative layout
2. Edit Text
3. TextView
4. Constraint Layout
5. ImageView
6. App Bar Layout
7. Material Layout
8. Scrool View
9. Navigation View
10. Video View
11. Recycle View
12. Horizontal Scroll View
13. Slide View

Activity:

1. MainActivity
2. BodyandBathActivity
3. ClothLandingActivity
4. CoatWomenActivty
5. CompleteProfileActivty
6. CosmeticActivity
7. DeliveryDetailActivity
8. EnterOTPActivity
9. FragnanceActivity
10. GrownWomenActivity
11. HairCareActivity
12. HijabActivity
13. JacketsWomenActivity
14. KurtisWomenActivity
15. LoginWithEmailActivity
16. LoginWithMobileActivity
17. MenCareActivity
18. OrdersHistoryActivity
19. PantsWomenActivity
20. PersonalCareActivity
21. RegisterWithMailActivity
22. RegisterWithMobileActivity
23. SareeActivity
24. ShalwarKamizActivity
25. ShortsWomenActivity
26. SkinCareActivity
27. SkirtsActivity
28. SweaterWomenActivity
29. TopWomenActivity
30. UnderWearWomenActivity
31. WelcomeScreenActivity

32. WomenActivity2

Adapter:

1. **SliderAdapter:** In Slider Adapter we will slide our images in MainActivity.

```
package com.example.ecommerce;

import android.support.v7.widget.RecyclerView;
import android.view.LayoutInflater;
import android.view.View;
import android.view.ViewGroup;
import android.widget.ImageView;

import java.util.ArrayList;

public class SliderAdapter extends RecyclerView.Adapter<SliderAdapter.Holder> {
    ArrayList<Integer> images;

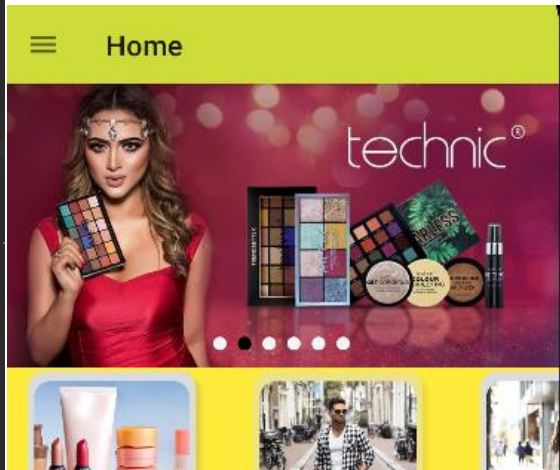
    public SliderAdapter(ArrayList<Integer> images){
        this.images = images;
    }

    @Override
    public Holder onCreateViewHolder(ViewGroup parent) {
        View view = LayoutInflater.from(parent.getContext())
            .inflate(R.layout.slider_item, parent, attachToRoot: false);
        return new Holder(view);
    }

    @Override
    public void onBindViewHolder(Holder viewHolder, int position) {
        viewHolder.imageView.setImageResource(images.get(position));
    }

    @Override
    public int getItemCount() { return images.size(); }

    public class Holder extends RecyclerView.ViewHolder{
        ImageView imageView;
        public Holder(View itemView){
            super(itemView);
            imageView = itemView.findViewById(R.id.image_view);
        }
    }
}
```



2. **FirestoreRecycleAdapter:** This is one type of RecyclerView adapters offered by the FirebaseUI for Firestore. It binds the results of a query to a recyclerview while responding to all the real-time events. This Adapter is implemented in almost all class where recyclerview is used.

```
implementation "com.firebaseui:firebase-ui-firestore:8.0.1"
```

Include the Firebase UI library as a dependency in your gradle file

```
query = firestore.collection(collectionPath: "coat_women").orderBy(field: "Price", Query.Direction.ASCENDING);
FirestoreRecyclerOptions<CosmeticModelClass> options = new FirestoreRecyclerOptions.Builder<CosmeticModelClass>()
    .setQuery(query, CosmeticModelClass.class).build();
```

we use query to read data from our firebase.

```

adapter = new FirestoreRecyclerAdapter<cosmeticModelClass, ProductViewHolder>(options) {
    @NonNull
    @Override
    public ProductViewHolder onCreateViewHolder(@NonNull ViewGroup parent, int viewType) {
        View view = LayoutInflater.from(parent.getContext()).inflate(R.layout.cosmetic_layout, parent, false);
        return new ProductViewHolder(view);
    }

    @Override
    public void onBindViewHolder(@NonNull ProductViewHolder holder, int positions, @NonNull final cosmeticModelClass cosmeticModelClass) {
        holder.title.setText(cosmeticModelClass.getTitle());
        holder.price.setText(cosmeticModelClass.getPrice());
        String pid2= cosmeticModelClass.getPID();
        StorageReference cosmopic = storageReference.child("all_product/"+pid2+".jpg");
        cosmopic.getDownloadUrl().addOnSuccessListener(new OnSuccessListener<Uri>() {
            @Override
            public void onSuccess(Uri uri) {
                Picasso.get().load(uri).into(holder.product_pic);
                //Picasso.get().load(uri).into(edit_pic);
            }
        });

        holder.linearLayout.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                String pid= cosmeticModelClass.getPID();
                String brand = cosmeticModelClass.getBrand();
                String description = cosmeticModelClass.getDescription();
                String capacity = cosmeticModelClass.getCapacity();
                String prices = cosmeticModelClass.getPrice();
                String titles = cosmeticModelClass.getTitle();
            }
        });
    }
};

```

Project update recommended
Android Gradle Plugin can be upgraded.

Finally, we use Adapter to run in recycle View.

```

recyclerView.setHasFixedSize(true);
recyclerView.setLayoutManager(new LinearLayoutManager(context, this));
recyclerView.setAdapter(adapter);
toolbar.setNavigationOnClickListener(new View.OnClickListener() {

```

```

}

@Override
public void onStart() {
    super.onStart();
    adapter.startListening();
}

@Override
public void onStop() {
    super.onStop();
    adapter.stopListening();
}
}

```

The onStart() call makes the activity visible to the user, as the app prepares for the activity to enter the foreground and become interactive. here we calling adapter to show data in recycle view so that we can see the list and able to click the product

Object Class:

Cosmetic Model is used to load data of object from firestore database and call by the adapter class.

```
package com.example.ecommerce;

public class CosmeticModelClass {
    String Brand,Capacity,Description,PID,Price,Title;

    public CosmeticModelClass() {
    }

    public CosmeticModelClass(String brand, String capacity, String description, String PID, String price, String title) {
        Brand = brand;
        Capacity = capacity;
        Description = description;
        this.PID = PID;
        Price = price;
        Title = title;
    }

    public String getBrand() {return Brand;}

    public void setBrand(String brand) {Brand = brand;}

    public String getCapacity() {return Capacity;}

    public void setCapacity(String capacity) {Capacity = capacity;}

    public String getDescription() {return Description;}

    public void setDescription(String description) {Description = description;}

    public String getPID() {return PID;}

    public void setPID(String PID) {this.PID = PID;}

    public String getPrice() {return Price;}

    public void setPrice(String price) {Price = price;}

    public String getTitle() {return Title;}

    public void setTitle(String title) {Title = title;}
}
```

Project update recom
Android Gradle Plug

AndroidManifest:

Here our necessary permission and activity class is declared in it.

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.example.ecommerce">

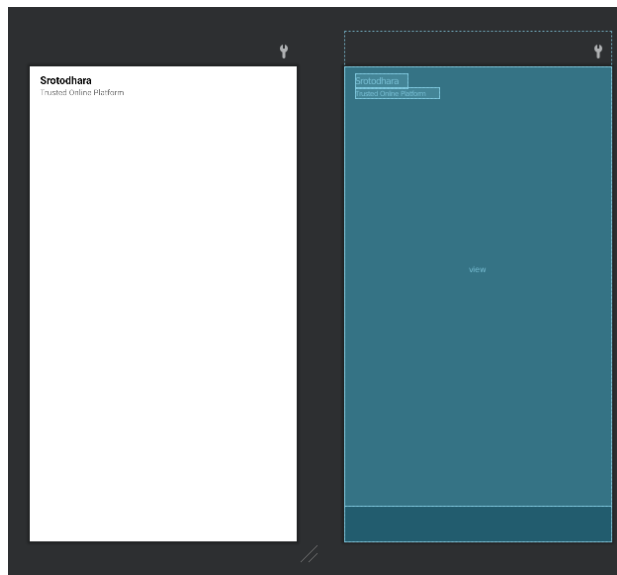
    <uses-feature
        android:name="android.hardware.camera"
        android:required="true" />

    <uses-permission android:name="android.permission.READ_EXTERNAL_STORAGE" />
    <uses-permission android:name="android.permission.INTERNET" />
    <uses-permission android:name="android.permission.ACCESS_WIFI_STATE" />
    <uses-permission android:name="android.permission.READ_PHONE_STATE" />
    <uses-permission android:name="android.permission.ACCESS_NETWORK_STATE" />

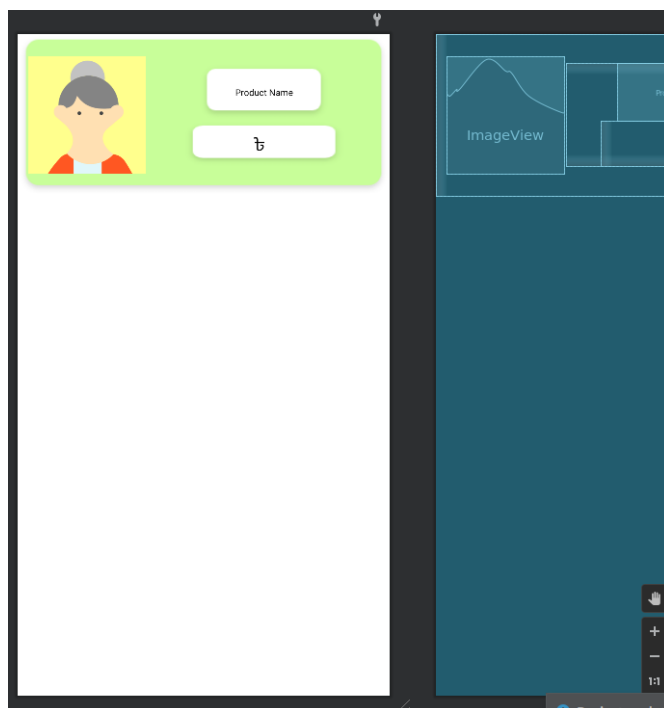
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="E Commerce"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="true"
        android:theme="@style/Theme.ECommerce">
        <activity
            android:name=".OrderHistoryActivity"
            android:exported="false" />
        <activity android:name=".LoginWithEmailActivity" />
        <activity
            android:name=".DeliveryDetailActivity"
            android:exported="true" />
        <activity
            android:name=".ClothLandingActivity"
            android:exported="true" />
        <activity
            android:name=".UnderWearWomenActivity"
            android:exported="true" />
        <activity
            android:name=".JacketsWomenActivity"
            android:exported="true" />
        <activity
```

nav_header.xml:

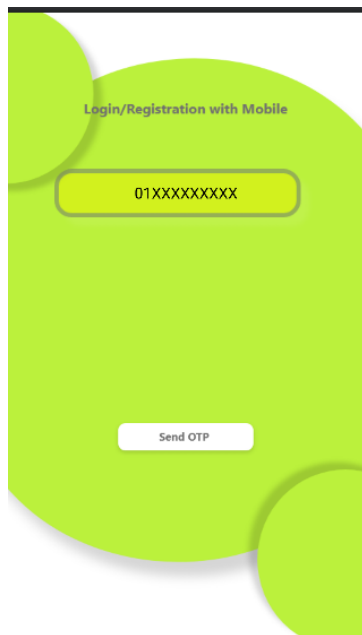
here we constraint layout and text view and reletive layout is used



Cosmetic_layout.xml : here we design list view item. it will use to call in recycle view as a list where we will choose our product. from adapter it will put image and data from firebase storage and firestore.



RegisterWithMobileActivity/LoginWithMobileActivity: in this activity user will Register or Login with their mobile number using firebase AUth feature. if mobile is valid it will go to OTPActivity page for Final Registration and Login. also it passes Mobile number to that activity.



LoginOTPActivity: Here user will Verify his authentication BY giving OTP. It will check OTP to firebase Auth and save info in firestore if needed. here OTP will be check.

```

@Override
public void onVerificationCompleted(PhoneAuthCredential credential) {
    Log.d(ContentValues.TAG, "onVerificationCompleted:" + credential);
}

@Override
public void onVerificationFailed(FirebaseException e) {
    Log.w(ContentValues.TAG, "onVerificationFailed", e);
    Toast.makeText(context, LoginOTPActivity.this, text: "onVerificationFailed: " + e.getMessage(), Toast.LENGTH_LONG).show();
}

@Override
public void onCodeSent(@NonNull String verificationId,
    @NonNull PhoneAuthProvider.ForceResendingToken token) {
    backedotp=verificationId;
    Toast.makeText(context, LoginOTPActivity.this, text: "OTP send Successfully", Toast.LENGTH_LONG).show();

    // Log.d(TAG, "onCodeSent:" + verificationId);
}

};

PhoneAuthOptions options =
    PhoneAuthOptions.newBuilder(firebaseAuth)
        .setPhoneNumber("+88"+getIntent().getStringExtra( name: "mobile")) // Phone number to verify
        .setTimeout(60L, TimeUnit.SECONDS) // Timeout and unit
        .setActivity(LoginOTPActivity.this) // Activity (for callback binding)
        .setCallbacks(mCallbacks) // OnVerificationStateChangedCallbacks
        .build();
PhoneAuthProvider.verifyPhoneNumber(options);

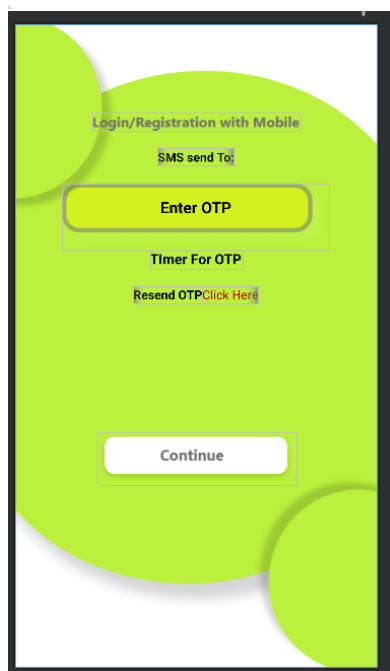
```

here are the Register User

<div> <div> <div> <div> <div></div> </div> <div> <div>Search by email address, phone number, or user UID</div> </div> </div> <div> <div>Add user</div> <div> <div></div> <div></div> </div> </div> </div> </div>				
Identifier	Providers	Created ↓	Signed In	User UID
+8801533839156	📞	Mar 11, 2022	Mar 11, 2022	PQIOu8o55xQhSGiavAHQIpiNGIQ2
+8801558255612	📞	Mar 4, 2022	Apr 25, 2022	YN9rQDXUL4OzHNQhI9GnyxTmM...
+8801685013204	📞	Feb 6, 2022	Feb 6, 2022	tkCmqzXpiOOuUcevtV0yRktEq33
+8801721789053	📞	Jan 20, 2022	Jan 20, 2022	k0uULkTWXNgWdFrhk9r5szmk5...
+8801680990930	📞	Jan 16, 2022	Jan 16, 2022	FeO16T4Rmjgb8MdW2Hj3GJGnB...
sharifahmed1951@gmail.c...	✉	Jan 15, 2022	Jan 15, 2022	LR5cAtU0s6Olu69Alqg0dU7nth73
adipto@gmail.com	✉	Jan 15, 2022	Jan 15, 2022	nB7oPKYx76akountrXRNj0n5po82
+8801825414728	📞	Jan 14, 2022	Jan 14, 2022	TcCRbYqms8frrchIShEF7I7bOil1
adiptoahmed15@gmail.com	✉	Jan 14, 2022	Jan 15, 2022	WTKliwJehPPBNkh2CqhmpXOg5I...
2018-3-60-111@std.ewubd...	✉	Jan 14, 2022	Jan 14, 2022	fM8szAqeaRUsE5cxKbm55uvShuL2

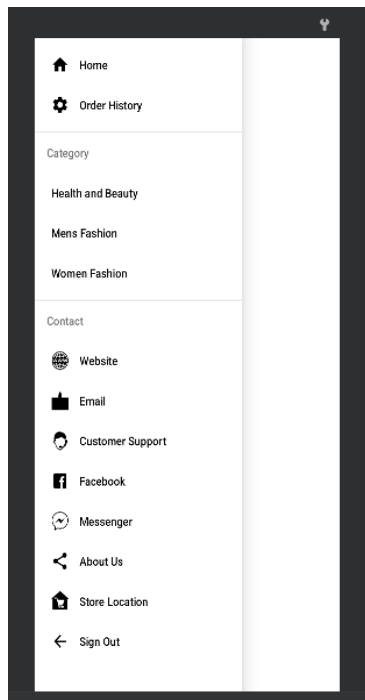
Rows per page: 50

1 – 10 of 10



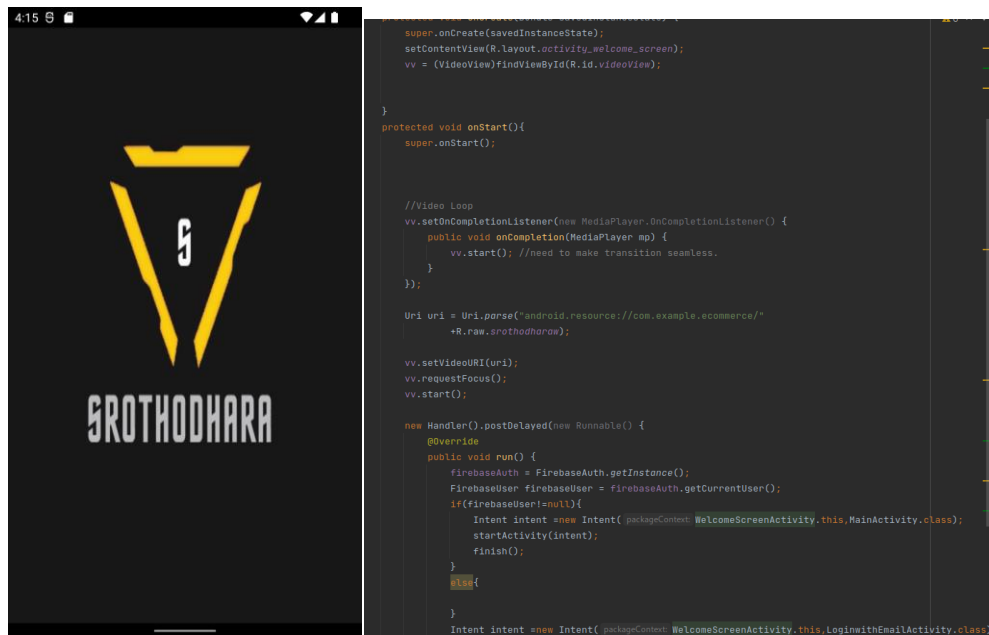
my_navigation_view:

In this navigation bar, it is connected with all activity. here we use navigation bar for navigate . here we use intent to call other apps and other activity.

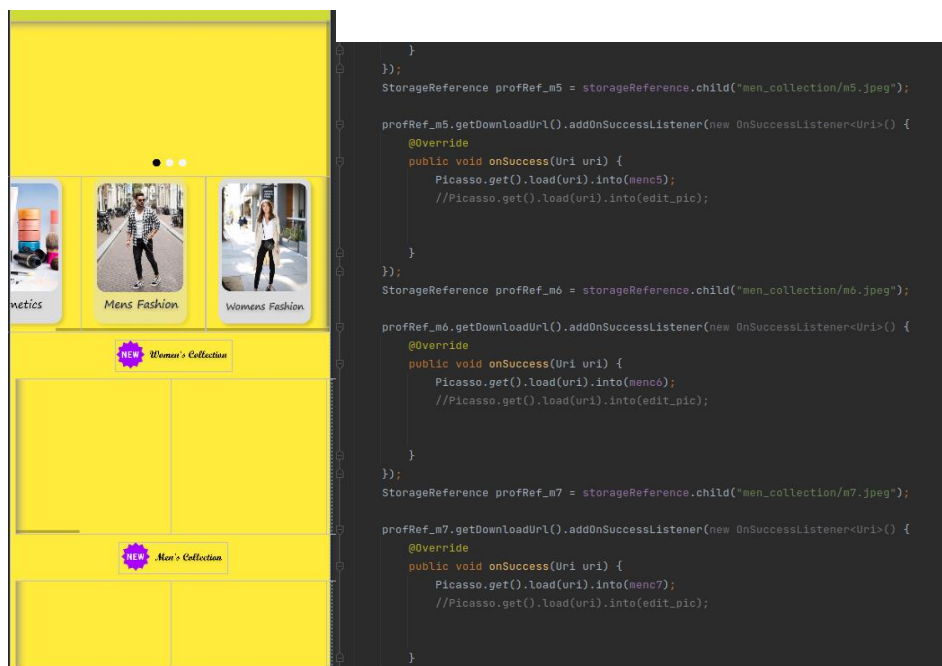


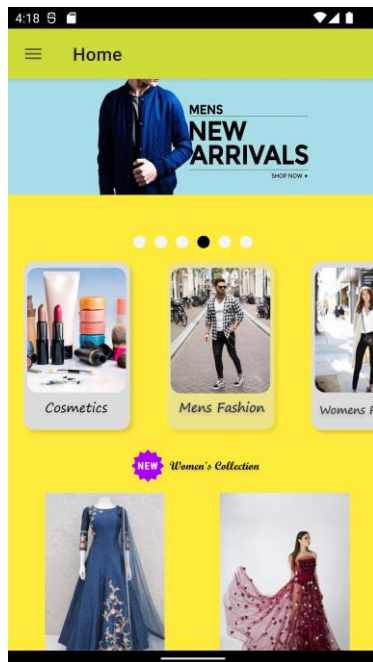
Welcome Activity:

In this Activity ,we play srotodhara.mp4 as a animation for few second. then it will call **LoginWithEmail** will call. if the user is already login. then login authentication will be check in **LoginWithEmail** and it if user is login then it will open **MainActivity**.

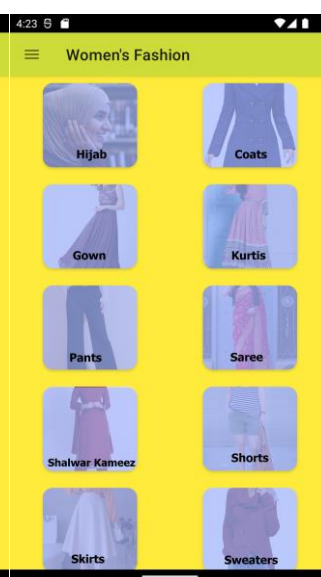
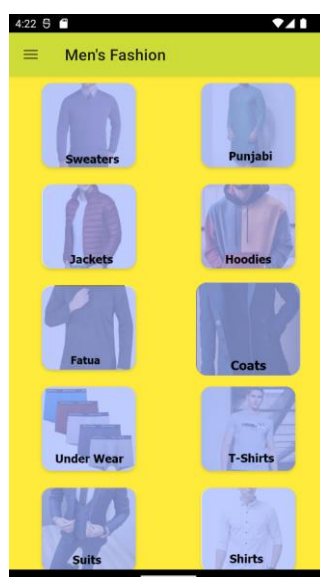
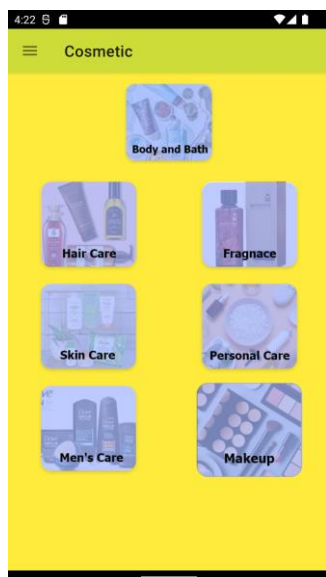


MainActivity: Here we use drawerlayout,LinearLayout,ScrollView. Also Ad and offer picture load from Firebase .

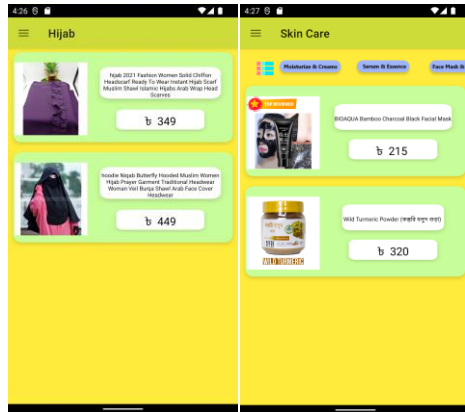




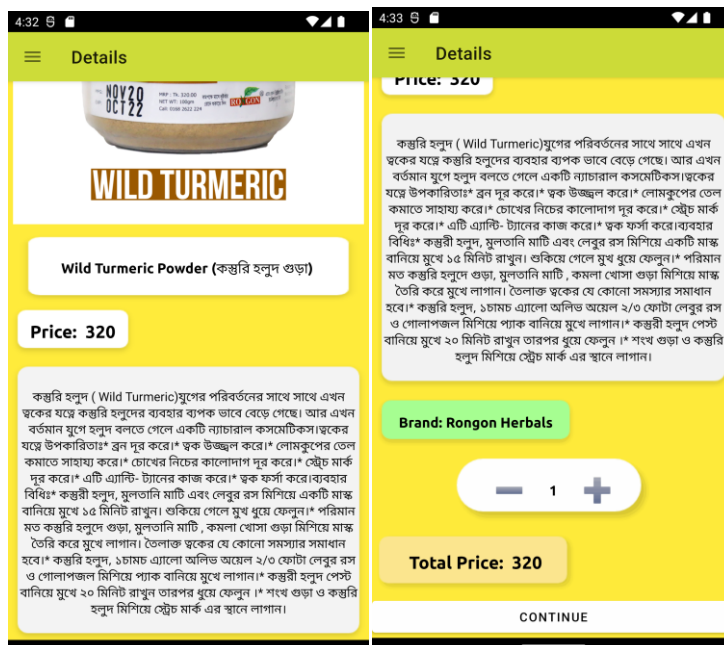
Here when we click Cosmetic,men Fashion , Women Fashion it will open another activity from that we can able to see our product.



From that we can click on of sub Category to show item



when we click on item , it will take detail activity and some data pass to ClothLandingActivity(detail activity) in intent



```

    }
    });
    continues.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {
            Intent intent4 = new Intent( packageContext, ClothLandingActivity.this, DeliveryDetail

            double a= Double.parseDouble(price);
            double total = (a*1)+00;
            last_price= String.valueOf(total);
            intent4.putExtra( name: "pid",pid);
            intent4.putExtra( name: "title",title);
            intent4.putExtra( name: "brand",brand);
            intent4.putExtra( name: "capacity",capacity);
            intent4.putExtra( name: "description",description);
            intent4.putExtra( name: "price",price);
            intent4.putExtra( name: "Quantity",String.valueOf(1));
            intent4.putExtra( name: "total_price",last_price);
            startActivity(intent4);
        }
    });

    MaterialToolbar toolbar = findViewById(R.id.topAppBarLp);
    DrawerLayout drawerLayout = findViewById(R.id.drawer_layout_lp);
    NavigationView navigationView = findViewById(R.id.navigation_lp);

    toolbar.setOnClickListener(new View.OnClickListener() {
        @Override
        public void onClick(View v) {

```

when we click on continue, it will take to payment and information page (Delivery DetailActivity)

4:35

Necessary Information

Address

District

Enter Mobile Number:01XXXXXXXX

Road Number

Block

Area/Thana

Product Size/ Other Info you want to give

Payment Option

☐ Cash On Delivery

☐ Pay on VISA/Master/Mobile Banking

4:36

Block

Area/Thana


Product Size/ Other Info you want to give

Payment Option

☐ Cash On Delivery

☐ Pay on VISA/Master/Mobile Banking

Order Details



Wild Turmeric Powder (কিছুনি
শরৎকর কলাই)

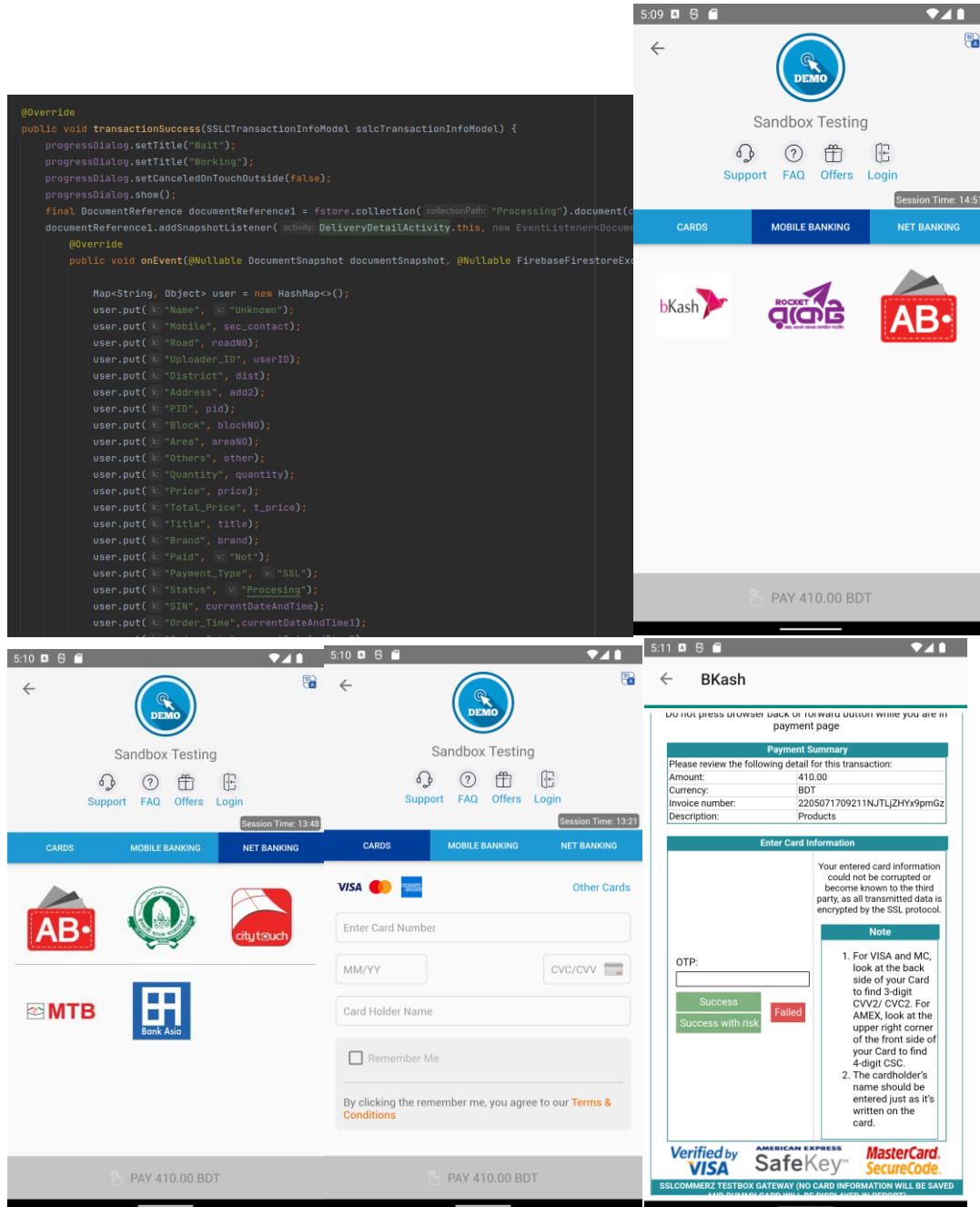
Quantity: 1.0

Delivery Charge: 60

Total Price: 380.0

CONTINUE

After Clicking on continue if online payment is selected, it will take to SSL commerce page that is added to our apps as library. and after successful transaction ,data will be store in firestore in order history. For using SSL Commerce service, We need to create developer account in ssl commerce.



Transactions

Search From
07-05-2022

Search To
07-05-2022

Transaction ID

Bank
Select one

Store
Select one

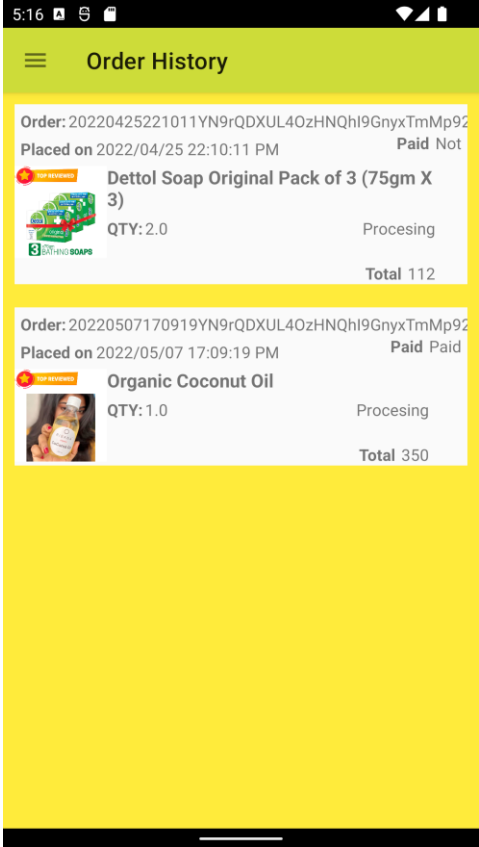
Status
Success Only

Card No

Card Holder Given Name

Search

In Order history:
We see our order is placed



Conclusion: Today’s business must always strive to create the next best thing that consumers will want because consumers continue to desire their products, services etc. to continuously be better, faster and cheaper. E-commerce app is continuously progressing and is becoming more and more important to business as technology continues to advance and is something that should be taken advantage of and implemented. Benefits of e-commerce app are too many to describe, like creating more opportunities for profit and advancements for business while creating more options for the consumers. However, e-commerce app has its disadvantages too including consumer uncertainties, scam ads, site crash, lack of privacy, poor implementation, credit card fraud etc. E-commerce app has a lot of room for growth. In future there might be a scope were through an e-commerce app a person can do more things besides purchasing items.