



# TERA MERA POINT APP (OS)

Section : S4

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# INTRODUCTION

The name of our android app is 'Tera Mera Point'. It is a online food ordering app where we can order food online using our phones .All the students in NU can use this app as the food hub TMP is within our campus . We have made our app using the software named android studio in which we used XML(i.e Extensible markup language) for front end and JAVA for backend.

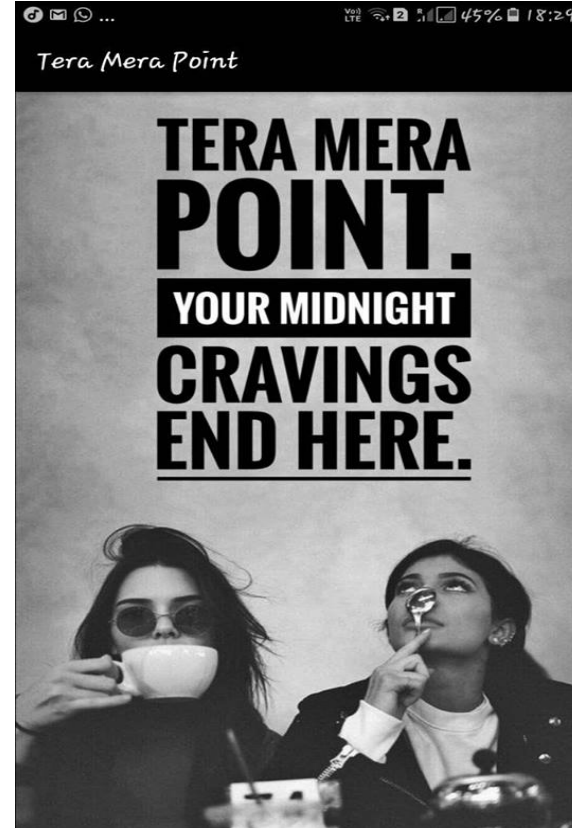


# **FRONT END**

(The front end is made using XML)

## SCREEN 1:

- This is the starting page(Splash Screen) of the app with a visibility of 2 seconds.
- It is made by putting a background image in <relativelayout>.
- The image has been edited in SnapSeed an app by Google.



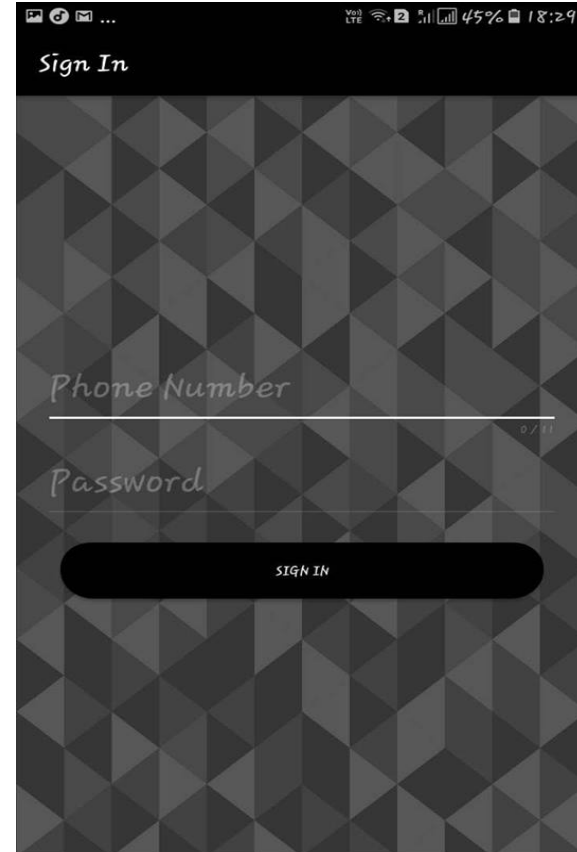
## Screen 2:

- It is the we have used a background image in `<RelativeLayout>`
- We have used 2 `<info.hoang8f.widget.FButton>` for SignIn and SignUp.
- Here the User basically registers himself if he/she is new or Login if he/she is already registered.



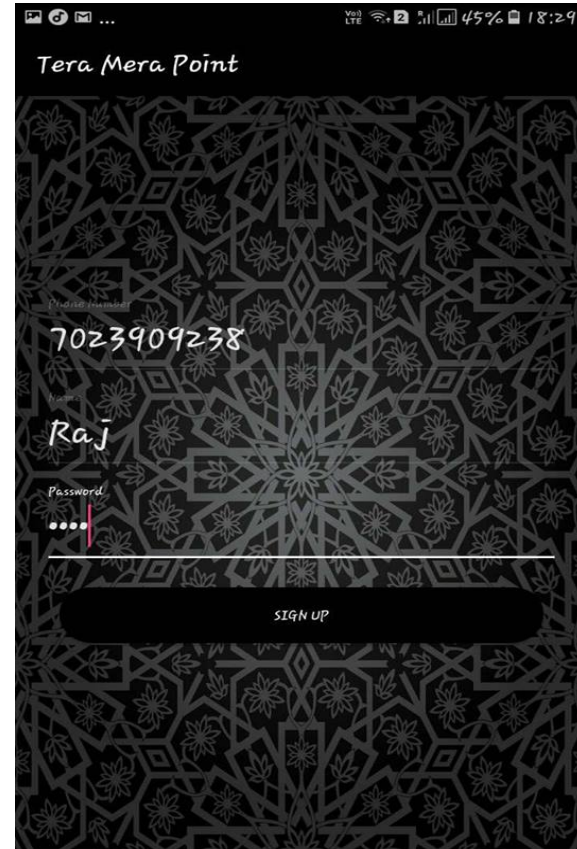
### Screen 3:

- If the user already has account then he or she may log in by entering required details.
- This is the SignIn page.
- We have used the below mentioned attribute for taking input of the SignIn details .
- `<com.rengwuxian.materialEditText.MaterialEditText>`
- The SignIn Details are checked with the details in Firebase.



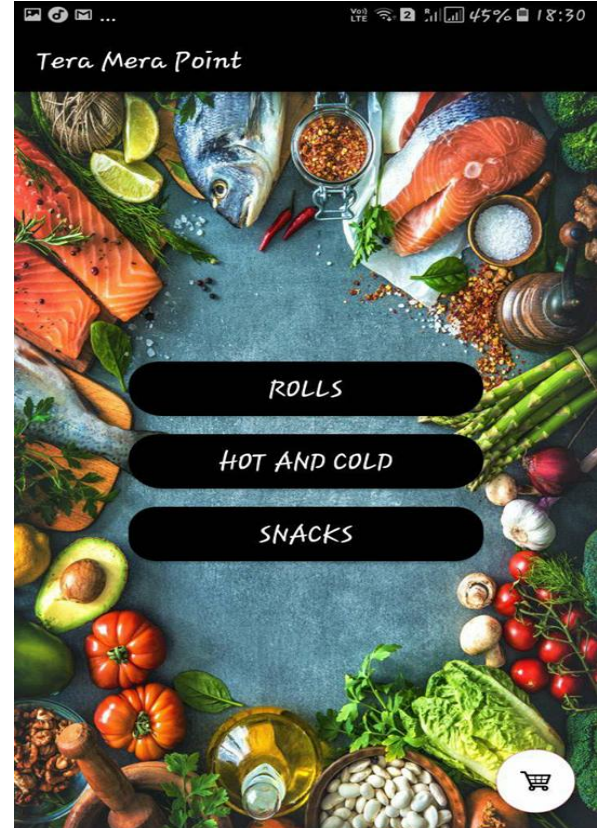
#### Screen 4:

- This is the SignUp page for the new Users.
- We have used `<com.rengwuxian.materialEditText.MaterialEditText>` for taking SignUp details of Users and storing them in firebase database.
- For the the SignUp button ,I have used `<info.hoang8f.widget.FButton>`



## Screen 5:

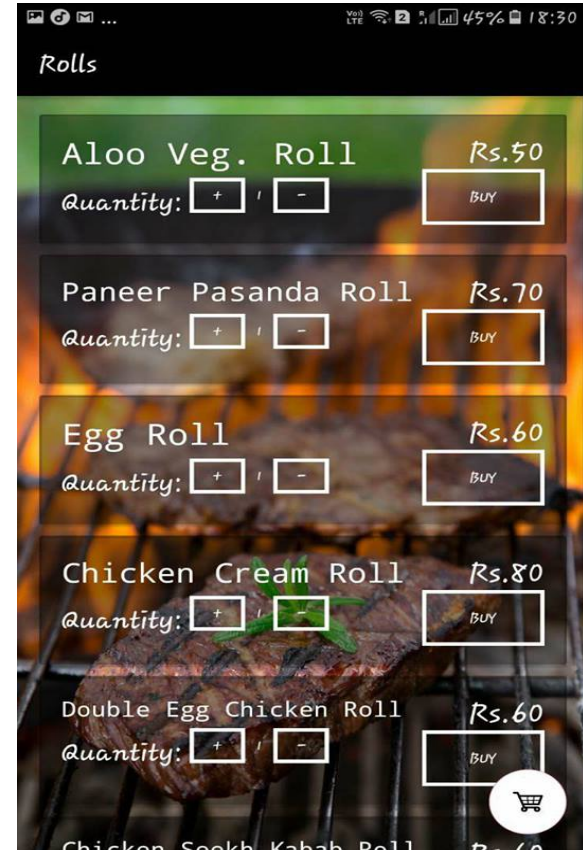
- This is the MenuSelectionActivity where the User gets to choose the type of food he/she wants to order.
- Each of the category has the menu.
- We have a <FloatingActionButton> to go to the summary page.
- We have used `<info.hoang8f.widget.FButton>` for going to different menus.





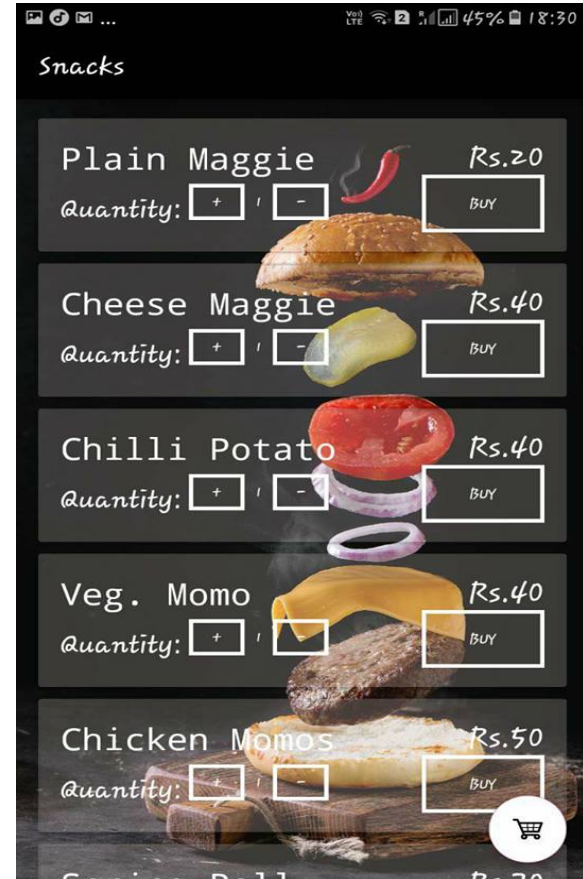
## Screen 6:

- The user will reach to this page by clicking on the Rolls button .
- This page displays the different type of rolls available under Rolls .
- It consists of  
<ScrollView>,<RelativeLayout>,  
<Cardview>,<Customized Button and  
<Textview>.



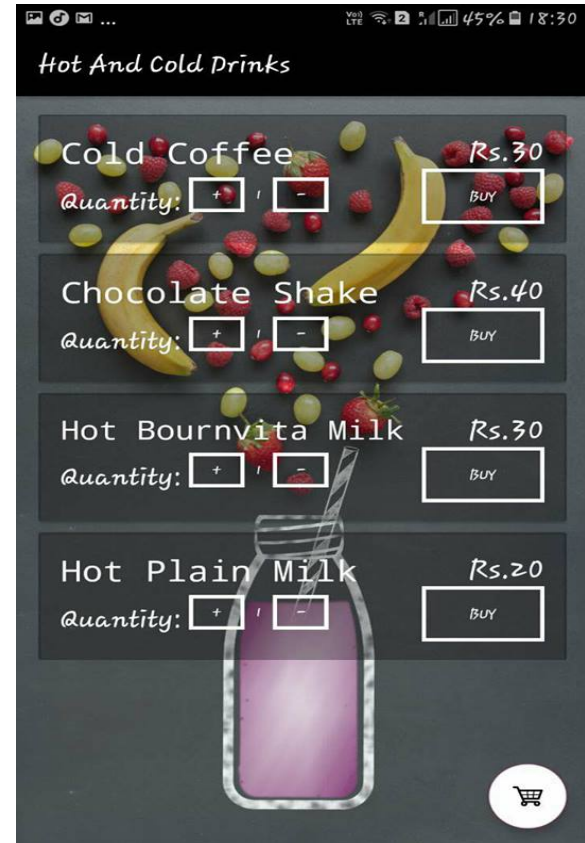
## Screen 7:

- The user will reach to this page by clicking on the Snacks Button .
- This page displays different types of Snacks available.
- It consists of  
<ScrollView> , <RelativeLayout> ,  
<LinearLayout> , <CardView> ,  
Customized Button **and** <Textview> .



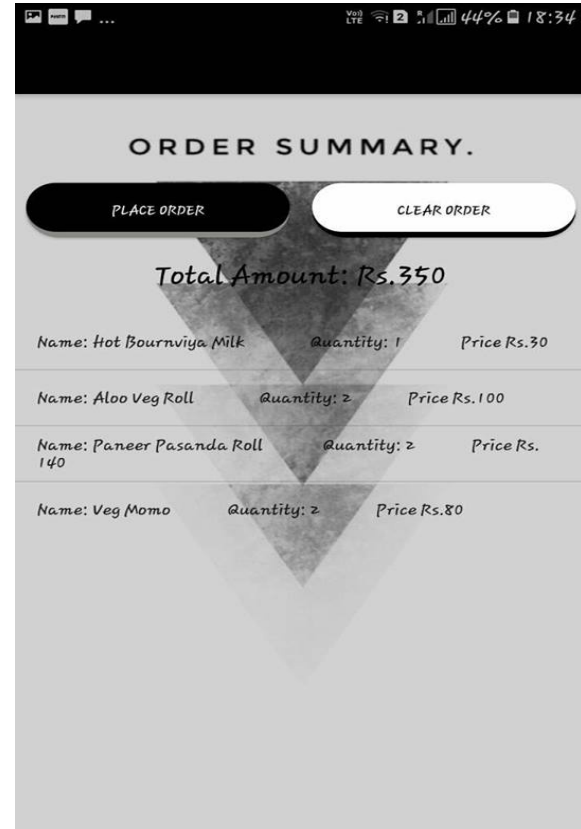
## Screen 8:

- The user will reach to this page by clicking on the Hot and cold drinks button .
- This page displays all the items available under Hot and cold drinks .
- It consists of  
<ScrollView> , <RelativeLayout> , <Cardview> , Customized Button and <Textview> .



## Screen 9:

- The user will reach to this page by clicking on the cart icon .
- On Opening the app if the cart is clicked it shows the previously placed order, the user can directly place the order or add new items to the previous order.
- Otherwise, we can click on Clear Button so as to delete all the previous items, and add new items to the orders.
- This page displays all the items the user have added to the cart
- It consists of ,<FButton>,<ListView> and <Textview>.



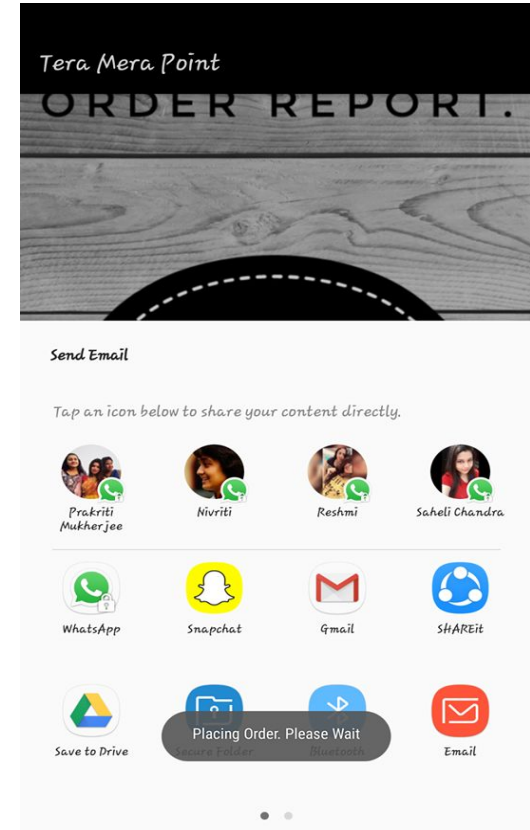
## Screen 10:

- This page notifies the User that the order has been placed by the user
- It consists of `<ImageView>`.
- We have also used a Toast message to make sure that the order is being placed.



### Screen 11:

- The user needs to select the email app he or she wants to use to send the order.
- The app window will open you can review your order there and press the send button.
- The retailer will receive the mail after the user places the order.





# **BACKEND**

---

(We have made the backend using JAVA.)

# Dependencies

```
dependencies {
    compile fileTree(include: ['*.jar'], dir: 'libs')
    androidTestCompile('com.android.support.test.espresso:espresso-core:2.2.2', {
        exclude group: 'com.android.support', module: 'support-annotations'
    })
    compile 'com.android.support:appcompat-v7:25.3.1'
    compile 'com.android.support:design:25.3.1'
    testCompile 'junit:junit:4.12'
    compile 'com.android.support:recyclerview-v7:26.+@aar'
    compile 'com.android.support:cardview-v7:26.+@aar'
    compile 'com.google.firebase:firebase-database:10.2.0'
    compile 'com.google.firebase:firebase-core:10.2.0'
    compile 'info.hoang8f:fbutton:1.0.5'
    compile 'com.rengwuxian.materialedittext:library:2.1.4'
    compile 'com.squareup.picasso:picasso:2.5.2'
    compile 'com.firebaseui:firebase-ui-database:1.2.0'
}

apply plugin: 'com.google.gms.google-services'

configurations.all {
    resolutionStrategy.eachDependency { DependencyResolveDetails details ->
        def requested = details.requested
        if (requested.group == 'com.android.support') {
            if (!requested.name.startsWith("multidex")) {
                details.useVersion '25.3.0'
            }
        }
    }
}
```



```

apply plugin: 'com.android.application'

android {
    compileSdkVersion 25
    buildToolsVersion "25.0.3"
    aaptOptions.cruncherEnabled = false
    aaptOptions.useNewCruncher = false
    defaultConfig {
        useLibrary 'org.apache.http.legacy'
        applicationId "com.example.soumyadipghosh.tmp"
        minSdkVersion 14
        targetSdkVersion 25
        versionCode 1
        versionName "1.0"
        testInstrumentationRunner "android.support.test.runner.AndroidJUnitRunner"
    }
    buildTypes {
        release {
            minifyEnabled false
            proguardFiles getDefaultProguardFile('proguard-android.txt'), 'proguard-rules.pro'
        }
    }
}

dependencies {
    compile fileTree(include: ['*.jar'], dir: 'libs')
    androidTestCompile('com.android.support.test.espresso:espresso-core:2.2.2', {
        exclude group: 'com.android.support', module: 'support-annotations'
    })
    compile 'com.android.support:appcompat-v7:25.2.1'
}

```

# Main2Activity.java

```
package com.example.soumyadipghosh.tmp;

import ...

public class Main2Activity extends AppCompatActivity {

    private static int $g = 2000;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main2);

        Thread thread = run() → {
            try {
                sleep(2000);
                Intent intent = new Intent(Main2Activity.this, MainActivity.class);
                startActivity(intent);
                finish();
            } catch (InterruptedException e) {
                e.printStackTrace();
            }
        };
        thread.start();
    }
}
```

# MainActivity.java

```
package com.example.soumyadipghosh.tmp;

import androidx.appcompat.app.AppCompatActivity;

public class MainActivity extends AppCompatActivity {

    Button btnSignIn, btnSignUp;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);

        btnSignIn = (Button)findViewById(R.id.signIn);
        btnSignUp = (Button)findViewById(R.id.signUp);

        btnSignUp.setOnClickListener((v) -> {
            Intent signUp = new Intent(MainActivity.this, Signup.class);
            startActivity(signUp);
        });

        btnSignIn.setOnClickListener((v) -> {
            Intent signIn = new Intent(MainActivity.this, SignIn.class);
            startActivity(signIn);
        });
    }
}
```

# SignInActivity.java

```
package com.example.soumyadipghosh.tmp;

import androidx.appcompat.app.AppCompatActivity;

public class SignIn extends AppCompatActivity {

    EditText edtPhone, edtPassword;
    Button btnSignIn;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_sign_in);

        edtPassword = (MaterialEditText)findViewById(R.id.edtPassword);
        edtPhone = (MaterialEditText)findViewById(R.id.edtPhone);
        btnSignIn = (Button)findViewById(R.id.btnSignIn);

        //Init Firebase
        final FirebaseDatabase database = FirebaseDatabase.getInstance();
        final DatabaseReference tabel_user = database.getReference("User");

        btnSignIn.setOnClickListener((v) -> {
            final ProgressDialog mDialog = new ProgressDialog(SignIn.this);
            mDialog.setMessage("Please Wait");
            mDialog.show();

            tabel_user.addValueEventListener(new ValueEventListener() {
                @Override
                public void onDataChange(DataSnapshot dataSnapshot) {
                    //Check if User Exists in DataBase
                    if (dataSnapshot.child(edtPhone.getText().toString()).exists())
                    {
                        //Get User Information
                        mDialog.dismiss();
                        User user = dataSnapshot.child(edtPhone.getText().toString()).getValue(User.class);
                        if (user.getPassword().equals(edtPassword.getText().toString()))
                        {
                            Toast.makeText(SignIn.this, "Sign in Successful", Toast.LENGTH_SHORT).show();
                            Intent intent = new Intent(SignIn.this, MenuSelectionActivity.class);
                            Common.currentUser = user;
                            startActivity(intent);
                            finish();
                        }
                        else
                        {
                            Toast.makeText(SignIn.this, "Wrong Password!! Try Again", Toast.LENGTH_SHORT).show();
                        }
                    }
                }
            })
        })
    }
}
```

# SignUpActivity.java

```
package com.example.soumyadipghosh.tmp;

import ...

public class Signup extends AppCompatActivity {
    MaterialEditText edtPhone, edtName, edtPassword;
    Button btnSignUp;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_signup);

        edtName = (MaterialEditText)findViewById(R.id.edtName);
        edtPassword = (MaterialEditText)findViewById(R.id.edtPassWordSignUp);
        edtPhone = (MaterialEditText)findViewById(R.id.edtPhoneSignUp);

        btnSignUp = (Button)findViewById(R.id.btnSignUp);

        //Init Firebase
        final FirebaseDatabase database = FirebaseDatabase.getInstance();
        final DatabaseReference tabel_user = database.getReference("User");

        btnSignUp.setOnClickListener((v) -> {
            final ProgressDialog mDialog = new ProgressDialog(Signup.this);
            mDialog.setMessage("Please Wait");
            mDialog.show();

            tabel_user.addValueEventListener(new ValueEventListener() {
                @Override
                public void onDataChange(DataSnapshot dataSnapshot) {
                    //Check if user already Present
                    if (dataSnapshot.child(edtPhone.getText().toString()).exists())
                    {
```

# HotAndCold.java

```
package com.example.soumyadipghosh.tmp;

import ...

public class HotAndCold extends AppCompatActivity {
    Button OrderColdCoffee;
    Button OrderChocolateShake;
    Button OrderBournvitaMilk;
    Button OrderMilk;
    FloatingActionButton button;
    List<String> word ;
    int TotalPriceHotAndCold=0;

    int i=0;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_hot_and_cold);

        word = new ArrayList<>();

        OrderColdCoffee = (Button)findViewById(R.id.buyColdCoffee);
        OrderChocolateShake = (Button)findViewById(R.id.buyChocolateShake);
        OrderBournvitaMilk = (Button) findViewById(R.id.buyHotBournvitaMilk);
        OrderMilk = (Button) findViewById(R.id.buyHotPlainMilk);
        OrderColdCoffee.setOnClickListener((v) -> {
            String Name= "Cold Coffee";
            String Quantity = String.valueOf(countColdCoffee);
            int q = Integer.parseInt(Quantity);
            int tc = q*30;
            TotalPriceHotAndCold = TotalPriceHotAndCold + tc;
            String tem = Integer.toString(tc);
```

# SnacksActivity.java

```
package com.example.soumyadipghosh.tmp;

import ...

public class SnacksActivity extends AppCompatActivity {

    Button BuyPlainMaggie;
    Button BuyCheesemaggie;
    Button BuyChilliPotato;
    Button BuyVegmomo;
    Button BuyChickenMomo;
    Button BuySpringRoll;
    Button BuyBreadOmlette;
    Button BuyCheesePaneerBurger;
    Button BuyDoubleChickenBurger;
    Button BuyChickenCutlet;
    Button BuyChickenPopcorn;
    Button BuyChickenSeekhKabab;
    Button BuyChickenReshmiKabab;
    Button BuyChickenShamiKabab;
    Button BuyChickenSandwich;
    FloatingActionButton button;
    List<String> word =new ArrayList<>();
    int i=0;
    int TotalSnacks=0;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_snacks);
    }
}
```




# RollsActivity.java

```
package com.example.soumyadipghosh.tmp;

import ...

public class RollsActivity extends AppCompatActivity {

    Button BuyAlooVegRoll;
    Button BuyPaneerPasandaRoll;
    Button BuyEggRoll;
    Button BuyChickenCreamRoll;
    Button BuyDoubleEggChickenRoll;
    Button BuyChickenSeekhKababRoll;
    Button BuyChickenTikkaRoll;
    int TotalPrice=0;
     FloatingActionButton button;
    int i=0;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_rolls);

        BuyAlooVegRoll = (Button) findViewById(R.id.buyAlooVegRoll);
        BuyPaneerPasandaRoll = (Button) findViewById(R.id.buyPaneerPasandaRoll);
        BuyEggRoll = (Button) findViewById(R.id.buyEggRoll);
        BuyChickenCreamRoll = (Button) findViewById(R.id.buyChickenCreamRoll);
    }
}
```



# Summary.java

```
package com.example.soumyadipghosh.tmp;

import ...

public class Summary extends AppCompatActivity {

    List<String> addArray ;
    ListView show;
    ArrayAdapter<String> adapter;
    FButton PlaceOrder;
    FButton Clr;
    int Total=0;
    int i=0;
    String wordSet;
    int TotalCost=0;
    Intent intent = null, chooser = null;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_summary);

        Toast.makeText(Summary.this, "Previously Placed Order!!", Toast.LENGTH_LONG).show();

        addArray = new ArrayList<String>();

        show = (ListView)findViewById(R.id.OrderList);
    }
}
```

# OrderPlaced.java

```
package com.example.soumyadipghosh.tmp;

import ...

public class OrderPlaced extends AppCompatActivity {

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_order_placed);
    }
}
```



## Note:


**The Above slides contains Screen Captures of the codes of back end programming the whole code is there in the project folder along with all the files.**



## Problems Faced:

While doing the project we faced quite a no. of problems as the whole concept and design is of ours and there is no replica of such problems in internet we did really had to face real problems to solve such issues. Few of the the problems we faced are listed below:

- As we haven't used database to store the orders to keep the app simple we did really face problem of passing data from activity from one activity to another (the food details on clicking of buy button to Summary page).
- After a lot of research we got a solution of using SharedPreferences which is basically used as a global variable to store data and access the saved data from any activity.
- Another major problem we faced was was clearing the order summary. It was being cleared temporarily by clicking on the "Clear" button in the OderSummary page.
- To resolve the above stated problem we realized that that there has been a serious issue with the backend of the whole app.

- 
- Solving it was a hectic job but we did accomplish solving previously stated problem, in the process we lost a lot of time for which we had to change the idea of our app. Previously we thought of including PayTm payment gateway but due to authorization problem from facebook we had to drop that plan then we thought of sending the order through SMS but due to lack of time and authorization problem we had to drop the plan and had to keep it to Email for placing the order which is somehow better than SMS as it may incur some cost to the user.
  - We will try to implement the Paytm payment gateway in sometime future once facebook settles its Privacy policies.



# THE END

Thank you so much Sir, for assigning us this android project. We learnt a lot while we were doing this project. This helped us implement Java which we have learnt in previous semester. We also got a chance of exploring the field of Android which is one of the trending platforms nowadays . We got a first hand experience of an android developer.