

# Lovely Professional University

## Assignment-2

Course: CSE224 – FUNDAMENTALS OF ANDROID

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### **SET-B (ODD ROLL\_NO)**

**Question:** Create an android application of activities, Where first activity named “sign up” is the signup page of a shopping website. After providing all the credentials ,when you click on the button named “signup” , It can only go to the welcome page If all the fields of sign up page are correctly filled. This app should be designed in french language using the concept of app localization. In the welcome activity there should be 4 buttons:

**shop :** clicking on this button, It should take you to next activity named “products”where there should be a gridview having 9 to 12 items displayed. When you select any of the item ,Toast message should get printed “added to the cart successfully.

**count:** It will show the total number of items you have added to cart in a textview.

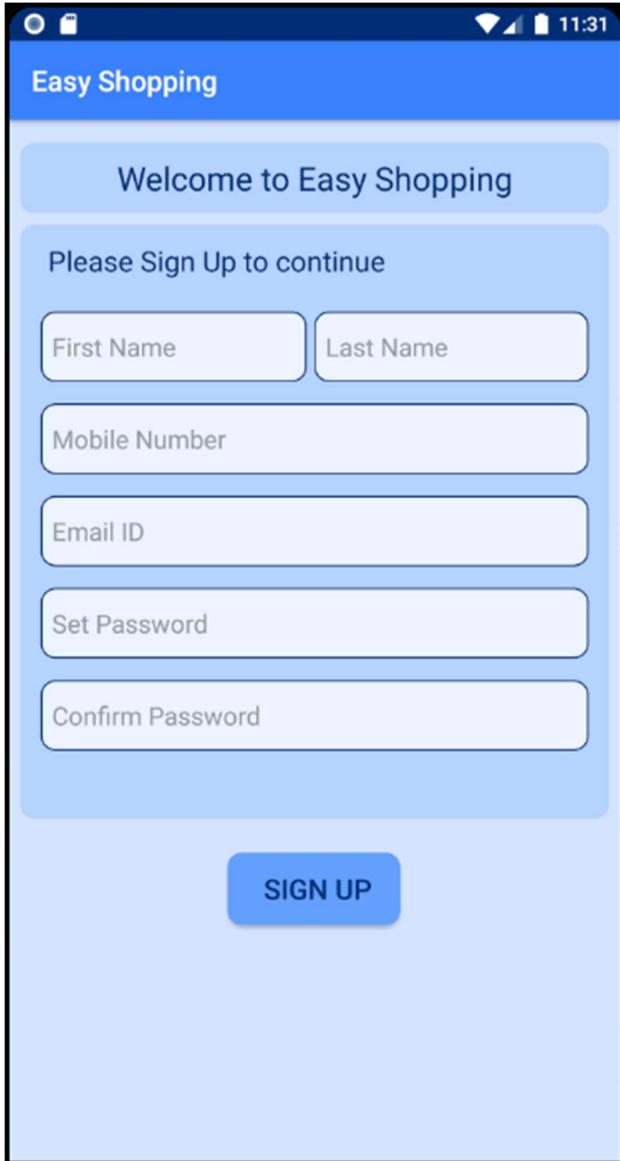
**contact :** It should make a call to the customer care.

**Back :** sent you back to sign up page.

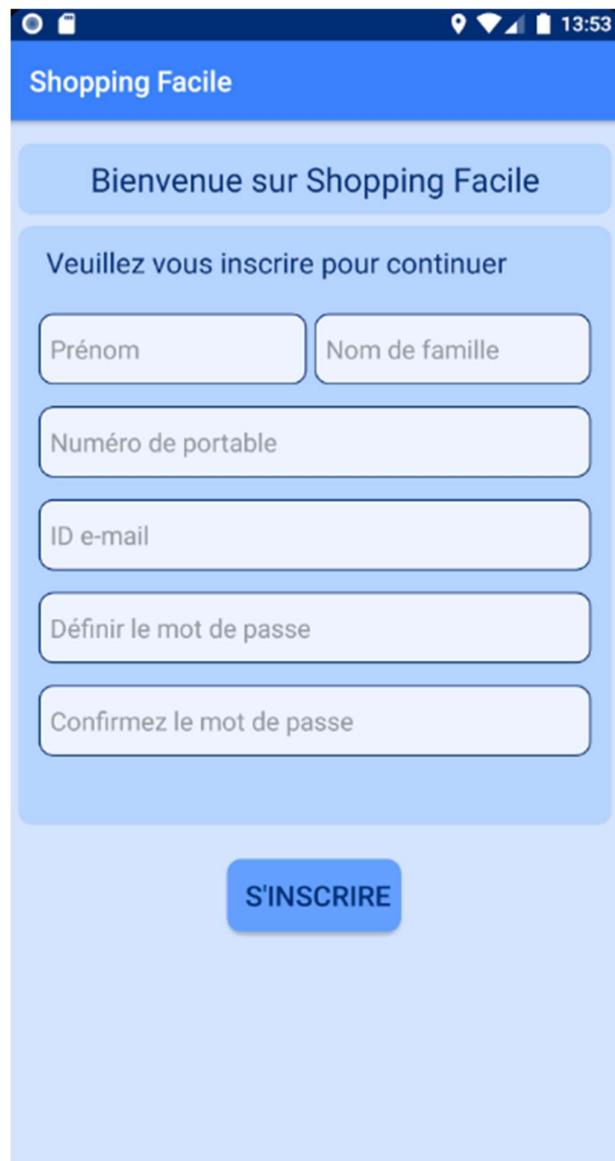
# App Name: Easy Shopping / Shopping Facile

## 1. Layout of the SignUp Screen (MainActivity)

English Version



French Version



## 2. Sign Up Form Conditions

### 2.1. First Name should be entered

The screenshot shows the sign-up screen for the "Easy Shopping" app. It features fields for First Name, Last Name, Mobile Number, Email ID, Set Password, and Confirm Password. A red error message "Please provide first name" is displayed below the First Name field. A blue "SIGN UP" button is at the bottom.

```
if(first_name.length()==0){  
    warn.setText("Please provide first name");  
}
```

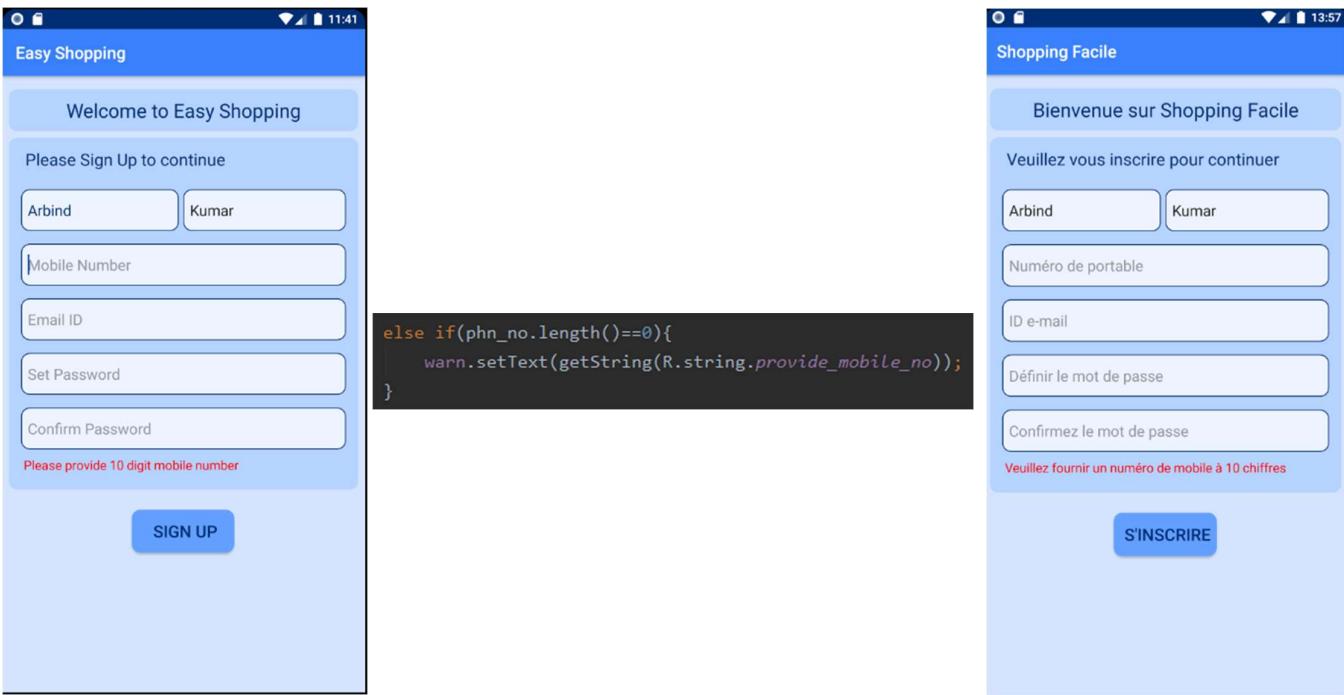
The screenshot shows the sign-up screen for the "Shopping Facile" app. It has fields for Prénom, Nom de famille, Numéro de portable, ID e-mail, Définir le mot de passe, and Confirmez le mot de passe. A red error message "Veuillez indiquer le prénom" is shown below the Prénom field. A blue "S'INSCRIRE" button is at the bottom.

```
else if(last_name.length()==0){  
    warn.setText("Please provide last name");  
}
```

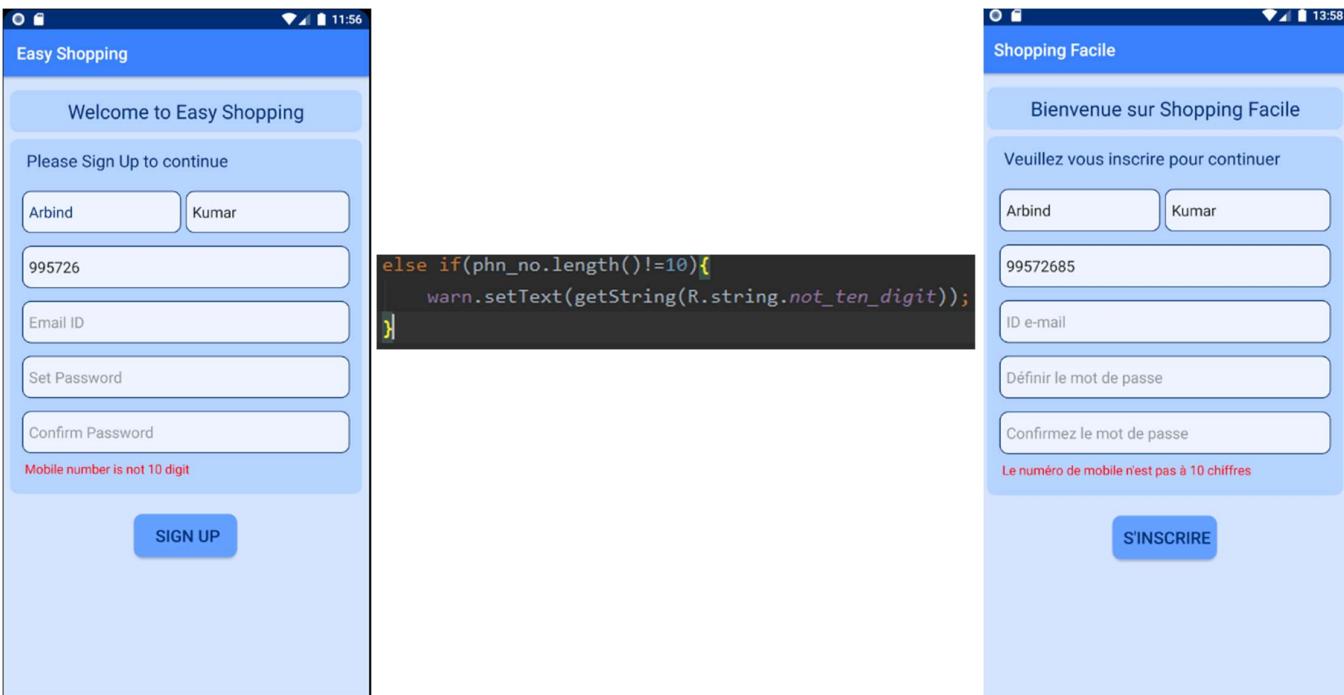
This screenshot is identical to the one above it, showing the "Easy Shopping" app's sign-up screen with a validation error for the last name field. A red message "Please provide last name" is visible below the Last Name field, and the "SIGN UP" button is at the bottom.

This screenshot is identical to the one above it, showing the "Shopping Facile" app's sign-up screen with a validation error for the last name field. A red message "Veuillez fournir votre nom de famille" is visible below the Nom de famille field, and the "S'INSCRIRE" button is at the bottom.

### **2.3. Mobile Number should not be empty**



### **2.4. Mobile number should be 10 digit long**



## 2.5. Email id should not be empty and should be valid

**Easy Shopping**

Welcome to Easy Shopping

Please Sign Up to continue

Arbind Kumar

9957268522

arbind.kr@gmail

Set Password

Confirm Password

Email ID is not valid

**SIGN UP**

```
String email= eml.getText().toString();
int at_pos = email.indexOf("@");
int dot_pos = email.lastIndexOf(".");
if(at_pos>4&&dot_pos-at_pos>2&&email.length()-dot_pos>2){
    isValid = true;
}
else{
    isValid=false;
}

else if(!isValid){
    warn.setText(getString(R.string.invalid_email));
}
```

**Shopping Facile**

Bienvenue sur Shopping Facile

Veuillez vous inscrire pour continuer

Arbind Kumar

9957268522

arbind.kr@gmail

Définir le mot de passe

Confirmez le mot de passe

L'identifiant de messagerie n'est pas valide

**S'INSCRIRE**

## 2.6. Password should be valid having atleast 6 characters, one Upper Case Alphabet and one symbol

**Easy Shopping**

Welcome to Easy Shopping

Please Sign Up to continue

Arbind Kumar

9957268522

arbind.kr2580@gmail.com

.....

Confirm Password

Please provide a valid password atleast 6 characters long

**SIGN UP**

```
String password = pwd.getText().toString();
boolean isCapital=false;
boolean isSymbol= false;
String symbol = "@!#%^&*()_+?/>.<";

for(int i=0; i<password.length(); i++){
    char ch = password.charAt(i);
    if(Character.isUpperCase(ch)){
        isCapital = true;
    }
    String chstr = Character.toString(ch);
    if(symbol.contains(chstr)){
        isSymbol=true;
    }
}

if(isCapital&&isSymbol&&password.length()>5){
    isPwdvalid=true;
} else{
    isPwdvalid=false;
}

else if(!isPwdvalid){
    warn.setText(getString(R.string.pwd_not_valid));
}
```

**Shopping Facile**

Bienvenue sur Shopping Facile

Veuillez vous inscrire pour continuer

Arbind Kumar

9957268522

arbind.kr@gmail.com

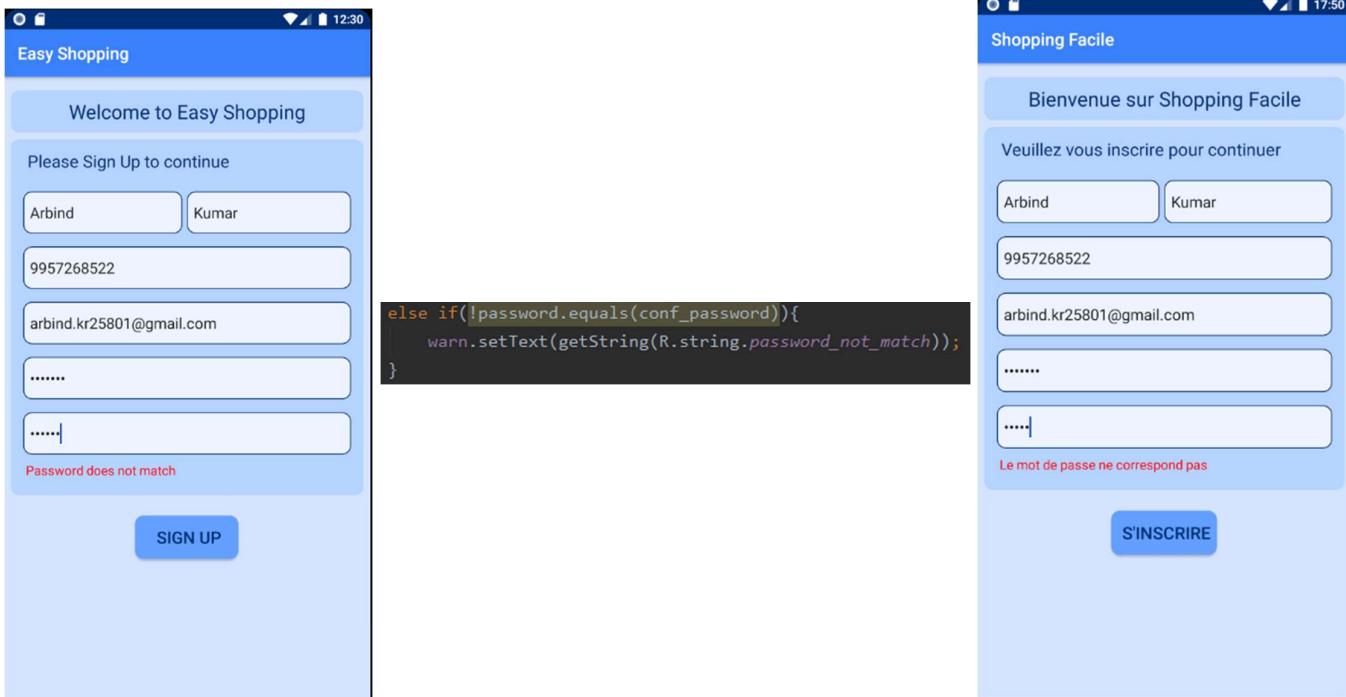
.....

Confirmez le mot de passe

Veuillez fournir un mot de passe valide d'au moins 6 caractères

**S'INSCRIRE**

## 2.7. Confirm password should match with the password

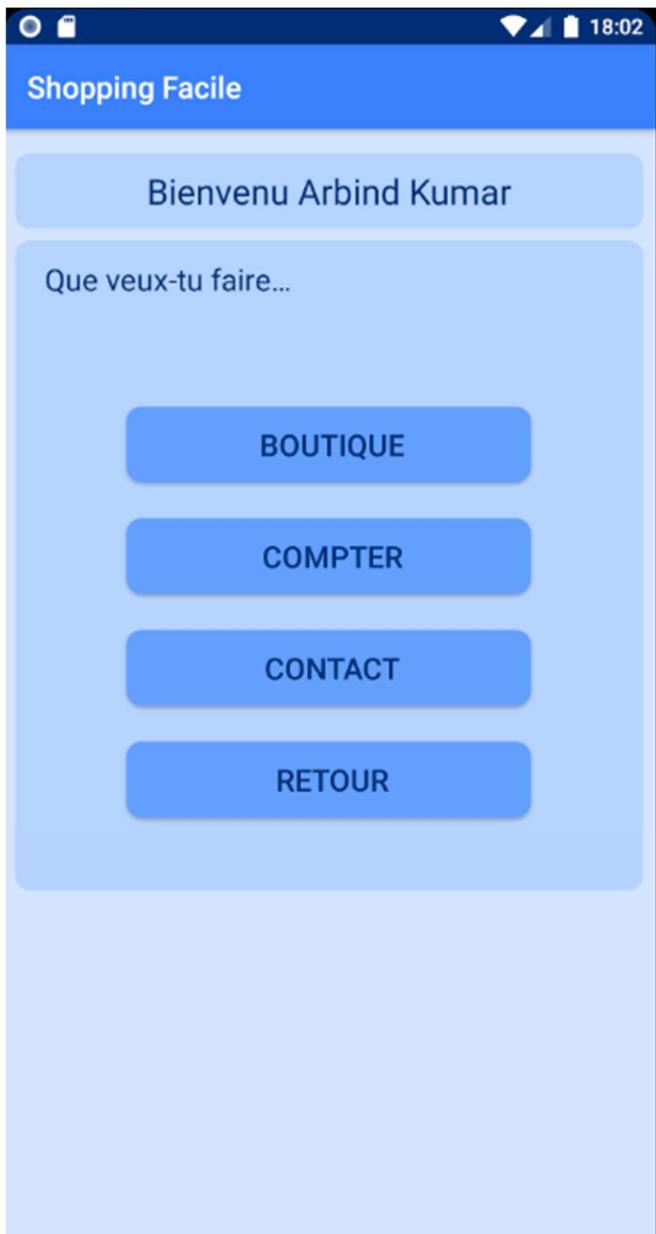
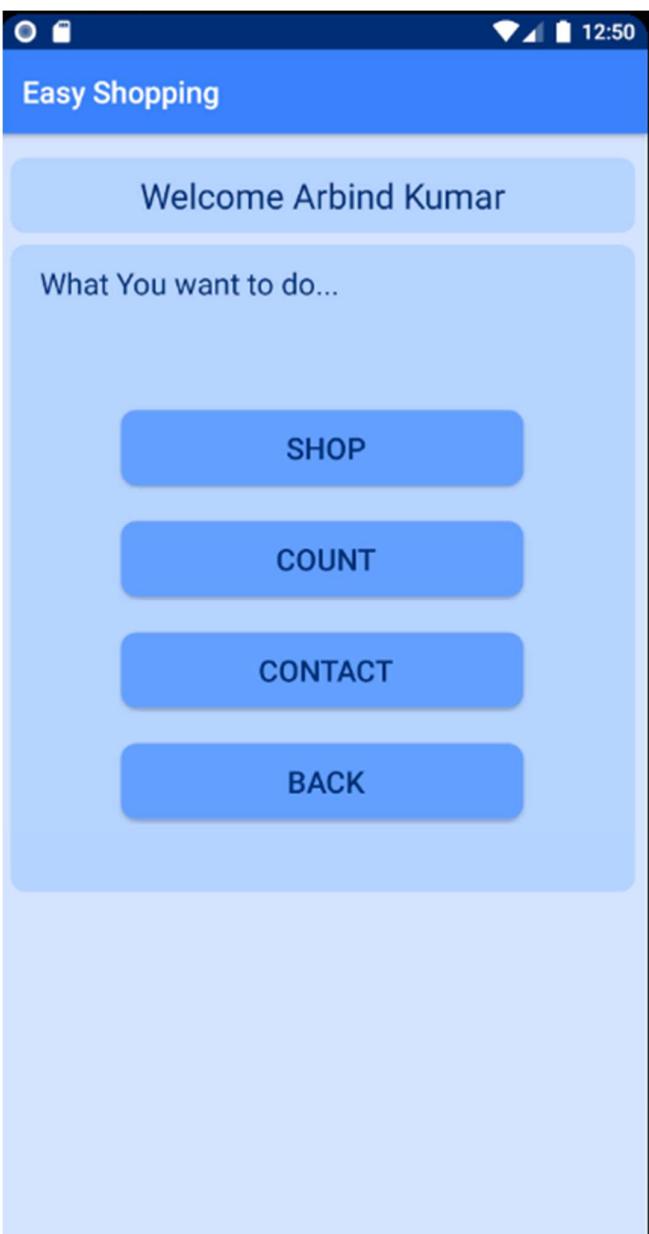


## 2.8. If All the conditions valid then the activity will shift to the second activity name as "Options" and the name of the person in the form is transferred via Intent.

```
String first_name = fn.getText().toString();
String last_name = ln.getText().toString();
String full_name = first_name+ " "+last_name;

if(first_name.length()>0&&last_name.length()>0&&phn_no.length()==10&&isValidEmail&&isPwdvalid&&password.equals(conf_password)){
    Intent i = new Intent( mContext, Options.class);
    i.putExtra( name: "my_key", full_name);
    startActivity(i);
}
```

### 3. Layout of Options Screen

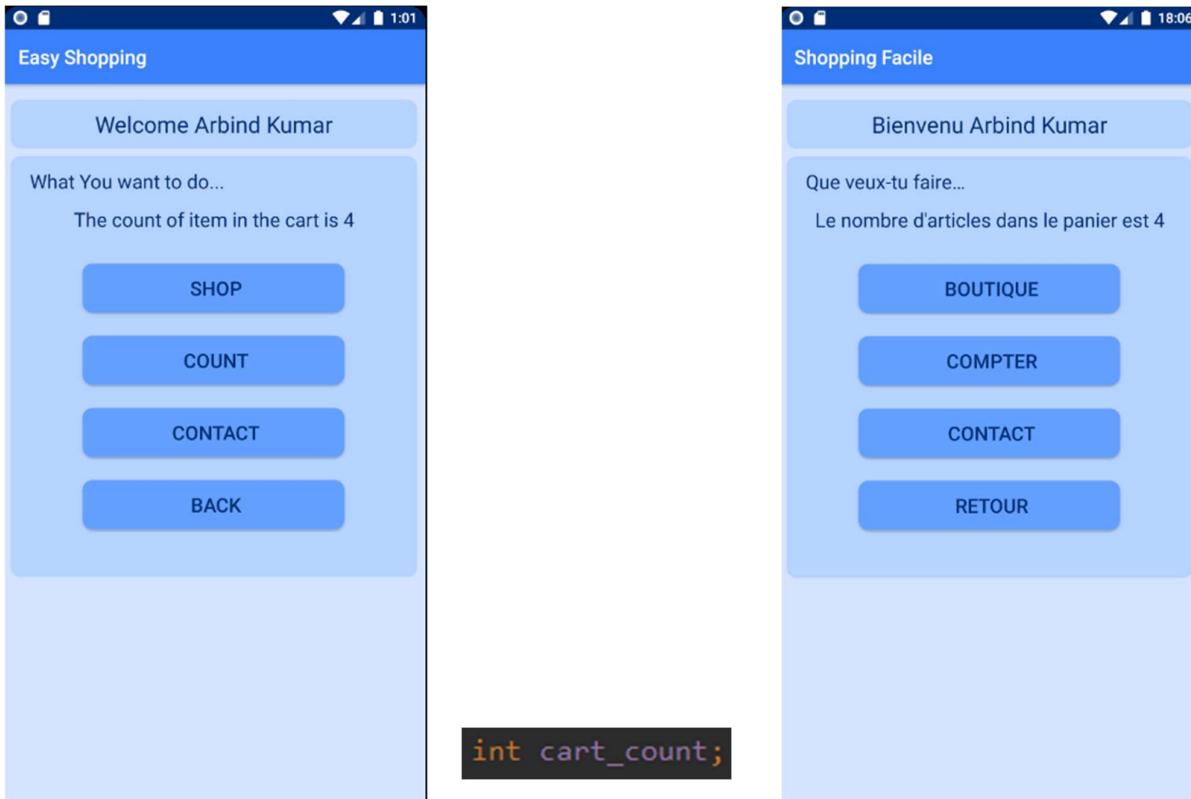


## 4. Features of Option Activity

### 4.1. Getting the name of the user from the Sign Up Activity

```
name_tv = findViewById(R.id.textView);
Bundle b = getIntent().getExtras();
String name = b.getString(key: "my_key");
name_tv.setText(getString(R.string.welcome)+" "+name);
```

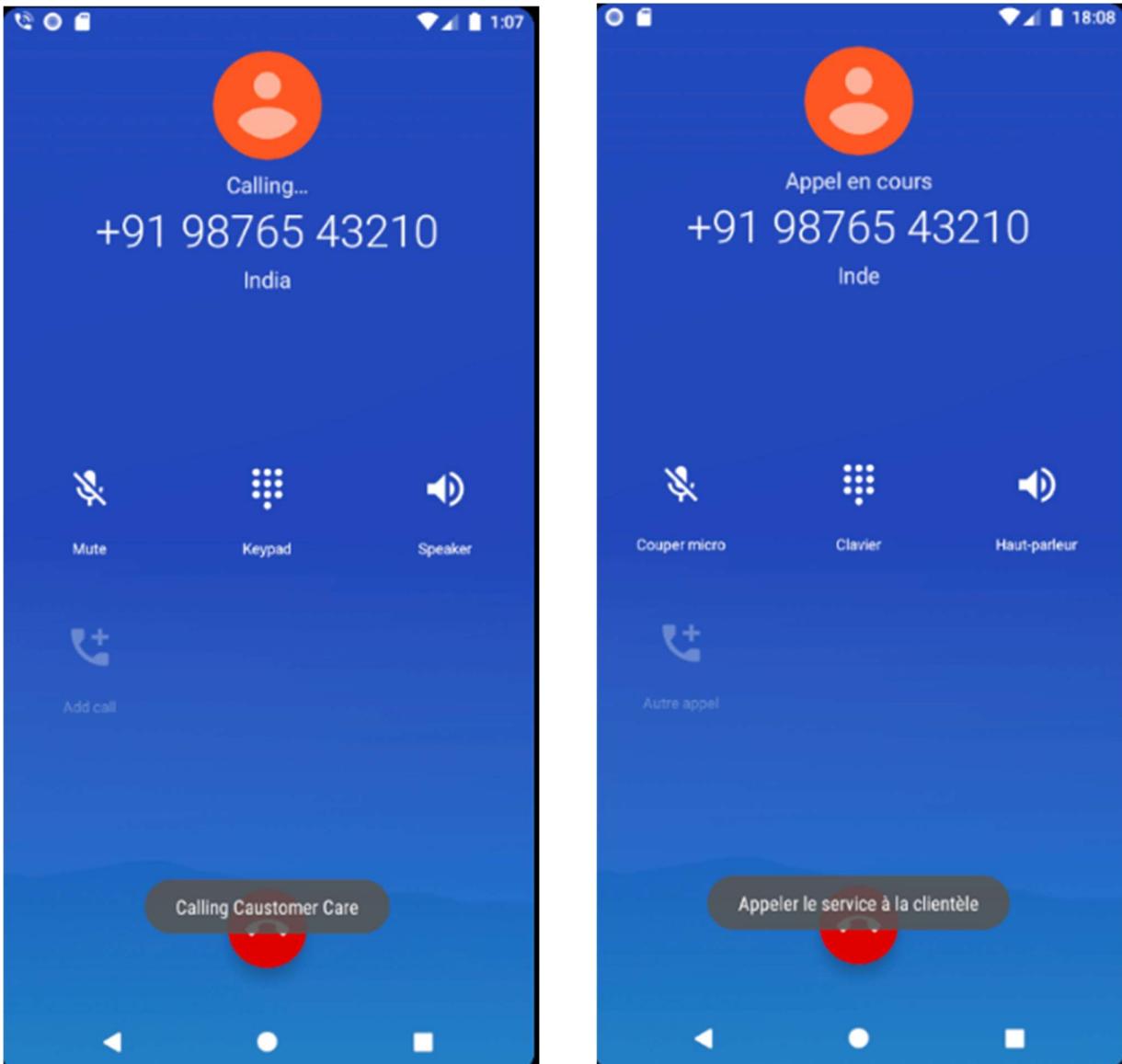
### 4.2. "Count" Options returns the number of items selected in the Products section when returned from the Shop section and selected some products.



```
count_btn.setOnClickListener((v) -> {
    cart_tv.setText(getString(R.string.cart_count)+" "+cart_count);
});
```

```
@Override
protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {
    super.onActivityResult(requestCode, resultCode, data);
    if(requestCode==2&&RESULT_OK==resultCode){
        Bundle b = data.getExtras();
        cart_count= b.getInt(key: "count");
    }
}
```

#### 4.3. "CONTACT" option calls to the Customer Care



```
contact_btn = findViewById(R.id.button4);
contact_btn.setOnClickListener((v) ->
    if(ContextCompat.checkSelfPermission(context: Options.this, Manifest.permission.CALL_PHONE)!= PackageManager.PERMISSION_GRANTED){
        ActivityCompat.requestPermissions( activity: Options.this, new String[] { Manifest.permission.CALL_PHONE }, requestCode: 1);
    } else{
        Toast.makeText( context: Options.this, getString(R.string.call_customer), Toast.LENGTH_SHORT).show();
        Intent intent = new Intent(Intent.ACTION_CALL, Uri.parse("tel:"+("+919876543210")));
        startActivity(intent);
    }
});
```

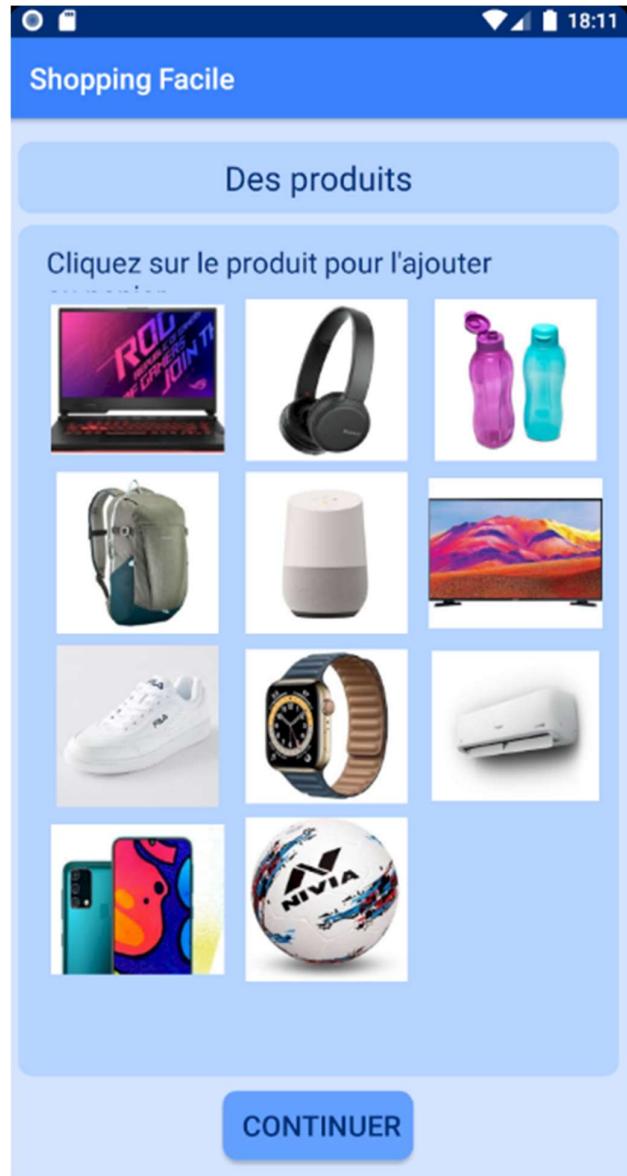
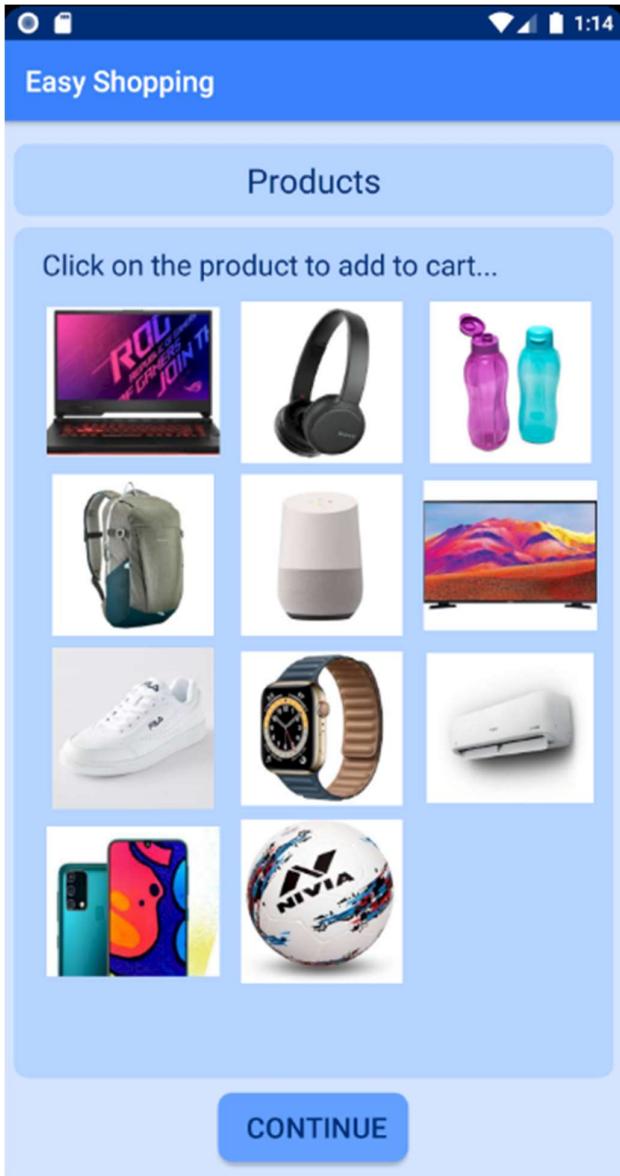
#### 4.4. Back Button Takes back to the Login Page.

```
back_btn = findViewById(R.id.button5);
back_btn.setOnClickListener((v) -> {
    Intent i = new Intent(getApplicationContext(), MainActivity.class);
    startActivity(i);
});
```

**4.5. The Shop button takes the user to the Products Screen.**

```
public void shop(View v){  
    Intent i = new Intent( mContext: this, Products.class);  
    startActivityForResult(i, requestCode: 2);  
}
```

**5. Layout of the Products Screen**



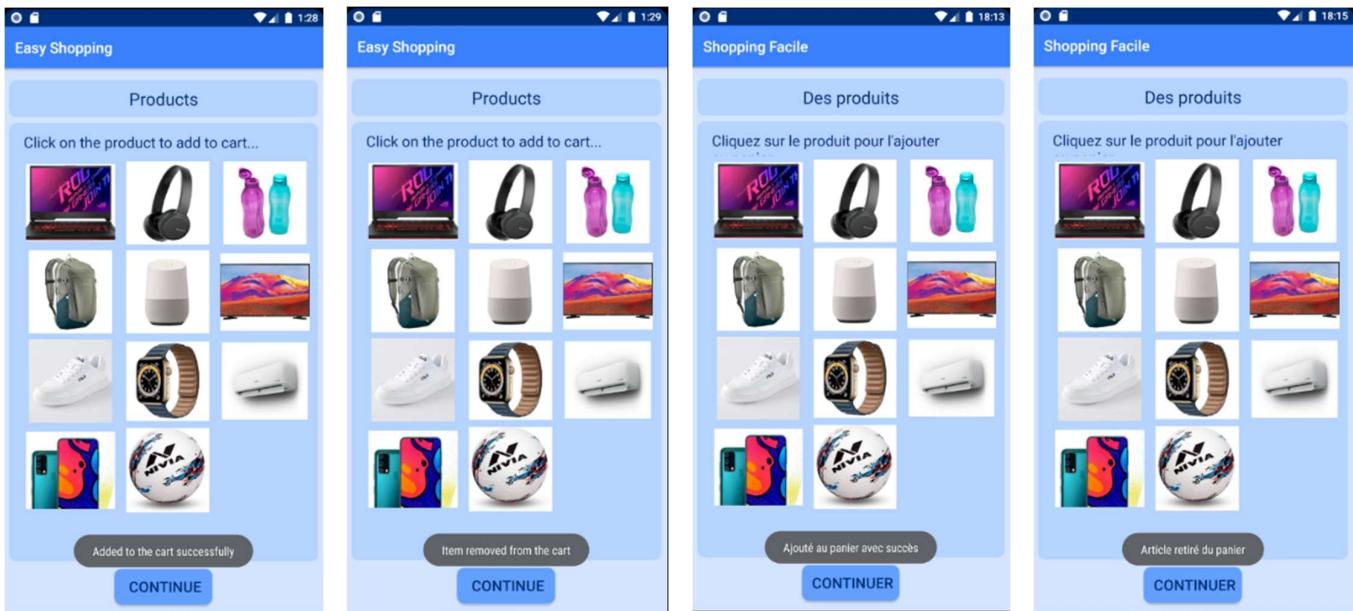
## 6. Features of Product Screen

### 6.1. Products are arranged in GridView

```
boolean[] bool_arr = {false, false, false, false, false, false, false, false, false, false, false};  
int[] products = {R.drawable.item1, R.drawable.item2, R.drawable.item3, R.drawable.item4, R.drawable.item5, R.drawable.item6,  
    R.drawable.item7, R.drawable.item8, R.drawable.item9, R.drawable.item10, R.drawable.item11};
```

```
public class ImageAdapterGridView extends BaseAdapter {  
    private Context mContext;  
    public ImageAdapterGridView(Context c) {  
        mContext = c;  
    }  
    public int getCount() { return products.length; }  
  
    public Object getItem(int position) { return position; }  
  
    public long getItemId(int position) { return 0; }  
  
    public View getView(int position, View convertView, ViewGroup parent) {  
        ImageView mImageView;  
  
        if (convertView == null) {  
            mImageView = new ImageView(mContext);  
            mImageView.setLayoutParams(new GridView.LayoutParams(w: 300, h: 300));  
            mImageView.setScaleType(ImageView.ScaleType.CENTER_CROP);  
            mImageView.setPadding(left: 10, top: 20, right: 10, bottom: 20);  
        } else {  
            mImageView = (ImageView) convertView;  
        }  
        mImageView.setImageResource(products[position]);  
        return mImageView;  
    }  
}
```

### 6.2. Clicking on the product will add the product to cart and again clicking on the same item will remove the item from cart.



```
gridView.setOnItemClickListener((parent, view, position, id) -> {
    System.out.println(position);
    if(bool_arr[position]==false){
        bool_arr[position]=true;

        Toast.makeText(context: Products.this, getString(R.string.added_to_cart), Toast.LENGTH_SHORT).show();
    }
    else{
        bool_arr[position]= false;
        Toast.makeText(context: Products.this, getString(R.string.item_removed), Toast.LENGTH_SHORT).show();
    }
    System.out.println(bool_arr[position]);
});

});
```

6.3. “CONTINUE” button will return to the Options Screen with the number of items added into the cart which we can show with the COUNT button.

```
btn = findViewById(R.id.button6);
btn.setOnClickListener((v) -> {
    int count = 0;
    for(int i=0; i<bool_arr.length; i++){
        if(bool_arr[i]==true) count++;
    }
    Intent i = new Intent();
    i.putExtra(name: "count", count);
    setResult(RESULT_OK,i);
    finish();
});
```

## 7. Files

### 7.1.File: Strings.xml (english)

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <string name="app_name">Easy Shopping</string>
    <string name="intro">Welcome to Easy Shopping</string>
    <string name="please_sign_in"> Please Sign Up to continue</string>
    <string name="fname">First Name</string>
    <string name="lname">Last Name</string>
    <string name="mobile">Mobile Number</string>
    <string name="email">Email ID</string>
    <string name="set_pwd">Set Password</string>
    <string name="cnf_pwd">Confirm Password</string>
    <string name="what_to_do">What You want to do...</string>
    <string name="shop">SHOP</string>
    <string name="count">COUNT</string>
    <string name="contact">CONTACT</string>
    <string name="back">BACK</string>
    <string name="product">Products</string>
    <string name="select_product">Click on the product to add to cart...</string>
    <string name="continu">Continue</string>
    <string name="sign_up">Sign Up</string>
    <string name="provide_fname">Please provide first name</string>
    <string name="provide_lname">Please provide last name</string>
    <string name="provide_mobile_no">Please provide 10 digit mobile number</string>
    <string name="not_ten_digit">Mobile number is not 10 digit</string>
    <string name="invalid_email">Email ID is not valid</string>
    <string name="pwd_not_valid">Please provide a valid password atleast 6 characters long</string>
    <string name="password_not_match">Password does not match</string>
    <string name="welcome">Welcome</string>
    <string name="call_customer">Calling Customer Care</string>
    <string name="cart_count">The count of item in the cart is </string>
    <string name="added_to_cart">Added to the cart successfully</string>
    <string name="item_removed">Item removed from the cart</string>
</resources>
```

## 7.2.File: Strings.xml (French)

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <string name="app_name">Shopping Facile</string>
    <string name="intro">Bienvenue sur Shopping Facile</string>
    <string name="please_sign_in"> Veuillez vous inscrire pour continuer</string>
    <string name="fname">Prénom</string>
    <string name="lname">Nom de famille</string>
    <string name="mobile">Numéro de portable</string>
    <string name="email">ID e-mail</string>
    <string name="set_pwd">Définir le mot de passe</string>
    <string name="cnf_pwd">Confirmez le mot de passe</string>
    <string name="what_to_do">Que veux-tu faire...</string>
    <string name="shop">BOUTIQUE</string>
    <string name="count">COMPTER</string>
    <string name="contact">Contact</string>
    <string name="back">RETOUR</string>
    <string name="product">Des produits</string>
    <string name="select_product">Cliquez sur le produit pour l'\ajouter au panier ...</string>
    <string name="continu">Continuer</string>
    <string name="sign_up">S\'inscrire</string>
    <string name="provide_fname">Veuillez indiquer le prénom</string>
    <string name="provide_lname">Veuillez fournir votre nom de famille</string>
    <string name="provide_mobile_no">Veuillez fournir un numéro de mobile à 10 chiffres</string>
    <string name="not_ten_digit">Le numéro de mobile n\'est pas à 10 chiffres</string>
    <string name="invalid_email">L\'identifiant de messagerie n\'est pas valide</string>
    <string name="pwd_not_valid">Veuillez fournir un mot de passe valide d\'au moins 6 caractères</string>
    <string name="password_not_match">Le mot de passe ne correspond pas</string>
    <string name="welcome">Bienvenu</string>
    <string name="call_customer">Appeler le service à la clientèle</string>
    <string name="cart_count">Le nombre d\'articles dans le panier est </string>
    <string name="added_to_cart">Ajouté au panier avec succès</string>
    <string name="item_removed">Article retiré du panier</string>
</resources>
```

### File: rounded\_button.xml

```
<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android"
    android:shape="rectangle"
    >
    <corners
        android:radius="10dp"
        />
    <solid
        android:color="#63a0ff"
        />

    <padding
        android:left="8dp"
        android:right="3dp">

        </padding>
    <size
        android:height="50dp"></size>

    </shape>
```

### File: rounded\_corner\_border.xml

```
<?xml version="1.0" encoding="utf-8"?>
<shape xmlns:android="http://schemas.android.com/apk/res/android"
    android:shape="rectangle"
    >
    <corners
        android:radius="10dp"
        />
    <solid
        android:color="#edf4ff"
        />
    <stroke
        android:width="1dp"
        android:color="@color/colorPrimaryDark">

        </stroke>
    <padding
        android:left="8dp"
        android:right="3dp">

        </padding>
    <size
        android:height="50dp"></size>

    </shape>
```

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/
  apk/res/android"
3   xmlns:app="http://schemas.android.com/apk/res-auto"
4   xmlns:tools="http://schemas.android.com/tools"
5   android:layout_width="match_parent"
6   android:layout_height="match_parent"
7   tools:context=".MainActivity"
8   android:background="@color/background">
9     <TextView
10       android:id="@+id/textView"
11       android:layout_width="0dp"
12       android:layout_height="50dp"
13       android:layout_marginTop="16dp"
14       android:background="@drawable/rounded_corner"
15       android:gravity="center"
16       android:text="@string/intro"
17       android:textColor="@color/colorPrimaryDark"
18       android:textSize="23dp"
19       app:layout_constraintEnd_toEndOf="@+id/constraintLayout"
20       app:layout_constraintStart_toStartOf="@+id/constraintLayout"
21       app:layout_constraintTop_toTopOf="parent" />
22
23   <androidx.constraintlayout.widget.ConstraintLayout
24     android:id="@+id/constraintLayout"
25     android:layout_width="0dp"
26     android:layout_height="420dp"
27     android:layout_marginStart="8dp"
28     android:layout_marginTop="8dp"
29     android:layout_marginEnd="8dp"
30     android:background="@drawable/rounded_corner"
31     app:layout_constraintEnd_toEndOf="parent"
32     app:layout_constraintHorizontal_bias="1.0"
33     app:layout_constraintStart_toStartOf="parent"
34     app:layout_constraintTop_toBottomOf="@+id/textView">
35
36     <TextView
37       android:id="@+id/textView2"
38       android:layout_width="387dp"
39       android:layout_height="34dp"
40       android:layout_marginTop="12dp"
41       android:paddingLeft="5dp"
42       android:text="@string/please_sign_in"
43       android:textColor="@color/colorPrimaryDark"
44       android:textSize="20dp"
45       app:layout_constraintEnd_toEndOf="parent"
46       app:layout_constraintStart_toStartOf="parent"
47       app:layout_constraintTop_toTopOf="parent" />
48
49     <EditText
50       android:id="@+id/editTextTextPersonName"
51       android:layout_width="188dp"
52       android:layout_height="50dp"
53       android:layout_marginTop="15dp"
54       android:background="@drawable/rounded_corner_border"
55       android:ems="10"
56       android:hint="@string/fname"
57       android:inputType="textPersonName"
58       app:layout_constraintStart_toStartOf="@+id/textView2"
59       app:layout_constraintTop_toBottomOf="@+id/textView2" />
60
61     <EditText
62       android:id="@+id/editTextTextPersonName2"
63       android:layout_width="0dp"
64       android:layout_height="0dp"
```

```
65    android:layout_marginStart="5dp"
66    android:background="@drawable/rounded_corner_border"
67    android:ems="10"
68    android:hint="@string/lname"
69    android:inputType="textPersonName"
70    app:layout_constraintBottom_toBottomOf="@+id/editTextTextPersonName"
71    app:layout_constraintEnd_toEndOf="@+id/textView2"
72    app:layout_constraintHorizontal_bias="1.0"
73    app:layout_constraintStart_toEndOf="@+id/editTextTextPersonName"
74    app:layout_constraintTop_toTopOf="@+id/editTextTextPersonName" />
75
76    <EditText
77        android:id="@+id/editTextPhone"
78        android:layout_width="0dp"
79        android:layout_height="50dp"
80        android:layout_marginTop="15dp"
81        android:background="@drawable/rounded_corner_border"
82        android:ems="10"
83        android:hint="@string/mobile"
84        android:inputType="phone"
85        app:layout_constraintEnd_toEndOf="@+id/textView2"
86        app:layout_constraintHorizontal_bias="1.0"
87        app:layout_constraintStart_toStartOf="@+id/textView2"
88        app:layout_constraintTop_toBottomOf="@+id/editTextTextPersonName" />
89
90    <EditText
91        android:id="@+id/editTextTextEmailAddress"
92        android:layout_width="0dp"
93        android:layout_height="wrap_content"
94        android:layout_marginTop="15dp"
95        android:background="@drawable/rounded_corner_border"
96        android:ems="10"
97        android:hint="@string/email"
98        android:inputType="textEmailAddress"
99        app:layout_constraintEnd_toEndOf="@+id/editTextPhone"
100       app:layout_constraintStart_toStartOf="@+id/editTextPhone"
101       app:layout_constraintTop_toBottomOf="@+id/editTextPhone" />
102
103   <EditText
104       android:id="@+id/editTextTextPassword"
105       android:layout_width="0dp"
106       android:layout_height="wrap_content"
107       android:layout_marginTop="15dp"
108       android:background="@drawable/rounded_corner_border"
109       android:ems="10"
110       android:hint="@string/set_pwd"
111       android:inputType="textPassword"
112       app:layout_constraintEnd_toEndOf="@+id/editTextTextEmailAddress"
113       app:layout_constraintStart_toStartOf="@+id/editTextTextEmailAddress"
114       app:layout_constraintTop_toBottomOf="@+id/editTextTextEmailAddress" />
115
116   <EditText
117       android:id="@+id/editTextTextPassword2"
118       android:layout_width="0dp"
119       android:layout_height="wrap_content"
120       android:layout_marginTop="15dp"
121       android:background="@drawable/rounded_corner_border"
122       android:ems="10"
123       android:hint="@string/cnf_pwd"
124       android:inputType="textPassword"
125       app:layout_constraintEnd_toEndOf="@+id/editTextTextPassword"
126       app:layout_constraintStart_toStartOf="@+id/editTextTextPassword"
127       app:layout_constraintTop_toBottomOf="@+id/editTextTextPassword" />
128
129   <TextView
```

```
130     android:id="@+id/textView4"
131     android:layout_width="0dp"
132     android:layout_height="38dp"
133     android:layout_marginStart="3dp"
134     android:layout_marginTop="8dp"
135     android:textColor="#fc0008"
136     android:textSize="15dp"
137     app:layout_constraintEnd_toEndOf="@+id/editTextTextPassword2"
138     app:layout_constraintHorizontal_bias="0.0"
139     app:layout_constraintStart_toStartOf="@+id/editTextTextPassword2"
140     app:layout_constraintTop_toBottomOf="@+id/editTextTextPassword2" />
141 </androidx.constraintlayout.widget.ConstraintLayout>
142
143 <Button
144     android:id="@+id/button"
145     android:layout_width="122dp"
146     android:layout_height="51dp"
147     android:layout_marginTop="24dp"
148     android:background="@drawable/rounded_button"
149     android:text="@string/sign_up"
150     android:textColor="@color/colorPrimaryDark"
151     android:textSize="20dp"
152     app:layout_constraintEnd_toEndOf="@+id/constraintLayout"
153     app:layout_constraintHorizontal_bias="0.498"
154     app:layout_constraintStart_toStartOf="@+id/constraintLayout"
155     app:layout_constraintTop_toBottomOf="@+id/constraintLayout"
156     android:onClick="sign_up"/>
157
158 </androidx.constraintlayout.widget.ConstraintLayout>
```

```

1 package com.example.easysShoppingcom;
2
3 import androidx.appcompat.app.AppCompatActivity;
4 import android.content.Intent;
5 import android.os.Bundle;
6 import android.view.View;
7 import android.widget.EditText;
8 import android.widget.TextView;
9
10 public class MainActivity extends AppCompatActivity {
11     EditText fn, ln, phn, eml, pwd, cpwd;
12     TextView warn;
13     boolean isEmailValid=false, isPwdvalid = false;
14     @Override
15     protected void onCreate(Bundle savedInstanceState) {
16         super.onCreate(savedInstanceState);
17         setContentView(R.layout.activity_main);
18     }
19
20     public void sign_up(View v){
21         fn=findViewById(R.id.editTextTextPersonName);
22         ln=findViewById(R.id.editTextTextPersonName2);
23         phn=findViewById(R.id.editTextTextPhone);
24         eml=findViewById(R.id.editTextTextEmailAddress);
25         pwd=findViewById(R.id.editTextTextPassword);
26         cpwd=findViewById(R.id.editTextTextPassword2);
27         warn=findViewById(R.id.textView4);
28
29         String phn_no = phn.getText().toString();
30
31         String email= eml.getText().toString();
32         int at_pos = email.indexOf("@");
33         int dot_pos = email.lastIndexOf(".");
34
35         if(at_pos>4&&dot_pos-at_pos>2&&email.length()-dot_pos>2){
36             isEmailValid = true;
37         }
38         else{
39             isEmailValid=false;
40         }
41
42         String password = pwd.getText().toString();
43         boolean isCapital=false;
44         boolean isSymbol= false;
45         String symbol = "@!#$%^&*()_+?/>. <";
46
47         for(int i=0; i<password.length(); i++){
48             char ch = password.charAt(i);
49             if(Character.isUpperCase(ch)){
50                 isCapital = true;
51             }
52             String chstr = Character.toString(ch);
53             if(symbol.contains(chstr)){
54                 isSymbol=true;
55             }
56         }
57
58         if(isCapital&&isSymbol&&password.length()>5){
59             isPwdvalid=true;
60         } else{
61             isPwdvalid=false;
62         }
63
64         String conf_password = cpwd.getText().toString();
65

```

### File: - MainActivity.java

```
66     String first_name = fn.getText().toString();
67     String last_name = ln.getText().toString();
68     String full_name = first_name+" "+last_name;
69
70     if(first_name.length()>0&&last_name.length()>0&&phn_no.length()==10&&isValid&&
71     isPwdvalid&&password.equals(conf_password)){
72         Intent i = new Intent(MainActivity.this, Options.class);
73         i.putExtra("my_key", full_name);
74         startActivity(i);
75     }
76     else{
77         if(first_name.length()==0){
78             warn.setText(getString(R.string.provide_fname));
79         }
80         else if(last_name.length()==0){
81             warn.setText(R.string.provide_lname);
82         }
83         else if(phn_no.length()==0){
84             warn.setText(getString(R.string.provide_mobile_no));
85         }
86         else if(phn_no.length()!=10){
87             warn.setText(getString(R.string.not_ten_digit));
88         }
89         else if(!isValid){
90             warn.setText(getString(R.string.invalid_email));
91         }
92         else if(!isPwdvalid){
93             warn.setText(getString(R.string.pwd_not_valid));
94         }
95         else if(!password.equals(conf_password)){
96             warn.setText(getString(R.string.password_not_match));
97         }
98         else{
99             warn.setText("");
100     }
101 }
102 }
```

```

1 <?xml version="1.0" encoding="utf-8"?>
2 <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/apk/res/android"
3     xmlns:app="http://schemas.android.com/apk/res-auto"
4     xmlns:tools="http://schemas.android.com/tools"
5     android:layout_width="match_parent"
6     android:layout_height="match_parent"
7     tools:context=".Options"
8     android:background="@color/background">
9
10    <TextView
11        android:id="@+id/textView"
12        android:layout_width="0dp"
13        android:layout_height="50dp"
14        android:layout_marginTop="16dp"
15        android:background="@drawable/rounded_corner"
16        android:gravity="center"
17        android:textColor="@color/colorPrimaryDark"
18        android:textSize="23dp"
19        app:layout_constraintEnd_toEndOf="@+id/constraintLayout"
20        app:layout_constraintStart_toStartOf="@+id/constraintLayout"
21        app:layout_constraintTop_toTopOf="parent" />
22
23    <androidx.constraintlayout.widget.ConstraintLayout
24        android:id="@+id/constraintLayout"
25        android:layout_width="0dp"
26        android:layout_height="431dp"
27        android:layout_marginStart="8dp"
28        android:layout_marginTop="8dp"
29        android:layout_marginEnd="8dp"
30        android:background="@drawable/rounded_corner"
31        app:layout_constraintEnd_toEndOf="parent"
32        app:layout_constraintHorizontal_bias="1.0"
33        app:layout_constraintStart_toStartOf="parent"
34        app:layout_constraintTop_toBottomOf="@+id/textView">
35
36        <TextView
37            android:id="@+id/textView2"
38            android:layout_width="387dp"
39            android:layout_height="34dp"
40            android:layout_marginTop="12dp"
41            android:paddingLeft="5dp"
42            android:text="@string/what_to_do"
43            android:textColor="@color/colorPrimaryDark"
44            android:textSize="20dp"
45            app:layout_constraintEnd_toEndOf="parent"
46            app:layout_constraintStart_toStartOf="parent"
47            app:layout_constraintTop_toTopOf="parent" />
48
49        <Button
50            android:id="@+id/button2"
51            android:layout_width="268dp"
52            android:layout_height="50dp"
53            android:layout_marginTop="64dp"
54            android:background="@drawable/rounded_button"
55            android:text="@string/shop"
56            android:textColor="@color/colorPrimaryDark"
57            android:textSize="20dp"
58            app:layout_constraintEnd_toEndOf="parent"
59            app:layout_constraintHorizontal_bias="0.496"
60            app:layout_constraintStart_toStartOf="parent"
61            app:layout_constraintTop_toBottomOf="@+id/textView2"
62            android:onClick="shop"/>
63
64        <Button
65            android:id="@+id/button3"
66            android:layout_width="0dp"
67            android:layout_height="50dp"
68            android:layout_marginTop="24dp"
69            android:background="@drawable/rounded_button"
70            android:text="@string/count"
71            android:textColor="@color/colorPrimaryDark"
72            android:textSize="20dp"
73            app:layout_constraintEnd_toEndOf="@+id/button2"
74            app:layout_constraintHorizontal_bias="0.555"
75            app:layout_constraintStart_toStartOf="@+id/button2"
76            app:layout_constraintTop_toBottomOf="@+id/button2" />
77
78        <Button
79            android:id="@+id/button4"
80            android:layout_width="0dp"
81            android:layout_height="50dp"

```

File: - activity\_options.xml

```
82     android:layout_marginTop="24dp"
83     android:background="@drawable/rounded_button"
84     android:text="@string/contact"
85     android:textColor="@color/colorPrimaryDark"
86     android:textSize="20dp"
87     app:layout_constraintEnd_toEndOf="@+id/button3"
88     app:layout_constraintStart_toStartOf="@+id/button3"
89     app:layout_constraintTop_toBottomOf="@+id/button3" />
90
91     <Button
92         android:id="@+id/button5"
93         android:layout_width="0dp"
94         android:layout_height="50dp"
95         android:layout_marginTop="24dp"
96         android:background="@drawable/rounded_button"
97         android:text="@string/back"
98         android:textColor="@color/colorPrimaryDark"
99         android:textSize="20dp"
100        app:layout_constraintEnd_toEndOf="@+id/button4"
101        app:layout_constraintStart_toStartOf="@+id/button4"
102        app:layout_constraintTop_toBottomOf="@+id/button4" />
103
104    <TextView
105        android:id="@+id/textView3"
106        android:layout_width="0dp"
107        android:layout_height="40dp"
108        android:layout_marginTop="5dp"
109        android:textAlignment="center"
110        android:textColor="@color/colorPrimaryDark"
111        android:textSize="20dp"
112        app:layout_constraintEnd_toEndOf="@+id/textView2"
113        app:layout_constraintStart_toStartOf="@+id/textView2"
114        app:layout_constraintTop_toBottomOf="@+id/textView2" />
115
116    </androidx.constraintlayout.widget.ConstraintLayout>
117
118 </androidx.constraintlayout.widget.ConstraintLayout>
```

```

1 package com.example.easyshoppingcom;
2
3 import androidx.annotation.Nullable;
4 import androidx.appcompat.app.AppCompatActivity;
5 import androidx.core.app.ActivityCompat;
6 import androidx.core.content.ContextCompat;
7
8 import android.Manifest;
9 import android.annotation.SuppressLint;
10 import android.content.Intent;
11 import android.content.pm.PackageManager;
12 import android.net.Uri;
13 import android.os.Bundle;
14 import android.view.View;
15 import android.widget.Button;
16 import android.widget.TextView;
17 import android.widget.Toast;
18
19 public class Options extends AppCompatActivity {
20     int cart_count;
21     Button count_btn, back_btn, contact_btn;
22     TextView cart_tv, name_tv;
23
24     @Override
25     protected void onCreate(Bundle savedInstanceState) {
26         super.onCreate(savedInstanceState);
27         setContentView(R.layout.activity_options);
28         count_btn = findViewById(R.id.button3);
29         cart_tv = findViewById(R.id.textView3);
30         count_btn.setOnClickListener(new View.OnClickListener() {
31             @SuppressLint("SetTextI18n")
32             @Override
33             public void onClick(View v) {
34                 cart_tv.setText(getString(R.string.cart_count)+" "+cart_count);
35             }
36         });
37
38         back_btn = findViewById(R.id.button5);
39         back_btn.setOnClickListener(new View.OnClickListener() {
40             @Override
41             public void onClick(View v) {
42                 Intent i = new Intent(getApplicationContext(), MainActivity.class);
43                 startActivity(i);
44             }
45         });
46
47         contact_btn = findViewById(R.id.button4);
48         contact_btn.setOnClickListener(new View.OnClickListener() {
49             @Override
50             public void onClick(View v) {
51                 if(ContextCompat.checkSelfPermission(Options.this, Manifest.permission.
52                     CALL_PHONE)!= PackageManager.PERMISSION_GRANTED){
53                     ActivityCompat.requestPermissions(Options.this, new String[] { Manifest.
54                         permission.CALL_PHONE}, 1);
55                 } else{
56                     Toast.makeText(Options.this, getString(R.string.call_customer), Toast.
57                         LENGTH_SHORT).show();
58                     Intent intent = new Intent(Intent.ACTION_CALL, Uri.parse("tel:"+("+
59                     919876543210")));
60                     startActivity(intent);
61                 }
62             }
63         });
64     }
65     name_tv = findViewById(R.id.textView);

```

```
62     Bundle b = getIntent().getExtras();
63     String name = b.getString("my_key");
64     name_tv.setText(getString(R.string.welcome)+" "+name);
65
66
67 }
68 public void shop(View v){
69     Intent i = new Intent(this, Products.class);
70     startActivityForResult(i, 2);
71 }
72
73 @Override
74 protected void onActivityResult(int requestCode, int resultCode, @Nullable Intent data) {
75     super.onActivityResult(requestCode, resultCode, data);
76     if(requestCode==2&&RESULT_OK==resultCode){
77         Bundle b = data.getExtras();
78         cart_count= b.getInt("count");
79     }
80 }
81 }
```

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <androidx.constraintlayout.widget.ConstraintLayout xmlns:android="http://schemas.android.com/
  apk/res/android"
3   xmlns:app="http://schemas.android.com/apk/res-auto"
4   xmlns:tools="http://schemas.android.com/tools"
5   android:layout_width="match_parent"
6   android:layout_height="match_parent"
7   tools:context=".Products"
8   android:background="@color/background">
9
10  <TextView
11    android:id="@+id/textView"
12    android:layout_width="0dp"
13    android:layout_height="50dp"
14    android:layout_marginTop="16dp"
15    android:background="@drawable/rounded_corner"
16    android:gravity="center"
17    android:textColor="@color/colorPrimaryDark"
18    android:textSize="23dp"
19    android:text="@string/product"
20    app:layout_constraintEnd_toEndOf="@+id/constraintLayout"
21    app:layout_constraintStart_toStartOf="@+id/constraintLayout"
22    app:layout_constraintTop_toTopOf="parent" />
23
24  <androidx.constraintlayout.widget.ConstraintLayout
25    android:id="@+id/constraintLayout"
26    android:layout_width="0dp"
27    android:layout_height="590dp"
28    android:layout_marginStart="8dp"
29    android:layout_marginTop="8dp"
30    android:layout_marginEnd="8dp"
31    android:background="@drawable/rounded_corner"
32    app:layout_constraintEnd_toEndOf="parent"
33    app:layout_constraintHorizontal_bias="0.0"
34    app:layout_constraintStart_toStartOf="parent"
35    app:layout_constraintTop_toBottomOf="@+id/textView">
36
37    <TextView
38      android:id="@+id/textView2"
39      android:layout_width="387dp"
40      android:layout_height="34dp"
41      android:layout_marginTop="12dp"
42      android:paddingLeft="5dp"
43      android:text="@string/select_product"
44      android:textColor="@color/colorPrimaryDark"
45      android:textSize="20dp"
46      app:layout_constraintEnd_toEndOf="parent"
47      app:layout_constraintStart_toStartOf="parent"
48      app:layout_constraintTop_toTopOf="parent" />
49
50    <GridView
51      android:id="@+id/products_grid"
52      android:layout_width="393dp"
53      android:layout_height="535dp"
54      android:layout_marginTop="35dp"
55      android:numColumns="3"
56      app:layout_constraintEnd_toEndOf="parent"
57      app:layout_constraintHorizontal_bias="1.0"
58      app:layout_constraintStart_toStartOf="parent"
59      app:layout_constraintTop_toTopOf="@+id/textView2" />
60
61  </androidx.constraintlayout.widget.ConstraintLayout>
62
63  <Button
64    android:id="@+id/button6"
```

```
65     android:layout_width="132dp"
66     android:layout_height="48dp"
67     android:layout_marginTop="10dp"
68     android:background="@drawable/rounded_button"
69     android:text="@string/continu"
70     android:textColor="@color/colorPrimaryDark"
71     android:textSize="20dp"
72     app:layout_constraintEnd_toEndOf="@+id/constraintLayout"
73     app:layout_constraintHorizontal_bias="0.498"
74     app:layout_constraintStart_toStartOf="@+id/constraintLayout"
75     app:layout_constraintTop_toBottomOf="@+id/constraintLayout" />
76
77 </androidx.constraintlayout.widget.ConstraintLayout>
```

```

1 package com.example.easysShoppingcom;
2
3 import androidx.appcompat.app.AppCompatActivity;
4
5 import android.content.Context;
6 import android.content.Intent;
7 import android.os.Bundle;
8 import android.view.View;
9 import android.view.ViewGroup;
10 import android.widget.AdapterView;
11 import android.widget.ArrayAdapter;
12 import android.widget.BaseAdapter;
13 import android.widget.Button;
14 import android.widget.GridView;
15 import android.widget.ImageView;
16 import android.widget.Toast;
17
18 public class Products extends AppCompatActivity {
19     GridView gridView;
20     boolean[] bool_arr = {false, false, false, false, false, false, false, false, false, false};
21     int[] products ={R.drawable.item1,R.drawable.item2, R.drawable.item3, R.drawable.item4, R.
drawable.item5, R.drawable.item6,
22                     R.drawable.item7, R.drawable.item8, R.drawable.item9, R.drawable.item10, R.drawable
.item11};
23     Button btn;
24     @Override
25     protected void onCreate(Bundle savedInstanceState) {
26         super.onCreate(savedInstanceState);
27         setContentView(R.layout.activity_products);
28
29         gridView = findViewById(R.id.products_grid);
30         gridView.setAdapter(new ImageAdapterGridView(this));
31         gridView.setChoiceMode(GridView.CHOICE_MODE_MULTIPLE);
32
33         btn = findViewById(R.id.button6);
34         btn.setOnClickListener(new View.OnClickListener() {
35             @Override
36             public void onClick(View v) {
37                 int count = 0;
38                 for(int i=0; i<bool_arr.length; i++){
39                     if(bool_arr[i]==true) count++;
40                 }
41                 Intent i = new Intent();
42                 i.putExtra("count", count);
43                 setResult(RESULT_OK,i);
44                 finish();
45             }
46         });
47
48
49         gridView.setOnItemClickListener(new AdapterView.OnItemClickListener() {
50             @Override
51             public void onItemClick(AdapterView<?> parent, View view, int position, long id) {
52                 System.out.println(position);
53                 if(bool_arr[position]==false){
54                     bool_arr[position]=true;
55
56                     Toast.makeText(Products.this, getString(R.string.added_to_cart), Toast.
LENGTH_SHORT).show();
57                 }
58                 else{
59                     bool_arr[position]= false;
60                     Toast.makeText(Products.this, getString(R.string.item_removed), Toast.
LENGTH_SHORT).show();
61                 }
62             }
63         });
64     }
65 }

```

```
61             }
62             System.out.println(bool_arr[position]);
63         }
64     });
65
66
67
68 }
69 public class ImageAdapterGridView extends BaseAdapter {
70     private Context mContext;
71     public ImageAdapterGridView(Context c) {
72         mContext = c;
73     }
74     public int getCount() {
75         return products.length;
76     }
77
78     public Object getItem(int position) {
79         return position;
80     }
81
82     public long getItemId(int position) {
83         return 0;
84     }
85
86     public View getView(int position, View convertView, ViewGroup parent) {
87         ImageView mImageView;
88
89         if (convertView == null) {
90             mImageView = new ImageView(mContext);
91             mImageView.setLayoutParams(new GridView.LayoutParams(300, 300));
92             mImageView.setScaleType(ImageView.ScaleType.CENTER_CROP);
93             mImageView.setPadding(10, 20, 10, 20);
94         } else {
95             mImageView = (ImageView) convertView;
96         }
97         mImageView.setImageResource(products[position]);
98         return mImageView;
99     }
100 }
101 }
```