

# DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

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## Experiment 6

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**Branch:** CSE

**Semester:** 6th

**Subject Name:** MAD Lab

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**Section/Group:** 704-B

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**Subject Code:** 20CSP356

- **Aim:** Create an Android-based application and use intent to send SMS
- **Objective:** Understanding of the interactions between user interface and underlying application infrastructure.
- **Tools used:**
  1. Android Studio.
  2. Eclipse IDE.
- **Script and Output:**

### Steps-

1. First create a new Android Application. This will create an XML file “activity\_main.xml” and a Java File “MainActivity.java”.
2. Open the “activity\_main.xml” file and add the following widgets in a [RelativeLayout](#):
  - A **EditView** to input the phone number.
  - A **EditView** to input the message content.
  - A **Button** button to store the response.

Also, Assign the **ID** to each of the components along with other attributes. The assigned ID on a component helps that component to be easily found and used in the Java files.

3. Now, after the UI, this step will create the Backend of Application. For this, open the “MainActivity.java” file and instantiate the components made in the XML file (EditView and Submit Button) using findViewById() method. This method binds the created object to the UI Components with the help of the assigned ID.

This step involves setting up the operations on the EditView and Submit Button. These operations are as follows:

- Give the Phone Number of intended receiver in first EditText.
- Give the Message for the intended receiver in the second EditText.
- In the Submit Button Listener, set the operations to be performed. This involves displaying the marked answer in the form of **Toast**.

4. Now run the app and operate as follows:

- When the app is opened, it displays two inputs one for phone number and other for message.
- A button to send message.

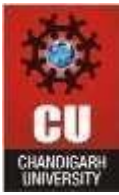
## CODE:

### MainActivity.java

```
package com.example.unit2;
```

```
import android.Manifest; import  
android.content.pm.PackageManager; import  
android.support.v4.app.ActivityCompat; import  
android.support.v4.content.ContextCompat; import  
android.support.v7.app.AppCompatActivity;  
import android.os.Bundle; import  
android.telephony.SmsManager; import  
android.view.View; import android.widget.Button;  
import android.widget.EditText;  
import android.widget.Toast;
```

```
public class MainActivity2 extends AppCompatActivity {  
    Button bt;  
    EditText et ,et2;
```



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```
@Override protected void onCreate(Bundle savedInstanceState) {

    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_main2);    bt =
    findViewById(R.id.button);    et =
    findViewById(R.id.smsContent);
        et2 = findViewById(R.id.phone);

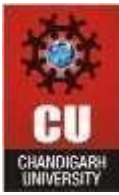
    ActivityCompat.requestPermissions(MainActivity2.this,new
    String[]{Manifest.permission.SEND_SMS,Manifest.permission.READ_SMS},PackageMan
    ager.PERMISSION_GRANTED);

        bt.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View view) {
                String message = et.getText().toString();
                String ph = et2.getText().toString();        ph
                = "+91"+ph;

                SmsManager smsManager = SmsManager.getDefault();
                smsManager.sendTextMessage(ph,null,message,null,null);
                Toast.makeText(MainActivity2.this,"SMS
                Sent"+ph,Toast.LENGTH_LONG).show();
            }
        });
    }
}
```

### activity\_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<android.support.constraint.ConstraintLayout
xmlns:android="http://schemas.android.com/apk/res/android"
xmlns:app="http://schemas.android.com/apk/res-auto"
```



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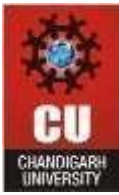
```
xmlns:tools="http://schemas.android.com/tools"  
android:layout_width="match_parent"  
android:layout_height="match_parent"    tools:context=".MainActivity2">
```

```
<EditText  
    android:id="@+id/smsContent"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:ems="17"  
        android:hint="Write your message.."  
    app:layout_constraintBottom_toBottomOf="parent"  
    app:layout_constraintEnd_toEndOf="parent"  
        app:layout_constraintHorizontal_bias="0.49
```

```
app:layout_constraintStart_toStartOf="parent"  
app:layout_constraintTop_toTopOf="parent"  
    app:layout_constraintVertical_bias="0.309" />
```

```
<Button  
    android:id="@+id/button"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:layout_marginBottom="388dp"  
    android:background="@color/whatsappGreen"  
        android:padding="10sp"    android:text="Send Message"  
    android:textColor="@color/white"  
    app:layout_constraintBottom_toBottomOf="parent"  
    app:layout_constraintEnd_toEndOf="parent"  
    app:layout_constraintStart_toStartOf="parent"  
    app:layout_constraintTop_toBottomOf="@+id/smsContent"  
        app:layout_constraintVertical_bias="0.101" />
```

```
<EditText  
    android:id="@+id/phone"  
    android:layout_width="wrap_content"
```



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```
android:layout_height="wrap_content"
android:ems="10"      android:inputType="phone"
    app:layout_constraintBottom_toTopOf="@+id/smsContent"
app:layout_constraintEnd_toEndOf="parent"
app:layout_constraintHorizontal_bias="0.497"
app:layout_constraintStart_toStartOf="parent"
app:layout_constraintTop_toTopOf="parent"
app:layout_constraintVertical_bias="0.766" />
</android.support.constraint.ConstraintLayout>
```

## OUTPUT:

