



Experiment – 6

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Subject Name: MAD Lab

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Aim:

To design an android application Send SMS using Intent.

Objective:

To design an android application that Send SMS directly.

System Requirement:

- Android Studio
- Java JDK5 or Above
- SDK
- JRE

Steps of Experiment:

The first step is to create a simple Android Application using Android studio.

Step 1: Create a New Project

Step 2: Write the permission code in Android-Manifest.xml file



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Source Code:

AndroidManifest.xml

```
<uses-permission android:name="android.permission.SEND_SMS"/>
```

MainActivity.java

```
package com.example.a20bcs9713_exp_6;

import androidx.annotation.NonNull;
import androidx.appcompat.app.AppCompatActivity;
import androidx.core.app.ActivityCompat;
import androidx.core.content.ContextCompat;

import android.Manifest;
import android.content.pm.PackageManager;
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 MainActivity extends AppCompatActivity {

    EditText editTextPhone, getEditTextMessage;
    Button btnSent;

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

        editTextPhone = findViewById(R.id.editTextPhone);
        getEditTextMessage = findViewById(R.id.editTextMessage);
        btnSent = findViewById(R.id.btnSent);

        btnSent.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                if (ContextCompat.checkSelfPermission(MainActivity.this,
                    Manifest.permission.SEND_SMS)
```

```
        == PackageManager.PERMISSION_GRANTED) {
            sendSMS();
        } else {
            ActivityCompat.requestPermissions(MainActivity.this, new
String[]{Manifest.permission.SEND_SMS}, 100);
        }
    }
});
}

@Override
public void onRequestPermissionsResult(int requestCode, @NonNull String[] permissions,
@NonNull int[] grantResults) {
    super.onRequestPermissionsResult(requestCode, permissions, grantResults);

    if(requestCode == 100 && grantResults.length > 0 && grantResults[0] ==
PackageManager.PERMISSION_GRANTED) {
        sendSMS();
    } else {
        Toast.makeText(this, "Permission Denied", Toast.LENGTH_SHORT).show();
    }
}

private void sendSMS() {
    String phone = editTextPhone.getText().toString();
    String message = getEditTextMessage.getText().toString();
    if(!phone.isEmpty() && !message.isEmpty()){
        SmsManager smsManager = SmsManager.getDefault();
        smsManager.sendTextMessage(phone, null, message, null, null);
        Toast.makeText(this, "SMS sent Successfully", Toast.LENGTH_SHORT).show();
    } else {
        Toast.makeText(this, "Please enter Phone & Message", Toast.LENGTH_SHORT).show();
    }
}
}
```

activity_main.xml

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

```
xmlns:tools="http://schemas.android.com/tools"
android:layout_width="match_parent"
android:layout_height="match_parent"
android:orientation="vertical"
android:gravity="center"
android:padding="15sp"
tools:context=".MainActivity">

<EditText
    android:background="@android:drawable/editbox_background"
    android:inputType="phone"
    android:maxLength="10"
    android:padding="15sp"
    android:id="@+id/editTextPhone"
    android:hint="Enter Phone Number"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
/>

<EditText
    android:layout_below="@id/editTextPhone"
    android:layout_width="match_parent"
    android:layout_height="wrap_content"
    android:id="@+id/editTextMessage"
    android:hint="Enter Message"
    android:padding="15sp"
    android:inputType="textMultiLine"
    android:lines="5"
    android:background="@android:drawable/editbox_background"
/>

<Button
    android:layout_below="@id/editTextMessage"
    android:layout_centerHorizontal="true"
    android:layout_width="wrap_content"
    android:layout_height="wrap_content"
    android:id="@+id/btnSent"
    android:text="Send SMS"
    android:textAllCaps="false"
    android:layout_marginTop="30dp"
/>

</RelativeLayout>
```

Running App on Mobile:

First ScreenShot:

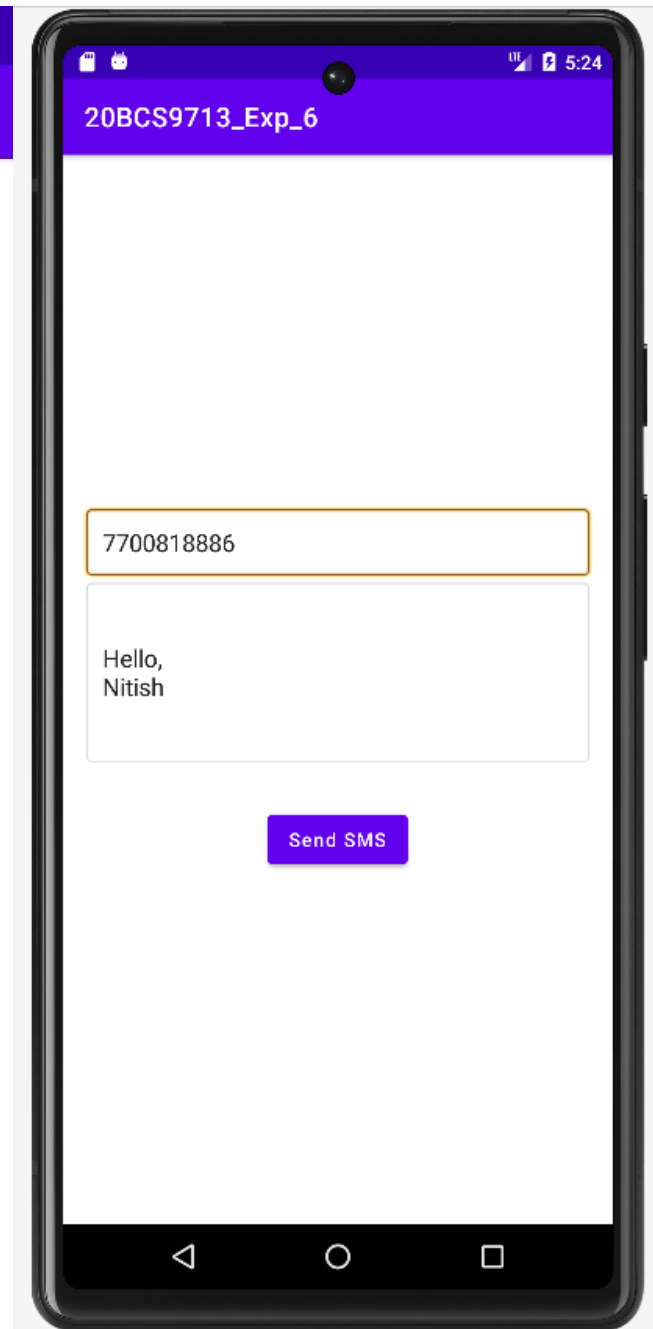
20BCS9713_Exp_6

7700818886

Hello,
Nitish

Send SMS

SMS sent Successfully





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Second Screenshot:

