

Practical No 29

Q1. Explain the use of SmsManager Class ?

In android, we can send SMS from our android application in two ways either by using SMSManager API or [Intents](#) based on our requirements.

If we use SMSManager API, it will directly send SMS from our application.

Android Send SMS using SMSManager API

In android, to send SMS using SMSManager API we need to write the code like as shown below.

```
SmsManager smgr = SmsManager.getDefault();
smgr.sendTextMessage(MobileNumber,null,Message,null,null);
```

Q2. List changes that are need to be done in AndroidManifest.xml file to send and receive messages.

SMSManager API required SEND_SMS permission in our android manifest to send SMS. Following is the code snippet to set SEND_SMS permissions in manifest file.

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

Q3. WAP to send and receive SMS,make use of following GUI

activity_main.xml

```
<?xml version="1.0" encoding="utf-8"?>
<LinearLayout xmlns:android="http://schemas.android.com/apk/res/android"
    android:orientation="vertical" android:layout_width="match_parent"
    android:layout_height="match_parent">
    <TextView
        android:id="@+id/fstTxt"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="100dp"
        android:layout_marginTop="150dp"
        android:text="Mobile No" />
    <EditText
```

```

        android:id="@+id/mb1Txt"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="100dp"
        android:ems="10"/>
    <TextView
        android:id="@+id/secTxt"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:text="Message"
        android:layout_marginLeft="100dp" />
    <EditText
        android:id="@+id/msgTxt"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="100dp"
        android:ems="10" />
    <Button
        android:id="@+id/btnSend"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:layout_marginLeft="100dp"
        android:text="Send SMS" />
</LinearLayout>

```

MainActivity.java

```

package com.tutlane.sendsmsexample;
import android.content.Intent;
import android.net.Uri;
import android.provider.Telephony;
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 MainActivity extends AppCompatActivity {

    private EditText txtMobile;
    private EditText txtMessage;
    private Button btnSms;
    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        txtMobile = (EditText)findViewById(R.id.mb1Txt);
        txtMessage = (EditText)findViewById(R.id.msgTxt);
        btnSms = (Button)findViewById(R.id.btnSend);
    }
}

```

```

        btnSms.setOnClickListener(new View.OnClickListener() {
            @Override
            public void onClick(View v) {
                try{
                    SmsManager smgr = SmsManager.getDefault();

                    smgr.sendTextMessage(txtMobile.getText().toString(),null,txtMessage.getText().toString(),null,null);
                    Toast.makeText(MainActivity.this, "SMS Sent Successfully", Toast.LENGTH_SHORT).show();
                }
                catch (Exception e){
                    Toast.makeText(MainActivity.this, "SMS Failed to Send, Please try again", Toast.LENGTH_SHORT).show();
                }
            }
        });
    }
}

```

AndroidManifest.xml

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    package="com.tutlane.sendsmsexample">
    <uses-permission android:name="android.permission.SEND_SMS"/>
    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">
        <activity android:name=".MainActivity">
            <intent-filter>
                <action android:name="android.intent.action.MAIN" />

                <category android:name="android.intent.category.LAUNCHER" />
            </intent-filter>
        </activity>
    </application>
</manifest>

```

If you observe above **AndroidManifest.xml** file, we added a **SEND_SMS** permissions in manifest file.

Output of Android Send SMS Example

When we run above program in android studio we will get the result like as shown below.

