

Assignment No: 08

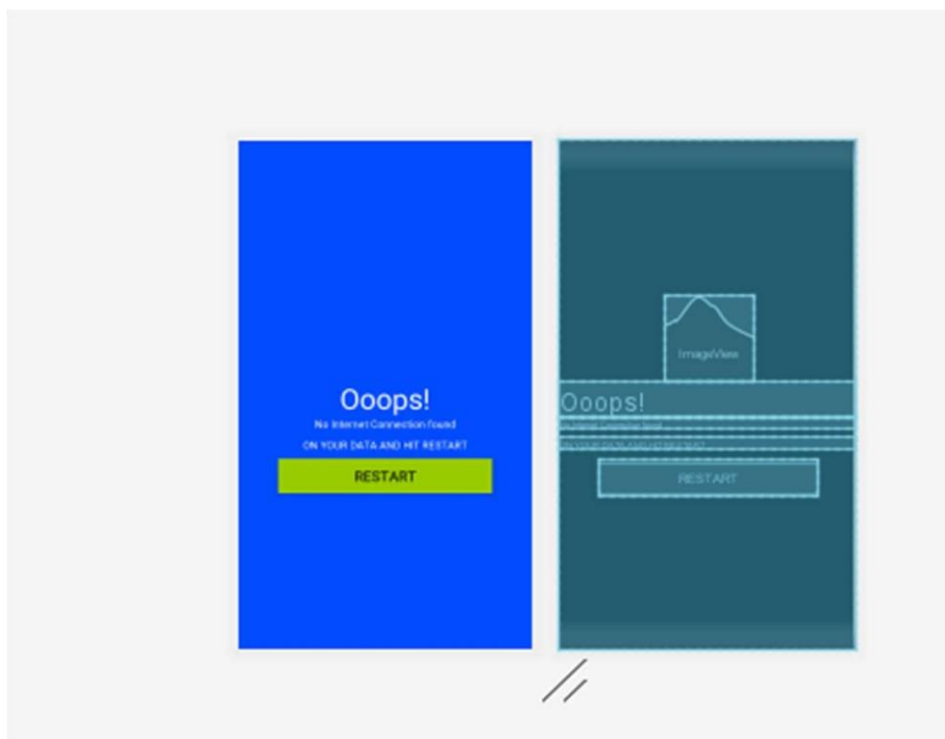
Aim - Create an android app to Connect to the Internet and use BroadcastReceiver.

customdialog.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:background="#024BFF"
    android:gravity="center"
    android:layout_height="match_parent">
    <ImageView
        android:layout_width="120dp"
        android:layout_height="120dp"
        android:src="@drawable/no_internet"
        android:layout_gravity="center"
    />
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content" android:text="Ooops!"
        android:gravity="center"
        android:textColor="#FFF"
        android:textSize="40sp"/>
    <TextView
        android:id="@+id/nettext"
        android:layout_width="match_parent"
        android:layout_height="wrap_content" android:text="No Internet
        Connection found"
        android:textColor="#FFF"
        android:textSize="15sp"
        android:layout_marginBottom="10dp" android:gravity="center"/>
    <TextView
        android:layout_width="match_parent"
        android:layout_height="wrap_content"
        android:text="ON YOUR DATA AND HIT RESTART"
```

```
        android:textColor="#FFF"
        android:textSize="15sp"
        android:layout_marginBottom="
10dp"
        android:gravity="center"/>
<Button
    android:id="@+id/restart"
    tapp"
    android:layout_width="30
0dp"
    android:layout_height="
50dp"
    android:text="Restart"
    android:textSize="20sp"

    android:background="@android:color/holo_green_light"/>
</LinearLayout>
```



Network_util.java

```
import android.content.Context;
import
android.net.ConnectivityManager;
```

```
import android.net.NetworkInfo;
class NetworkUtil {

    public static String
    getConnectivityStatusString(Context context) {String
    status = null;
    ConnectivityManager cm = (ConnectivityManager)
context.getSystemService(Context.CONNECTIVITY_SERVICE);
    NetworkInfo activeNetwork =
    cm.getActiveNetworkInfo();if (activeNetwork
    != null) {
        if (activeNetwork.getType() ==
            ConnectivityManager.TYPE_WIFI) {status = "Wifi
            enabled";
            return status;
        } else if (activeNetwork.getType() ==
            ConnectivityManager.TYPE_MOBILE) {status = "Mobile
            data enabled";
            return status;
        }
    } else {
        status = "No internet is
            available";return status;
    }
    return status;
}
}
```

AndroidManifest.xml

```
<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/res/android"
    xmlns:tools="http://schemas.android.com/tools"
    package="com.example.broadcastreceiverapplication">

    <application
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:roundIcon="@mipmap/ic_launcher_round"
        android:supportRtl="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>
<receiver android:name = "MyReceiver">
    <intent-filter>
        <action android:name = "android.net.conn.CONNECTIVITY_CHANGE"
            tools:ignore="BatteryLife" />
        <action android:name = "android.net.wifi.WIFI_STATE_CHANGED" />
    </intent-filter>
</receiver>
</application>
<uses-permission
    android:name="android.permission.ACCESS_NETWORK_STATE"/>
</manifest>
```

MyReceiver.java

```
import
android.app.Activity;
import android.app.Dialog;
import
android.content.BroadcastReceiver
;import android.content.Context;
import
android.content.Intent;
import android.util.Log;
import
android.view.View;
import
android.widget.Button;
import
android.widget.TextView;
import
android.widget.Toast;

import
com.example.broadcastreceiverapplication.MainActivity;
import com.example.broadcastreceiverapplication.R;

public class MyReceiver extends
BroadcastReceiver { Dialog dialog;
TextView

    nettext;
```

@Override

```
public void onReceive(final Context context, final
Intent intent) { String status =
NetworkUtil.getConnectivityStatusString(context);
dialog = new Dialog(context, android.R.style.Theme_NoTitleBar_Fullscreen);
dialog setContentView(R.layout.customdialog);
Button restartapp = (Button)dialog.findViewById(
R.id.restartapp); nettext
=(TextView)dialog.findViewById(R.id.nettext);

restartapp.setOnClickListener(new
View.OnClickListener() { @Override
public void onClick(View v)
{ ((Activity)
context).finish();
Log.d("clickedbutton", "yes
");
Intent i = new Intent(context,
MainActivity.class);
context.startActivity(i);
}
});
Log.d("network", status);
if(status.isEmpty() || status.equals("No internet is available") || status.equals("No
Internet Connection")) {
status="No Internet
Connection"; dialog.show();
}
Toast.makeText(context, status, Toast.LENGTH_LONG).show();
}
```

MainActivity.java

```
package
com.example.broadcastreceiverapplication;
import
android.content.BroadcastReceiver;
import
android.content.IntentFilter;
import
android.net.ConnectivityManager;
import android.os.Bundle;
import androidx.annotation.Nullable;
import
```

```
androidx.appcompat.app.AppCompatActivity
y; public class MainActivity extends
AppCompatActivity{
    private BroadcastReceiver
    MyReceiver = null; @Override
    protected void onCreate(@Nullable Bundle
    savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_main);
        MyReceiver = new
        MyReceiver();
        broadcastIntent();
    }
    public void broadcastIntent() {
        registerReceiver(MyReceiver,
        new
        IntentFilter(ConnectivityManager.CONNECTIVITY_ACTION));
    }
    @Override
    protected void
    onPause() {
        super.onPause();

        unregisterReceiver(MyReceiver);
    }
}
```

Output:

