```
 1 package com.example.amitkrishna.robo_car;
 2
 3 import android.app.Activity;
 4 import android.content.Context;
 5 import android.content.Intent;
 6 import android.util.Log;
 7 import android.widget.Toast;
 8
 9 import java.io.BufferedReader;
10 import java.io.IOException;
11 import java.io.InputStream;
12 import java.io.InputStreamReader;
13 import java.net.HttpURLConnection;
14 import java.net.MalformedURLException;
15 import java.net.URL;
16
17 /**
18  * Created by Amit Krishna on 31-05-2017.
19  */
20
21 public final class Utils {
22     public static final String[] TAG=new String[4];
23     public static final String URL="http://192.168.225.235
   ";
24
25     public static String request(String reqadd, String cmd
   , Context context){
26
27         try {
28             URL url=new URL(reqadd+"/"+cmd);
29             HttpURLConnection urlConnection=(
   HttpURLConnection) url.openConnection();
30             urlConnection.setReadTimeout(15000);
31             urlConnection.setConnectTimeout(10000);
32             urlConnection.setRequestMethod("GET");
33             urlConnection.connect();
34
35             if (urlConnection.getResponseCode()==200){
36                BufferedReader inputStreamReader= new
   BufferedReader(new InputStreamReader(urlConnection.
   getInputStream()));
37                 String val = inputStreamReader.readLine();
38                 Log.i(TAG[2], "request:val="+val);
39                 return val;
40             }
```

```
41              else if(urlConnection.getResponseCode()==404){
42
43                  return "error1";
44
45              }
46              Log.i(TAG[2], "request:responsecode="+String.
   valueOf(urlConnection.getResponseCode()));
47
48
49          }
50          catch (MalformedURLException e){
51              Log.e(TAG[2], "request: bad url",e );
52              return null;
53
54          }
55          catch (IOException e){
56              if(e.toString().contains("No route to host")){
   return "error1";}
57              Log.e(TAG[2],"request: can`t connect",e);
58
59
60              return "error2";
61
62
63          }
64        return null;
65      }
66
67
68
69
70 }
71
```

```
 1 package com.example.amitkrishna.robo_car;
 2
 3 import android.support.v4.view.MotionEventCompat;
 4 import android.util.Log;
 5 import android.view.MotionEvent;
 6 import android.view.View;
 7
 8 import static com.example.amitkrishna.robo_car.Utils.TAG;
 9 import static com.example.amitkrishna.robo_car.
   MainActivity.Backgroundrequesttask;
10
11 /**
12  * Created by Amit Krishna on 30-05-2017.
13  */
14
15 class mylistener implements View.OnTouchListener {
16     private View toggleview;
17     private float val1=0;
18     private float val2=0;
19
20
21     mylistener(View toggleview){
22         super();
23         this.toggleview=toggleview;
24     }
25     @Override
26     public boolean onTouch(View v, MotionEvent event) {
27         int eventval= MotionEventCompat.getActionMasked(
   event);
28         if(eventval==MotionEvent.ACTION_DOWN ){
29             if(toggleview==null){
30                 Log.i(TAG[0], "onTouch: btn pressed");
31
32                 String cmd;
33                 switch (v.getId()){
34                     case R.id.primeLeftArrow:
35                         cmd="move_left";
36                         break;
37                     case R.id.primearrowright:
38                         cmd="move_right";
39                         break;
40                     case R.id.primearrowup:
41                         cmd="move_forward";
42                         break;
43                     case R.id.primeDownArrow:
```

```
44                          cmd="move_backward";
45                          break;
46                      default:
47                          cmd="none";
48                  }
49                  if(cmd!="none"){
50                new Backgroundrequesttask(v.getContext()).
   execute(Utils.URL,cmd);}
51
52              }
53              else {val1=event.getX();}
54               return true;
55          }
56          else  if (eventval==MotionEvent.ACTION_UP){
57              if(toggleview==null){
58                  Log.i(TAG[0], "onTouch: btn released");
59                  new Backgroundrequesttask(v.getContext()).
   execute(Utils.URL,"stop");
60              }
61              else {val2=event.getX();}
62
63          }
64
65          if(val1-300>val2 && val2>0 && v.getId()==R.id.
   viewgroup1){
66              int id1=v.getId();
67              int id2=toggleview.getId();
68              Log.i(TAG[0], "onTouch:al1="+ String.valueOf(
   val1)+"val2="+String.valueOf(val2));
69              Log.i(TAG[0],"id1="+String.valueOf(id1)+"id2="
   +String.valueOf(id2));
70
71                  v.setVisibility(View.GONE);
72                  toggleview.setVisibility(View.VISIBLE);
73
74          }
75          else if(val1+300<val2 && val2>0 && v.getId()==R.id
   .viewgroup2){
76              int id1=v.getId();
77              int id2=toggleview.getId();
78              Log.i(TAG[0], "onTouch:al1="+ String.valueOf(
   val1)+"val2="+String.valueOf(val2));
79              Log.i(TAG[0],"id1="+String.valueOf(id1)+"id2="
   +String.valueOf(id2));
80              v.setVisibility(View.GONE);
```

```
81                toggleview.setVisibility(View.VISIBLE);
82
83            }
84
85            return true;
86        }
87    }
88
```

```
 1 package com.example.amitkrishna.robo_car;
 2
 3 import android.app.Activity;
 4 import android.content.Context;
 5 import android.content.Intent;
 6 import android.os.AsyncTask;
 7 import android.support.v7.app.AppCompatActivity;
 8 import android.os.Bundle;
 9 import android.util.Log;
10 import android.view.View;
11 import android.widget.ImageView;
12 import android.widget.SeekBar;
13 import android.widget.Toast;
14
15 import static com.example.amitkrishna.robo_car.Utils.TAG;
16 import static com.example.amitkrishna.robo_car.Utils.URL;
17
18
19 public class MainActivity extends AppCompatActivity {
20 private static View main;
21
22
23
24     @Override
25     protected void onCreate(Bundle savedInstanceState) {
26         super.onCreate(savedInstanceState);
27         setContentView(R.layout.activity_main);
28
29         main=findViewById(R.id.main);
30
31
32
33          View view=findViewById(R.id.viewgroup2);
34          View view1=findViewById(R.id.viewgroup1);
35
36         ImageView btnup=(ImageView) findViewById(R.id.
   primearrowup);
37         ImageView btndown=(ImageView) findViewById(R.id.
   primeDownArrow);
38         ImageView btnleft=(ImageView) findViewById(R.id.
   primeLeftArrow);
39         ImageView btnright=(ImageView) findViewById(R.id.
   primearrowright);
40
41         view.setOnTouchListener(new mylistener(view1));
```

```
42          view1.setOnTouchListener(new mylistener(view));
43
44          btnup.setOnTouchListener(new mylistener(null));
45          btndown.setOnTouchListener(new mylistener(null));
46          btnleft.setOnTouchListener(new mylistener(null));
47          btnright.setOnTouchListener(new mylistener(null));
48
49
50      }
51      public void onClick(View view){
52          String cmd;
53          switch (view.getId()){
54              case R.id.left:
55                  cmd="tweezers_loosen";
56                  break;
57              case R.id.right:
58                  cmd="tweezers_tighten";
59                  break;
60              case R.id.up:
61                  cmd="arm_up";
62                  break;
63              case R.id.down:
64                  cmd="arm_down";
65                  break;
66              default:
67                  cmd="none";
68          }
69          if(cmd!="none"){
70          Backgroundrequesttask backgroundrequesttask=new
    Backgroundrequesttask(this);
71          backgroundrequesttask.execute(URL,cmd);}
72
73
74      }
75
76     public static class Backgroundrequesttask extends
    AsyncTask<String,Void,String>{
77          private Context context;
78
79          public Backgroundrequesttask(Context context){
80              super();
81              this.context=context;
82          }
83
84          @Override
```

```
 85        protected void onPostExecute(String s) {
 86
 87            if(s=="error1"){
 88                Toast.makeText(context,"Robo_car is not
    connected!",Toast.LENGTH_LONG).show();
 89
 90            }
 91            else if(s=="error2"){
 92                Intent intent=new Intent(context,
    launcheractivity.class);
 93                intent=intent.addFlags(Intent.
    FLAG_ACTIVITY_SINGLE_TOP);
 94                context.startActivity(intent);
 95
 96
 97            }
 98        }
 99
100        @Override
101        protected String doInBackground(String... params)
    {
102            return Utils.request(params[0],params[1],
    context);
103        }
104    }
105
106 }
107
```

```java
package com.example.amitkrishna.robo_car;

import android.annotation.SuppressLint;
import android.content.Context;
import android.content.Intent;
import android.net.ConnectivityManager;
import android.net.Network;
import android.net.NetworkInfo;
import android.os.AsyncTask;
import android.support.v4.content.ContextCompat;
import android.support.v7.app.ActionBar;
import android.support.v7.app.AppCompatActivity;
import android.os.Bundle;
import android.os.Handler;
import android.util.Log;
import static com.example.amitkrishna.robo_car.Utils.TAG;
import android.view.MotionEvent;
import android.view.View;
import android.widget.Button;
import android.widget.TextView;

/**
 * An example full-screen activity that shows and hides the system UI (i.e.
 * status bar and navigation/system bar) with user interaction.
 */
public class launcheractivity extends AppCompatActivity {
    private  Button view1;

    @Override
    protected void onCreate(Bundle savedInstanceState) {
        super.onCreate(savedInstanceState);
        setContentView(R.layout.activity_launcheractivity);
        TAG[0]="MyListener";
        TAG[1]="MainActivity";
        TAG[2]="Utils";
        TAG[3]="LauncherActivity";
         view1=(Button) findViewById(R.id.btn);

       new launchertask().execute();

    }
    public void onClick(View view){
```

```
43          String btntext =(String) view1.getText();
44          if (btntext=="Continue"){
45              Intent intent=new Intent(this,MainActivity.
    class);
46              intent=intent.addFlags(Intent.
    FLAG_ACTIVITY_NO_HISTORY);
47              startActivity(intent);
48              finish();
49          }
50          else {new launchertask().execute();}
51
52      }
53      private class launchertask extends AsyncTask<Void,Void
    ,Void>{
54          private View view=findViewById(R.id.progressbar);
55          private  TextView status=((TextView)findViewById(R
    .id.status));
56
57          @Override
58          protected void onPreExecute() {
59              status.setText("Setting things up....");
60              status.setTextColor(ContextCompat.getColor(
    launcheractivity.this,android.R.color.white));
61              view.setVisibility(View.VISIBLE);
62              view1.setVisibility(View.GONE);
63          }
64
65          @Override
66          protected Void doInBackground(Void... params) {
67              try{Thread.sleep(3000); }
68              catch(InterruptedException e){
69                  Log.e(TAG[3], "onCreate:",e);}
70              return null;
71          }
72
73          @Override
74          protected void onPostExecute(Void aVoid) {
75
76
77              ConnectivityManager connectivity = (
    ConnectivityManager)getSystemService(Context.
    CONNECTIVITY_SERVICE);
78              NetworkInfo networkinfo=  connectivity.
    getActiveNetworkInfo();
79
```

```
 80             if(networkinfo!=null && networkinfo.
    isConnected() && ("\"JioFi3_2875D4\"".equals(networkinfo.
    getExtraInfo()))){(status).setText("Done");
 81             view1.setText("Continue");
 82             view.setVisibility(View.INVISIBLE);
 83             view1.setVisibility(View.VISIBLE);}
 84
 85             else if (networkinfo==null || networkinfo.
    isConnected() ||  networkinfo.getExtraInfo()!="\"
    JioFi3_2875D4\""){
 86
 87
 88                     status.setText("You are not connected
     to the local host JioFi3_2875D4\n"+ "to which Robo_Car
    is connected to \n"+"please connect to JioFi3_2875D4 to
    continue");
 89                 status.setTextColor(ContextCompat.
    getColor(launcheractivity.this,android.R.color.
    holo_red_light));
 90                 view.setVisibility(View.INVISIBLE);
 91                 view1.setText("Retry");
 92                 view1.setVisibility(View.VISIBLE);
 93
 94             }
 95
 96
 97         }
 98     }
 99
100
101 }
```