**Source Code**

**Mtc\_Bus:**

**MainActivity.java:**

package com.example.mtc\_bus;

import com.example.hospitalmap.R;

import android.support.v7.app.ActionBarActivity;

import android.support.v7.app.ActionBar;

import android.support.v4.app.Fragment;

import android.content.Intent;

import android.os.Bundle;

import android.os.Handler;

import android.view.LayoutInflater;

import android.view.Menu;

import android.view.MenuItem;

import android.view.View;

import android.view.ViewGroup;

import android.widget.SeekBar;

import android.os.Build;

public class MainActivity extends ActionBarActivity {

SeekBar progressBar;

private int progressStatus = 0;

private Handler handler = new Handler();

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

progressBar = (SeekBar) findViewById(R.id.progressBar);

new Thread(new Runnable() {

public void run() {

while (progressStatus < 100) {

progressStatus += 6;

// Update the progress bar and display the

//current value in the text view

handler.post(new Runnable() {

public void run() {

progressBar.setProgress(progressStatus);

}

});

try {

// Sleep for 200 milliseconds.

Thread.sleep(200);

} catch (InterruptedException e) {

e.printStackTrace();

}

}

}

}).start();

final Handler handler = new Handler();

handler.postDelayed(new Runnable() {

public void run() {

// TODO: Your application init goes here.

Intent mInHome = new Intent(MainActivity.this, Bus\_Page.class);

startActivity(mInHome);

MainActivity.this.finish();

}

}, 3000);

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {

// Inflate the menu; this adds items to the action bar if it is present.

getMenuInflater().inflate(R.menu.main, menu);

return true;

}

@Override

public boolean onOptionsItemSelected(MenuItem item)

{

// Handle action bar item clicks here. The action bar will

// automatically handle clicks on the Home/Up button, so long

// as you specify a parent activity in AndroidManifest.xml.

int id = item.getItemId();

if (id == R.id.action\_settings) {

return true;

}

return super.onOptionsItemSelected(item);

}

/\*\*

\* A placeholder fragment containing a simple view.

\*/

public static class PlaceholderFragment extends Fragment {

public PlaceholderFragment() {

}

@Override

public View onCreateView(LayoutInflater inflater, ViewGroup container,

Bundle savedInstanceState) {

View rootView = inflater.inflate(R.layout.fragment\_main, container,

false);

return rootView;

}

}

}

**Connection.java:**

package com.example.mtc\_bus;

public class Connection {

public static String MAIN\_URL = "http://iotclouds.in/busgps/";

public static String UPLOAD = MAIN\_URL+"upload.php?";

}

**Bus\_Page.java:**

package com.example.mtc\_bus;

import java.util.ArrayList;

import java.util.List;

import com.example.hospitalmap.GooglePlacesActivity;

import com.example.hospitalmap.R;

import android.app.Activity;

import android.app.AlertDialog;

import android.content.Context;

import android.content.DialogInterface;

import android.content.Intent;

import android.content.SharedPreferences;

import android.os.Bundle;

import android.view.View;

import android.widget.AdapterView;

import android.widget.ListView;

import android.widget.Toast;

import android.widget.AdapterView.OnItemClickListener;

public class Bus\_Page extends Activity {

ListView listview;

CustomAdapter1 adapter;

private List<ViewItem> rowItems = new ArrayList<ViewItem>();

String[] bus;

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.fragment\_main);

listview = (ListView) findViewById(R.id.listView1);

bus = new String[] { "6D", "500A", "1D", "11G", "25G", "21G", "56N",

"57F", "12B", "51B" };

for (String s : bus) {

ViewItem row = new ViewItem();

row.settask(s);

rowItems.add(row);

}

adapter = (CustomAdapter1) new CustomAdapter1(getApplicationContext(),

R.layout.list\_view, rowItems);

listview.setAdapter(adapter);

listview.setOnItemClickListener(new OnItemClickListener() {

@Override

public void onItemClick(AdapterView<?> parent, View view,

int position, long id) {

ViewItem value = (ViewItem) listview

.getItemAtPosition(position);

String name = value.gettask();

SharedPreferences shar = getSharedPreferences("User",

Context.MODE\_PRIVATE);

SharedPreferences.Editor edit = shar.edit();

edit.putString("Detail", name);

edit.commit();

Intent it = new Intent(getApplicationContext(),

GooglePlacesActivity.class);

it.putExtra("Bus", name);

startActivity(it);

}

});

}}

**GpsTracker.java:**

package com.example.mtc\_bus;

import android.app.AlertDialog;

import android.app.Service;

import android.content.Context;

import android.content.DialogInterface;

import android.content.Intent;

import android.location.Location;

import android.location.LocationListener;

import android.location.LocationManager;

import android.os.Bundle;

import android.os.IBinder;

import android.provider.Settings;

import android.util.Log;

public class GpsTracker extends Service implements LocationListener {

private final Context mContext;

// flag for GPS status

boolean isGPSEnabled = false;

// flag for network status

boolean isNetworkEnabled = false;

// flag for GPS status

public boolean canGetLocation = false;

Location location; // locationk

double latitude; // latitude

double longitude; // longitude

// The minimum distance to change Updates in meters

private static final long MIN\_DISTANCE\_CHANGE\_FOR\_UPDATES = 0; // 10 meters

// The minimum time between updates in milliseconds

private static final long MIN\_TIME\_BW\_UPDATES = 1000 \* 60 \* 1; // 1 minute

// Declaring a Location Manager

protected LocationManager locationManager;

public GpsTracker(Context context) {

this.mContext = context;

getLocation();

}

public Location getLocation() {

try {

Log.e("Location Checker", "------------------");

locationManager = (LocationManager) mContext

.getSystemService(LOCATION\_SERVICE);

// getting GPS status

isGPSEnabled = locationManager

.isProviderEnabled(LocationManager.GPS\_PROVIDER);

// getting network status

isNetworkEnabled = locationManager

.isProviderEnabled(LocationManager.NETWORK\_PROVIDER);

if (!isGPSEnabled && !isNetworkEnabled) {

// no network provider is enabled

} else {

this.canGetLocation = true;

// First get location from Network Provider

if (isNetworkEnabled) {

locationManager.requestLocationUpdates(

LocationManager.NETWORK\_PROVIDER,

MIN\_TIME\_BW\_UPDATES,

MIN\_DISTANCE\_CHANGE\_FOR\_UPDATES, this);

Log.d("Network", "Network");

if (locationManager != null) {

location = locationManager

.getLastKnownLocation(LocationManager.NETWORK\_PROVIDER);

if (location != null) {

latitude = location.getLatitude();

longitude = location.getLongitude();

}

}

}

// if GPS Enabled get lat/long using GPS Services

if (isGPSEnabled) {

if (location == null) {

locationManager.requestLocationUpdates(

LocationManager.GPS\_PROVIDER,

MIN\_TIME\_BW\_UPDATES,

MIN\_DISTANCE\_CHANGE\_FOR\_UPDATES, this);

Log.d("GPS Enabled", "GPS Enabled");

if (locationManager != null) {

location = locationManager

.getLastKnownLocation(LocationManager.GPS\_PROVIDER);

if (location != null) {

latitude = location.getLatitude();

longitude = location.getLongitude();

}

}

}

}

}

} catch (Exception e) {

e.printStackTrace();

}

return location;

}

/\*\*

\* Stop using GPS listener

\* Calling this function will stop using GPS in your app

\* \*/

public void stopUsingGPS(){

if(locationManager != null){

locationManager.removeUpdates(GpsTracker.this);

}

}

/\*\*

\* Function to get latitude

\* \*/

public double getLatitude(){

if(location != null){

latitude = location.getLatitude();

Log.e("latitide", String.valueOf(latitude));

}

// return latitude

return latitude;

}

/\*\*

\* Function to get longitude

\* \*/

public double getLongitude(){

if(location != null){

longitude = location.getLongitude();

}

// return longitude

return longitude;

}

/\*\*

\* Function to check GPS/wifi enabled

\* @return boolean

\* \*/

public boolean canGetLocation() {

return this.canGetLocation;

}

/\*\*

\* Function to show settings alert dialog

\* On pressing Settings button will lauch Settings Options

\* \*/

public void showSettingsAlert(){

AlertDialog.Builder alertDialog = new AlertDialog.Builder(mContext);

// Setting Dialog Title

alertDialog.setTitle("GPS is settings");

// Setting Dialog Message

alertDialog.setMessage("GPS is not enabled. Do you want to go to settings menu?");

// On pressing Settings button

alertDialog.setPositiveButton("Settings", new DialogInterface.OnClickListener() {

public void onClick(DialogInterface dialog,int which) {

Intent intent = new Intent(Settings.ACTION\_LOCATION\_SOURCE\_SETTINGS);

mContext.startActivity(intent);

}

});

// on pressing cancel button

alertDialog.setNegativeButton("Cancel", new DialogInterface.OnClickListener() {

public void onClick(DialogInterface dialog, int which) {

dialog.cancel();

}

});

// Showing Alert Message

alertDialog.show();

}

@Override

public void onLocationChanged(Location location) {

}

@Override

public void onProviderDisabled(String provider) {

}

@Override

public void onProviderEnabled(String provider) {

}

@Override

public void onStatusChanged(String provider, int status, Bundle extras) {

}

@Override

public IBinder onBind(Intent arg0) {

return null;

}

}

**Tracking App:**

**MainActivity.java:**

package com.example.gps\_bustracking;

import hospitalmap.GooglePlacesActivity;

import java.io.BufferedReader;

import java.io.InputStreamReader;

import java.util.ArrayList;

import java.util.Arrays;

import java.util.HashMap;

import java.util.HashSet;

import java.util.List;

import java.util.Set;

import android.support.v7.app.ActionBarActivity;

import android.support.v4.app.Fragment;

import android.app.AlertDialog;

import android.content.Context;

import android.content.DialogInterface;

import android.content.Intent;

import android.content.SharedPreferences;

import android.os.Bundle;

import android.util.Log;

import android.view.LayoutInflater;

import android.view.Menu;

import android.view.MenuItem;

import android.view.View;

import android.view.View.OnClickListener;

import android.view.ViewGroup;

import android.widget.ArrayAdapter;

import android.widget.AutoCompleteTextView;

import android.widget.Button;

import android.widget.EditText;

import android.widget.Toast;

import com.example.hospitalmap.R;

public class MainActivity extends ActionBarActivity {

AutoCompleteTextView pref;

EditText editText;

List<String> list = new ArrayList<String>();

Set<String> set = new HashSet<String>();

List<String> list1;

Set<String> set1;

BufferedReader bufferedReader;

HashMap<String, Set<String>> map;

Button search;

AutoCompleteTextView actv;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.login);

try {

pref = (AutoCompleteTextView) findViewById(R.id.src\_name);

editText = (EditText) findViewById(R.id.dest\_name);

search = (Button) findViewById(R.id.search\_button);

bufferedReader = new BufferedReader(new InputStreamReader(

getAssets().open("routes.txt")));

String s = "";

while ((s = bufferedReader.readLine()) != null) {

String temp[] = s.split("->");

for (int i = 1; i < temp.length; i++) {

set.add(temp[i]);

}

}

list.addAll(set);

ArrayAdapter<String> adapter = new ArrayAdapter<String>(this,

android.R.layout.select\_dialog\_item, list);

actv = (AutoCompleteTextView) findViewById(R.id.src\_name);

actv.setThreshold(1);// will start working from first character

actv.setAdapter(adapter);

editText.setOnClickListener(new OnClickListener() {

@Override

public void onClick(View v) {

// TODO Auto-generated method stub

try {

Log.e("oioioioioioioioioi", pref.getText().toString());

map = new HashMap<String, Set<String>>();

if (pref.getText().toString().equals("")) {

pref.setError("Source Should not be Empty");

} else {

Log.e("oioioioioioioioioi", pref.getText().toString());

list1 = new ArrayList<String>();

bufferedReader = new BufferedReader(

new InputStreamReader(getAssets().open(

"routes.txt")));

String s = "";

while ((s = bufferedReader.readLine()) != null) {

if (s.contains(pref.getText().toString())) {

set1 = new HashSet<String>();

String temp[] = s.split("->");

String busid = temp[0];

Log.e("inside", "-------" + busid);

for (int i = 1; i < temp.length; i++) {

if (temp[i].equalsIgnoreCase(pref

.getText().toString())) {

} else

Log.e("name", temp[i]);

set1.add(temp[i]);

}

map.put(busid, set1);

list1.addAll(set1);

}

}

Log.e("tempvariable", list1.toString());

String sr[] = new String[list1.size()];

list1.toArray(sr);

showDialogBox("Select Destination", sr);

}

} catch (Exception e) {

}

}

});

search.setOnClickListener(new OnClickListener() {

@Override

public void onClick(View v) {

// TODO Auto-generated method stub

if (editText.getText().toString().equals("")) {

editText.setError("Destination should not be Empty");

} else {

int i = 0;

List temp = new ArrayList();

Log.e("map", map.toString());

for (Object obj : map.keySet()) {

Set s = map.get(obj.toString());

if (s.contains(editText.getText().toString())) {

temp.add(obj.toString());

Log.e("tempbusvariable", temp.toString());

i++;

}

}

String sr[] = new String[temp.size()];

temp.toArray(sr);

Log.e("variable", temp.toString());

showBus("Available Bus ", sr);

}

}

});

} catch (Exception e) {

}

}

@Override

public boolean onCreateOptionsMenu(Menu menu) {

// Inflate the menu; this adds items to the action bar if it is present.

getMenuInflater().inflate(R.menu.main, menu);

return true;

}

@Override

public boolean onOptionsItemSelected(MenuItem item) {

// Handle action bar item clicks here. The action bar will

// automatically handle clicks on the Home/Up button, so long

// as you specify a parent activity in AndroidManifest.xml.

int id = item.getItemId();

if (id == R.id.action\_settings) {

return true;

}

return super.onOptionsItemSelected(item);

}

/\*\*

\* A placeholder fragment containing a simple view.

\*/

public static class PlaceholderFragment extends Fragment {

public PlaceholderFragment() {

}

@Override

public View onCreateView(LayoutInflater inflater, ViewGroup container,

Bundle savedInstanceState) {

View rootView = inflater.inflate(R.layout.fragment\_main, container,

false);

return rootView;

}

}

private void showDialogBox(final String type, final String[] items) {

AlertDialog.Builder alertDialogBuilder = new AlertDialog.Builder(

MainActivity.this);

alertDialogBuilder.setTitle(type);

alertDialogBuilder.setSingleChoiceItems(items, 0,

new DialogInterface.OnClickListener() {

public void onClick(DialogInterface dialog, int item) {

String selectedOption = items[item];

editText.setText(selectedOption);

dialog.dismiss();

}

});

alertDialogBuilder.show();

}

private void showBus(final String type, final String[] items) {

AlertDialog.Builder alertDiologueBuilder = new AlertDialog.Builder(

MainActivity.this);

AlertDialog alertDialogue = null;

final ArrayList<String> mselecteditems = new ArrayList<String>();

alertDiologueBuilder

.setTitle(type)

.setSingleChoiceItems(items, 0,

new DialogInterface.OnClickListener() {

public void onClick(DialogInterface dialog, int item) {

mselecteditems.add(items[item]);

}

})

.setPositiveButton("OK", new DialogInterface.OnClickListener() {

@Override

public void onClick(DialogInterface dialog, int which) {

try {

if (mselecteditems.get(0) != null) {

SharedPreferences shar = getSharedPreferences("User",

Context.MODE\_PRIVATE);

SharedPreferences.Editor edit = shar.edit();

edit.putString("Detail", mselecteditems.get(0));

edit.commit();

Intent it = new Intent(getApplicationContext(),

GooglePlacesActivity.class);

startActivity(it);

}

} catch (Exception e) {

Toast.makeText(getApplicationContext(), ""+e, Toast.LENGTH\_SHORT).show();

}

}

})

.setNegativeButton("Cancel",

new DialogInterface.OnClickListener() {

@Override

public void onClick(DialogInterface dialog,

int which) {

dialog.dismiss();

}

});

alertDialogue = alertDiologueBuilder.create();

alertDialogue.show();

}

}

**Connection.java:**

package com.connection;

public class Connection {

public static String MAIN\_URL = "http://iotclouds.in/busgps/";

public static String BUSSTATUS = MAIN\_URL+"fetchData.php?";

}

**Service\_Call.java:**

package com.connection;

import hospitalmap.GooglePlacesActivity;

import java.io.ByteArrayOutputStream;

import java.io.InputStream;

import org.apache.http.HttpResponse;

import org.apache.http.client.HttpClient;

import org.apache.http.client.methods.HttpGet;

import org.apache.http.impl.client.DefaultHttpClient;

import android.app.Service;

import android.content.Context;

import android.content.Intent;

import android.content.SharedPreferences;

import android.os.IBinder;

import android.os.Message;

import android.os.StrictMode;

import android.util.Log;

import android.widget.Toast;

public class Service\_Call extends Service

{

boolean b = true;

String routenum= "";

@Override

public void onCreate() {

try {

if (android.os.Build.VERSION.SDK\_INT > 9) {

StrictMode.ThreadPolicy policy = new StrictMode.ThreadPolicy.Builder()

.permitAll().build();

StrictMode.setThreadPolicy(policy);

}

SharedPreferences shar = getApplicationContext().getSharedPreferences("User", Context.MODE\_PRIVATE);

routenum = shar.getString("Detail", null);

} catch (Exception e) {

Log.d("Myservice", "" + e);

}

}

@Override

public int onStartCommand(Intent intent, int flags, int startId) {

try

{

new Thread(){

@Override

public void run()

{

while(b)

{

try

{

String url=Connection.BUSSTATUS+"route\_id="+routenum;

url=url.replace(" ", "%20");

HttpClient httpClient = new DefaultHttpClient();

HttpGet getRequest = new HttpGet(url);

HttpResponse res = httpClient.execute(getRequest);

InputStream is = res.getEntity().getContent();

byte[] b = null;

ByteArrayOutputStream bos = new ByteArrayOutputStream();

int ch;

while ((ch = is.read()) != -1) {

bos.write(ch);

}

b = bos.toByteArray();

String str = new String(b).replace("\n", "").trim();

Message msgToActivity = new Message();

msgToActivity.what = 0;

msgToActivity.obj = str;

if (!str.equalsIgnoreCase("")) {

Log.e("jsonreturns", str);

GooglePlacesActivity.Handler.sendMessage(msgToActivity);

}

sleep(15000);

}

catch(Exception e)

{

e.printStackTrace();

}

}

}

}.start();

}

catch(Exception e)

{

e.printStackTrace();

}

return START\_STICKY;

}

@Override

public void onDestroy()

{

stopSelf();

b =false;

Toast.makeText(this, "Service Destroyed", Toast.LENGTH\_LONG).show();

}

@Override

public IBinder onBind(Intent intent) {

// TODO Auto-generated method stub

return null;

}

}