<?xml version="1.0" encoding="utf-8"?>

<LinearLayout 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"

tools:context="mca.acharya.com.lab7.MainActivity"

android:padding="16dp">

<Button

android:id="@+id/button"

android:layout\_gravity="center\_horizontal"

android:layout\_width="wrap\_content"

android:layout\_height="wrap\_content"

android:onClick="showCurrentLocation"

android:text="Get Location" />

</LinearLayout>

package mca.acharya.com.lab7;

import android.content.Context;

import android.location.Location;

import android.location.LocationListener;

import android.location.LocationManager;

import android.support.v7.app.AppCompatActivity;

import android.os.Bundle;

import android.view.View;

import android.widget.Button;

import android.widget.Toast;

public class MainActivity extends AppCompatActivity {

private static final long min\_dist = 1;

private static final long min\_time = 1000;

protected LocationManager locationManager;

protected Button btn;

@Override

protected void onCreate(Bundle savedInstanceState) {

super.onCreate(savedInstanceState);

setContentView(R.layout.activity\_main);

btn = (Button)findViewById(R.id.button);

locationManager = (LocationManager) getSystemService(Context.LOCATION\_SERVICE);

try {

locationManager.requestLocationUpdates(LocationManager.GPS\_PROVIDER,1000,1,new MyLocationListener());

} catch (SecurityException e) {

}

}

protected void showCurrentLocation(View v) {

try{

Location location = locationManager.getLastKnownLocation(LocationManager.GPS\_PROVIDER);

String message = String.format("Current Location \n Longitude: %1$s \n Latitude: %2$s",

location.getLongitude(), location.getLatitude());

Toast.makeText(MainActivity.this, message, Toast.LENGTH\_LONG).show();

} catch (SecurityException e) {

}

}

private class MyLocationListener implements LocationListener {

public void onLocationChanged(Location location) {

String message = String.format("New Location \n Longitude: %1$s \n Latitude: %2$s",

location.getLongitude(), location.getLatitude());

Toast.makeText(MainActivity.this, message, Toast.LENGTH\_LONG).show();

}

public void onStatusChanged(String s, int i, Bundle b) {

Toast.makeText(MainActivity.this, "Provider status changed", Toast.LENGTH\_LONG).show();

}

public void onProviderDisabled(String s) {

Toast.makeText(MainActivity.this, "GPS turned off", Toast.LENGTH\_LONG).show();

}

public void onProviderEnabled(String s) {

Toast.makeText(MainActivity.this, "GPS turned on",Toast.LENGTH\_LONG).show();

}

}

}