**public class** MainActivity2 **extends** Activity **implements** LocationListener

{  
 **private** TextView **locationText**;  
 **private** LocationManager **locationManager**;  
 **private long minTime** = 500;  
 **private float minDistance** = 1;  
 **private static final int *MY\_PERMISSION\_GPS*** = 1;  
  
 @Override  
 **protected void** onCreate(Bundle savedInstanceState) {  
 **super**.onCreate(savedInstanceState);  
 setContentView(R.layout.***activity\_main***);  
 **locationText** = (TextView) findViewById(R.id.***location***);  
 setUpLocation();  
 }  
  
 *// Switch on Location tracking* **private void** setUpLocation()  
 {  
 **locationManager** = (LocationManager) getSystemService(Context.***LOCATION\_SERVICE***);  
  
 *// Check if there is permission for location tracking already stored* **if** (ContextCompat.*checkSelfPermission*(MainActivity2.**this**,  
 Manifest.permission.***ACCESS\_FINE\_LOCATION***)  
 != PackageManager.***PERMISSION\_GRANTED***)  
 {  
 *// If not, display a dialog box to the users to request permission* ActivityCompat.*requestPermissions*(MainActivity2.**this**,  
 **new** String[]{Manifest.permission.***ACCESS\_FINE\_LOCATION***},  
 ***MY\_PERMISSION\_GPS***);  
 } **else** {  
  
 **locationManager**.requestLocationUpdates(LocationManager.***GPS\_PROVIDER***, **minTime**, **minDistance**, **this**);  
 }  
 }  
  
 *// call back method when location listener detect a "change of location"* **public void** onLocationChanged(Location location)   
 {  
 String latestLocation = **""**;  
  
 **if** (location != **null**) {  
 latestLocation = String.*format*(  
 **"Current Location: Latitude %1$s Longitude : %2$s"**,  
 Math.*round*(location.getLatitude()), Math.*round*(location.getLongitude()));  
   
 }  
 **locationText**.setText(**"GPS Location"** +**"\n"** + latestLocation);  
  
 } *// end onLocationChanged* **public void** onProviderDisabled(String provider) { }  
  
 **public void** onProviderEnabled(String provider) { }  
  
 **public void** onStatusChanged(String provider, **int** status, Bundle extras) { }  
  
 *// callback method triggered when user responds to the request permissions dialog* @Override  
 **public void** onRequestPermissionsResult(**int** requestCode, String[] permissions, **int**[] grantResults) {  
 **switch** (requestCode) {  
 **case *MY\_PERMISSION\_GPS***:  
 *// if permission grand, fine.* **if** (grantResults.**length** > 0 && grantResults[0] == PackageManager.***PERMISSION\_GRANTED***) {  
 *// All good!* } **else** {  
 Toast.*makeText*(**this**, **"Need your location!"**, Toast.***LENGTH\_SHORT***).show();  
 }  
 **break**;  
 }  
 }  
  
 *// life cycle method: restart location tracking when Activity resumes* @Override  
 **protected void** onResume() {  
 **super**.onResume();  
 *// switch on location tracking again*   
  
 }  
  
  
 *// life cycle method: switch off location tracking if activity is paused   
 // @Override* **protected void** onPause()   
 {  
 **super**.onPause();  
  
 *// switch off location tracking*  
 }   
  
}