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Android find distance and duration between two points on Google Map



# ANDROID FIND DISTANCE AND DURATION BETWEEN TWO POINTS ON GOOGLE MAP

In this tutorial, we are going to learn how to find the distance and duration between two points on Google Map API v2. There are situations where you might want your app to measure the distance and duration between two points on a Map, this can give an insight of how long the distance is and the time it will take to accomplish the journey.

Major part of this android tutorial on finding distance and duration between two points on a Map is adopted from my tutorial on [How to draw path between two points on a Map](#). If you have not read the tutorial, I will suggest you read it first.



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1. We are going to implement a Map
2. Select two points on the Map we want find their distance and duration
3. We draw a path between the two points and calculate the distance and duration between them

Before we start it is important that that we understand what we are planning to achieve in this tutorial. I have add some screen-shot from this tutorial

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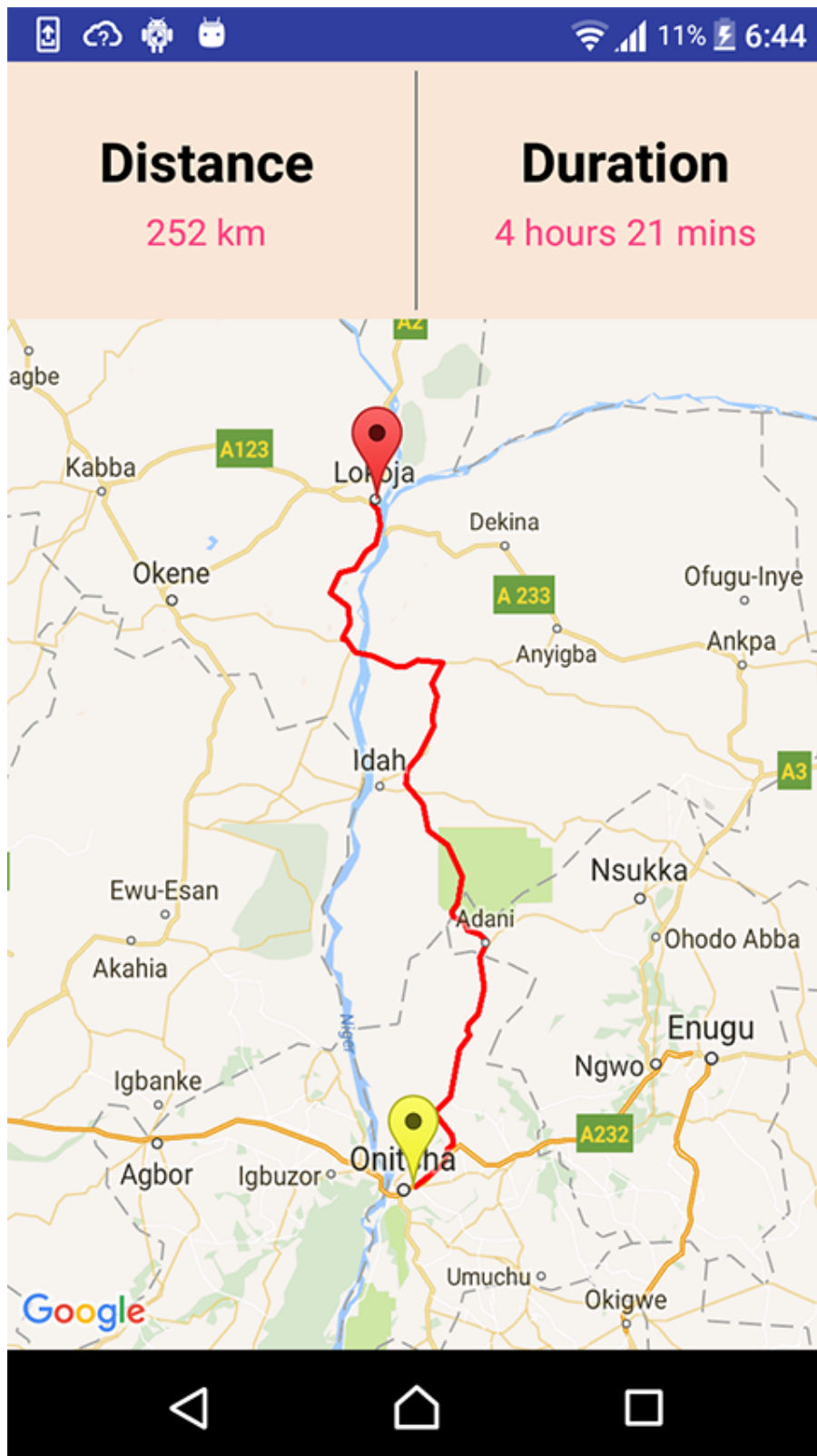
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CREATE NEW ANDROID PROJECT

Accept

Windows 10

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Min SDK 14

Target SDK 23

To create a new android application project, follow the steps as stipulated below.

Go to File menu

Click on New menu

Click on Android Application

Enter Project name: AndroidMapRouteDistance

Package: com.inducesmile.androidmaproutedistance

Select Map Activity

Name your activity: MapsActivity

Keep other default selections

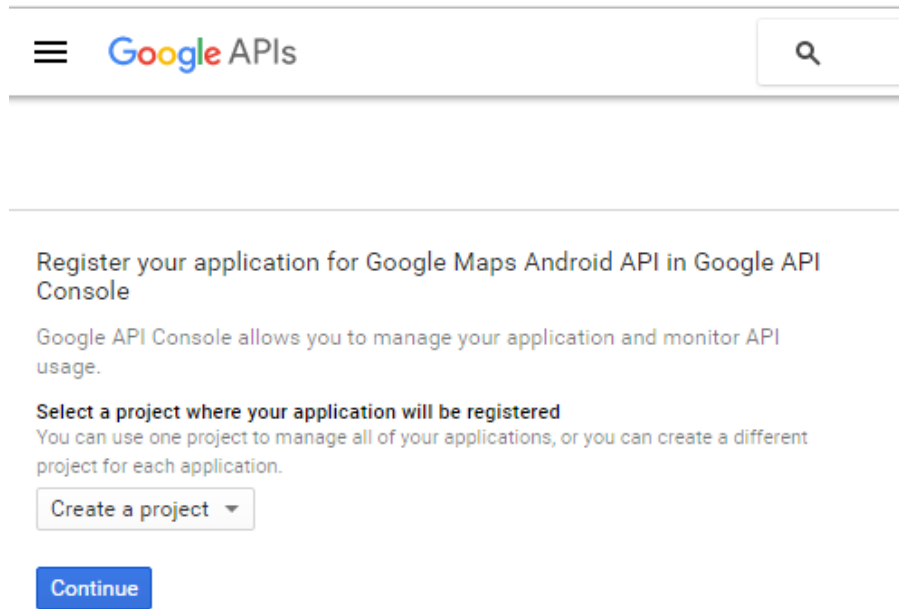
Continue to click on next button until Finish button is active, then click on Finish Button.

Since we selected the default android Map Activity template, Android Studio will add an xml file name google\_maps\_api.xml. This file is stored in the values folder inside the res folder of your android project.

When you open the file, it contains instruction on how to obtain a Google Map Key. Every request your application send to Google Map Server requires a unique key that will be used to identify your application.

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Copy for creating a Google Map Key and paste it in a web browser and hit enter. You will see a page like this.



You can create a new project or use an existing project. Click the continue button to proceed.

Click the Create AOI Key button that will appear in the next page to move over to Google API Manager page.

In the Google API Manager page, click on credentials and the key link to open the page.

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Add a name for your key.

Select Android apps to restrict all the request from android apps

Add the your application package name

You can generate a SHA-1 certificate fingerprint. You will find the process on the page.

Click the Save button when you are done.

Finally, copy your application Google map key to the generated **google\_maps\_api.xml** as shown.

```
apply plugin: 'com.android.application'
```

```
</>
```

```
<resources>
```

```
<!--
```

```
TODO: Before you run your application, you need a Go
To get one, follow this link, follow the directions
https://console.developers.google.com/flows/enableap
You can also add your credentials to an existing key
```

```
</>
```

Accept

```
string in this file.  
-->  
<string name="google_maps_key" templateMergeStrategy  
</resources>
```

## BUILD.GRADLE

In android, since we are going to make use of user location in drawing path between two points in Google Map API, we are going to use Google Play Services. Android Location Service API is part of Google Play Services.

Since the library is too big and to avoid going beyond 64000 methods which will force use to multiDexEnabled true in the defaultConfig, we will use Location and Map libraries alone.

In addition to these libraries, we are going to make use of Volley network library and Gson library.

Open your application build.gradle and add the code below.

```
apply plugin: 'com.android.application'
android {
    compileSdkVersion 24
    buildToolsVersion "24.0.1"
    defaultConfig {
        applicationId "com.inducesmile.androidmapdrawrou
        minSdkVersion 14
        targetSdkVersion 24
        versionCode 1
        versionName "1.0"
    }
    buildTypes {
        release {
            minifyEnabled false
            proguardFiles getDefaultProguardFile('progua
```

Accept

```

compile 'com.android.support:appcompat-v7:24.2.1'
compile 'com.google.android.gms:play-services-maps:9
compile 'com.google.android.gms:play-services-locati
compile 'com.google.code.gson:gson:2.6.1'
compile 'com.mcxiaoke.volley:library:1.0.19'
}

```

## ANDROIDMANIFEST.XML

We are going to update our application androidmanifest.xml. We are going to add some user permissions. Open your AndroidManifest.xml file and add the code below.

```

<?xml version="1.0" encoding="utf-8"?>
<manifest xmlns:android="http://schemas.android.com/apk/
    package="com.inducesmile.androidmaproutedistance">

    <uses-permission android:name="android.permission.AC
    <uses-permission android:name="android.permission.IN

    <application
        android:name=".network.CustomApplication"
        android:allowBackup="true"
        android:icon="@mipmap/ic_launcher"
        android:label="@string/app_name"
        android:supportsRtl="true"
        android:theme="@style/AppTheme">

        <meta-data
            android:name="com.google.android.geo.API_KEY"
            android:value="@string/google_maps_key" />

        <activity
            android:name=".MapsActivity"
            android:label="@string/title_activity_maps">
            <intent-filter>
                <action android:name="android.intent.act

```

Accept



```
</manifest>
```

## STRINGS.XML

We are going to update our project strings.xml file located in the values folder inside the res folder. Open the file and add the code below to it.

```
<resources>
    <string name="app_name">AndroidMapRouteDistance</string>
    <string name="title_activity_maps">Map</string>
    <string name="route_distance">Distance</string>
    <string name="route_distance_value">40.2 Km</string>
    <string name="route_duration">Duration</string>
    <string name="route_duration_value">48 mins</string>
    <string name="server_error">Server error. Something
</resources>
```

## COLORS.XML

Open the colors.xml file in the same location as the strings.xml file and add the code below to the file.

```
<?xml version="1.0" encoding="utf-8"?>
<resources>
    <color name="colorPrimary">#3F51B5</color>
    <color name="colorPrimaryDark">#303F9F</color>
    <color name="colorAccent">#FF4081</color>
    <color name="colorPrimaryText">#000000</color>
    <color name="colorSecondaryText">#737373</color>
    <color name="colorIcons">#FFFFFF</color>
    <color name="colorDivider">#737373</color>
    <color name="colorMap">#FAE6D6</color>
</resources>
```

Accept

# ANDROID GOOGLE DIRECTION API

This android tutorial on how to find distance and duration between two points on Google Map API v2 is going to make use of android Google Direction API.

Android Google Direction API is a service that calculates directions between locations using an HTTP request.

So we are going to get the user current location as the origin and we will implement onMapClickListener which will mark the user destination.

Thereafter, we will use the Android Google Direction API to calculate the direction between the two locations. The Android Polyline is used to draw an overlay line between the two directions.

Lets move on to create a layout interface file

## ACTIVITY\_MAPS.XML

The Map Activity uses Fragment with android:name="com.google.android.gms.maps.SupportMapFragment".

The complete code for the layout file is as shown.

```
<LinearLayout xmlns:android="http://schemas.android.com/
  xmlns:map="http://schemas.android.com/apk/res-auto"
  xmlns:tools="http://schemas.android.com/tools"
  android:layout_height="match_parent"
  android:orientation="vertical"
  android:layout_width="match_parent">

  <LinearLayout
    android:layout_width="match_parent"
    android:layout_height="0dp"
    android:orientation="horizontal"
    android:background="@color/colorMap"
```

Accept

```
android:layout_height="match_parent"  
android:orientation="horizontal">
```

#### <LinearLayout

```
    android:layout_width="0dp"  
    android:layout_height="match_parent"  
    android:layout_weight="1"  
    android:gravity="center"  
    android:orientation="vertical">
```

#### <TextView

```
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:textStyle="bold"  
    android:textSize="24sp"  
    android:textColor="@color/colorPrimary"  
    android:text="@string/route_distance"
```

#### <TextView

```
    android:id="@+id/distance_value"  
    android:layout_width="wrap_content"  
    android:layout_height="wrap_content"  
    android:textSize="16sp"  
    android:layout_marginTop="4dp"  
    android:textColor="@color/colorAccent"  
    android:text="@string/route_distance"
```

#### </LinearLayout>

#### <View

```
    android:layout_width="1dp"  
    android:layout_height="match_parent"  
    android:background="@color/colorDivider"  
    android:layout_margin="4dp"/>
```

#### <LinearLayout

```
    android:layout_width="0dp"  
    android:layout_height="match_parent"  
    android:layout_weight="1"  
    android:gravity="center"  
    android:orientation="vertical">
```

Accept

```

        android:textSize="24sp"
        android:textColor="@color/colorPrimary"
        android:text="@string/route_duration"
    
```

```

    <TextView

```

```

        android:id="@+id/duration_value"
        android:layout_width="wrap_content"
        android:layout_height="wrap_content"
        android:textSize="16sp"
        android:layout_marginTop="4dp"
        android:textColor="@color/colorAccent"
        android:text="@string/route_duration"
    
```

```

    </LinearLayout>

```

```

</LinearLayout>

```

```

</LinearLayout>

```

```

<LinearLayout

```

```

    android:layout_width="match_parent"
    android:layout_height="0dp"
    android:orientation="vertical"
    android:layout_weight="8">

```

```

    <fragment

```

```

        android:id="@+id/map"
        android:name="com.google.android.gms.maps.SupportMapFragment"
        android:layout_width="match_parent"
        android:layout_height="match_parent"
        tools:context="com.inducesmile.androidmaprou
    
```

```

    </LinearLayout>

```

```

</LinearLayout>

```

## MAPSACTIVITY CLASS

In the MapsActivity class, the Android Google Map is setup by Android

Accept

When the Map is load, the click event listener is attached to the Map View. Users can select a location of interest on the Map by clicking on the location. Once clicked a marker will appear there to let you know the location you have selected.

The selected location is added to a List Object, once a user has selected two different location, we will draw a path to between the two location points and calculate the distance and duration between the location.

Open the MapsActivity class and add the code below to the class.

```
import android.content.pm.ActivityInfo;
import android.graphics.Color;
import android.os.Bundle;
import android.support.v4.app.FragmentActivity;
import android.util.Log;
import android.widget.TextView;
import android.widget.Toast;
import com.android.volley.DefaultRetryPolicy;
import com.android.volley.Request;
import com.android.volley.Response;
import com.android.volley.VolleyError;
import com.google.android.gms.maps.CameraUpdateFactory;
import com.google.android.gms.maps.GoogleMap;
import com.google.android.gms.maps.OnMapReadyCallback;
import com.google.android.gms.maps.SupportMapFragment;
import com.google.android.gms.maps.model.BitmapDescriptor;
import com.google.android.gms.maps.model.CameraPosition;
import com.google.android.gms.maps.model.LatLng;
import com.google.android.gms.maps.model.MarkerOptions;
import com.google.android.gms.maps.model.Polyline;
import com.google.android.gms.maps.model.PolylineOptions;
import com.inducesmile.androidmaproutedistance.entityObj;
import com.inducesmile.androidmaproutedistance.entityObj;
import com.inducesmile.androidmaproutedistance.entityObj;
import com.inducesmile.androidmaproutedistance.entityObj;
import com.inducesmile.androidmaproutedistance.network.G
import com.inducesmile.androidmaproutedistance.network.V
import java.util.ArrayList;
import java.util.List;
```

Accept

```

private TextView distanceValue;
private TextView durationValue;
@Override
protected void onCreate(Bundle savedInstanceState) {
    super.onCreate(savedInstanceState);
    setContentView(R.layout.activity_maps);
    setRequestedOrientation(ActivityInfo.SCREEN_ORIENTATION_PORTRAIT);
    distanceValue = (TextView)findViewById(R.id.distanceValue);
    durationValue = (TextView)findViewById(R.id.durationValue);
    latLngList = new ArrayList<LatLng>();
    SupportMapFragment mapFragment = (SupportMapFragment)
        getSupportFragmentManager().findFragmentById(R.id.map);
    mapFragment.getMapAsync(this);
}
@Override
public void onMapReady(GoogleMap googleMap) {
    mMap = googleMap;
    mMap.setOnMapClickListener(this);
}
@Override
public void onMapClick(LatLng latLng) {
    if(latLngList.size() > 1){
        refreshMap(mMap);
        latLngList.clear();
        distanceValue.setText("");
        durationValue.setText("");
    }
    latLngList.add(latLng);
    Log.d(TAG, "Marker number " + latLngList.size());
    createMarker(latLng, latLngList.size());
    if(latLngList.size() == 2){
        LatLng origin = latLngList.get(0);
        LatLng destination = latLngList.get(1);
        //use Google Direction API to get the route
        String directionApiPath = Helper.getUrl(
            String.valueOf(destination.latitude),
            String.valueOf(origin.latitude));
        Log.d(TAG, "Path " + directionApiPath);
        getDirectionFromDirectionApiServer(directionApiPath);
    }
}
private void refreshMap(GoogleMap mapInstance){
    mapInstance.clear();
}

```

Accept

```

    }else{
        mOptions.icon(BitmapDescriptorFactory.default
    }
    addCameraToMap(latLng);
    mMap.addMarker(mOptions);
}
private void addCameraToMap(LatLng latLng){
    CameraPosition cameraPosition = new CameraPositi
        .target(latLng)
        .zoom(8)
        .build();
    mMap.animateCamera(CameraUpdateFactory.newCamera
}
private void getDirectionFromDirectionApiServer(Stri
    GsonRequest<DirectionObject> serverRequest = new
        Request.Method.GET,
        url,
        DirectionObject.class,
        createRequestSuccessListener(),
        createRequestErrorListener());
    serverRequest.setRetryPolicy(new DefaultRetryPol
        Helper.MY_SOCKET_TIMEOUT_MS,
        DefaultRetryPolicy.DEFAULT_MAX_RETRIES,
        DefaultRetryPolicy.DEFAULT_BACKOFF_MULT)
    VolleySingleton.getInstance(getApplicationContext
}
private Response.Listener<DirectionObject> createReq
return new Response.Listener<DirectionObject>()
    @Override
    public void onResponse(DirectionObject respo
        try {
            Log.d("JSON Response", response.toSt
            if(response.getStatus().equals("OK")
                List<LatLng> mDirections = getDi
                drawRouteOnMap(mMap, mDirections
            }else{
                Toast.makeText(MapsActivity.this
            }
        } catch (Exception e) {
            e.printStackTrace();
        }
    }
};

```

Accept

```

        durationValue.setText(duration);
    }
    private List<LatLng> getDirectionPolylines(List<RouteObject> routes){
        List<LatLng> directionList = new ArrayList<LatLng>();
        for(RouteObject route : routes){
            List<LegsObject> legs = route.getLegs();
            for(LegsObject leg : legs){
                String routeDistance = leg.getDistance();
                String routeDuration = leg.getDuration();
                setRouteDistanceAndDuration(routeDistance, routeDuration);
                List<StepsObject> steps = leg.getSteps();
                for(StepsObject step : steps){
                    PolylineObject polyline = step.getPolyline();
                    String points = polyline.getPoints();
                    List<LatLng> singlePolyline = decodePoly(points);
                    for (LatLng direction : singlePolyline)
                        directionList.add(direction);
                }
            }
        }
        return directionList;
    }
    private Response.ErrorListener createRequestErrorListener() {
        return new Response.ErrorListener() {
            @Override
            public void onErrorResponse(VolleyError error) {
                error.printStackTrace();
            }
        };
    }
    private void drawRouteOnMap(GoogleMap map, List<LatLng> positions){
        PolylineOptions options = new PolylineOptions();
        options.addAll(positions);
        Polyline polyline = map.addPolyline(options);
    }
    /**
     * Method to decode polyline points
     * Courtesy : http://jeffreysambells.com/2010/05/27/decoding-polyline/
     */
    private List<LatLng> decodePoly(String encoded) {
        List<LatLng> poly = new ArrayList<>();
    }

```

Accept



```

do {
    b = encoded.charAt(index++) - 63;
    result |= (b & 0x1f) << shift;
    shift += 5;
} while (b >= 0x20);
int dlat = ((result & 1) != 0 ? ~(result >>
lat += dlat;
shift = 0;
result = 0;
do {
    b = encoded.charAt(index++) - 63;
    result |= (b & 0x1f) << shift;
    shift += 5;
} while (b >= 0x20);
int dlng = ((result & 1) != 0 ? ~(result >>
lng += dlng;
LatLng p = new LatLng((((double) lat / 1E5))
    (((double) lng / 1E5)));
poly.add(p);
}
return poly;
}
}

```

## RETURNED JSON RESPONSE OBJECT FROM GOOGLE DIRECTION API

The returned response object is a json object and the direction path is stored in the Polyline class. This is the class structure of the json response object. We are going to use the Gson library to convert it to plain java object class.

```

{
    "geocoded_waypoints" : [
        {
            "geocoder_status" : "OK",
            "place_id" : "ChIJZymwbofzU0YRvgugqrVwH8Q",

```

Accept

```
"place_id" : "EiJOeWdhdGFuIDMyLCAyNDIgMzEgSM02c
"types" : [ "street_address" ]
}
],
"routes" : [
{
  "bounds" : {
    "northeast" : {
      "lat" : 55.8541564,
      "lng" : 13.661235
    },
    "southwest" : {
      "lat" : 55.851871499999999,
      "lng" : 13.660381
    }
  },
  "copyrights" : "Map data ©2016 Google",
  "legs" : [
    {
      "distance" : {
        "text" : "0.3 km",
        "value" : 260
      },
      "duration" : {
        "text" : "1 min",
        "value" : 84
      },
      "end_address" : "Nygatan 32, 242 31 Hörby
      "end_location" : {
        "lat" : 55.851871499999999,
        "lng" : 13.660381
      },
      "start_address" : "Nygatan 12B, 242 31 Hö
      "start_location" : {
        "lat" : 55.8541564,
        "lng" : 13.661235
      },
      "steps" : [
        {
          "distance" : {
            "text" : "0.3 km",
            "value" : 260
```

Accept

```

    },
    "end_location" : {
        "lat" : 55.85187149999999,
        "lng" : 13.660381
    },
    "html_instructions" : "Head \u003cb",
    "polyline" : {
        "points" : "o_|sIwekrAVHxBj@|Bh@",
    },
    "start_location" : {
        "lat" : 55.8541564,
        "lng" : 13.661235
    },
    "travel_mode" : "DRIVING"
    }
    ],
    "traffic_speed_entry" : [],
    "via_waypoint" : []
    }
    ],
    "overview_polyline" : {
        "points" : "o_|sIwekrApCt@|Bh@nBr@hAV",
    },
    "summary" : "Nygatan",
    "warnings" : [],
    "waypoint_order" : []
    }
    ],
    "status" : "OK"
    }

```

## ENTITYOBJECT CLASSES

We will create the following classes to mimic the structure of the json response object. The classes are

Accept

```
private List<RouteObject> routes;
private String status;
public DirectionObject(List<RouteObject> routes, Str
    this.routes = routes;
    this.status = status;
}
public List<RouteObject> getRoutes() {
    return routes;
}
public String getStatus() {
    return status;
}
}
```

## LEGSOBJECT.JAVA

```
import java.util.List;

public class LegsObject {

    private List<StepsObject> steps;

    private DistanceObject distance;

    private DurationObject duration;

    public LegsObject(DurationObject duration, DistanceObje
        this.duration = duration;
        this.distance = distance;
        this.steps = steps;
    }

    public List<StepsObject> getSteps() {
        return steps;
    }

    public DistanceObject getDistance() {
        return distance;
    }
}
```

Accept

```
}  
}
```

## POLYLINEOBJECT.JAVA

```
public class PolylineObject {  
    private String points;  
    public PolylineObject(String points) {  
        this.points = points;  
    }  
    public String getPoints() {  
        return points;  
    }  
}
```

## ROUTEOBJECT.JAVA

```
import java.util.List;  
public class RouteObject {  
    private List<LegsObject> legs;  
    public RouteObject(List<LegsObject> legs) {  
        this.legs = legs;  
    }  
    public List<LegsObject> getLegs() {  
        return legs;  
    }  
}
```

## STEPSOBJECTS.JAVA

```
public class StepsObject {  
    private PolylineObject polyline;
```

```
        return polyline;
    }
}
```

## USING ANDROID VOLLEY FOR NETWORK CALL

We are going to extend the Application class. Create a java class and name it CustomApplication.java.

We will create an instance of our Volley object in the class. By using a custom application class, we can access the Volley object anywhere in our application.

Add the following code to the class

```
import android.app.Application;
import com.android.volley.RequestQueue;
public class CustomApplication extends Application{
    private RequestQueue requestQueue;
    @Override
    public void onCreate() {
        super.onCreate();
        requestQueue = VolleySingleton.getInstance(getAp
    }
    public RequestQueue getVolleyRequestQueue(){
        return requestQueue;
    }
}
```

## GSONREQUEST.JAVA

Create a java file and name it GsonRequest.java. Open the file and add the code below to it.

```

import com.android.volley.Request;
import com.android.volley.Response;
import com.android.volley.toolbox.HttpHeaderParser;
import com.google.gson.Gson;
import com.google.gson.JsonSyntaxException;
import java.io.UnsupportedEncodingException;
import java.util.Map;
public class GsonRequest<T> extends Request<T> {
    // create variables
    private Gson mGson = new Gson();
    private Class<T> tClass;
    private Map<String, String> headers;
    private Map<String, String> params;
    private Response.Listener<T> listener;
    public GsonRequest(int method, String url, Class<T>
        super(method, url, errorListener);
        this.tClass = tClass;
        this.listener = listener;
        mGson = new Gson();
    }
    public GsonRequest(int method, String url, Class<T>
        super(method, url, errorListener);
        this.tClass = tClass;
        this.params = params;
        this.listener = listener;
        this.headers = null;
        mGson = new Gson();
    }
    @Override
    public Map<String, String> getHeaders() throws AuthF
        return headers != null ? headers : super.getHead
    }
    @Override
    protected Map<String, String> getParams() throws Aut
        return params;
    }
    protected void deliverResponse(T response) {
        listener.onResponse(response);
    }
    @Override
    protected Response<T> parseNetworkResponse(NetworkRe
        try {

```

Accept

```
    } catch (JsonSyntaxException e) {  
        return Response.error(new ParseError(e));  
    }  
}  
}
```

## VOLLEYSINGLETON.JAVA

Create a new Java class and name it VolleySingleton.java. Open the file and add the code below to it.

```
import android.content.Context;  
import android.graphics.Bitmap;  
import android.util.LruCache;  
import com.android.volley.Request;  
import com.android.volley.RequestQueue;  
import com.android.volley.toolbox.ImageLoader;  
import com.android.volley.toolbox.Volley;  
public class VolleySingleton {  
    private static VolleySingleton mInstance;  
    private RequestQueue mRequestQueue;  
    private ImageLoader mImageLoader;  
    private static Context mCtx;  
    private VolleySingleton(Context context) {  
        mCtx = context;  
        mRequestQueue = getRequestQueue();  
        mImageLoader = new ImageLoader(mRequestQueue, ne  
            private final LruCache<String, Bitmap> cache  
            @Override  
            public Bitmap getBitmap(String url) {  
                return cache.get(url);  
            }  
            @Override  
            public void putBitmap(String url, Bitmap bit  
                cache.put(url, bitmap);  
            }  
        });  
    }  
}
```

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```

        return mInstance;
    }
    public RequestQueue getRequestQueue() {
        if (mRequestQueue == null) {
            mRequestQueue = Volley.newRequestQueue(mCtx);
        }
        return mRequestQueue;
    }
    public <T> void addToRequestQueue(Request<T> req) {
        getRequestQueue().add(req);
    }
    public ImageLoader getImageLoader() {
        return mImageLoader;
    }
}

```

## HELPER.JAVA

We will create a new Java file and we will name it Helper.java. Open the file and add the code below.

```

import android.content.Context;
import android.net.ConnectivityManager;
import android.net.NetworkInfo;
public class Helper {
    private static final String DIRECTION_API = "https://
    public static final String API_KEY = "AIzaSyCuZCfoPP
    public static final int MY_SOCKET_TIMEOUT_MS = 5000;
    public static String getUrl(String originLat, String
        return Helper.DIRECTION_API + originLat+", "+orig
    }
    public static boolean isNetworkAvailable(Context con
        ConnectivityManager connectivityManager = (Conne
        NetworkInfo activeNetworkInfo = connectivityMana
        return activeNetworkInfo != null && activeNetwor
    }
}

```

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You can download the code for this tutorial below. If you are having hard time downloading the tutorial, kindly contact me.

Remember to subscribe with your email address to be among the first to receive my new android blog post once it is published.

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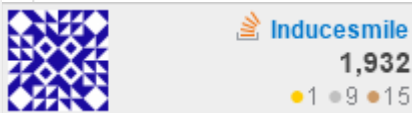
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## ABOUT THE AUTHOR



### Inducesmile

I learn and write about Android, iOS, Javascript, Php, Node.js, React Native, Mobile Game, Virtual Reality and Internet of Things



## 13 COMMENTS



**elmahdi** | October 14, 2016

[Log in to Reply](#)

hi henry,  
String routeDistance = leg.getDistance().getText();  
String routeDuration = leg.getDuration().getText();  
getDistance() and getDuration() aren't defined on  
LegsObject.  
any advice?!



**Henry** Author | October 14, 2016

[Log in to Reply](#)

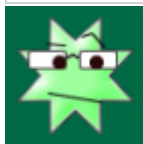
Wow, thanks for pointing it out. I think I mistakenly used a class from another project.  
The class is pasted below and I have updated the source code

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```
private DistanceObject distance;
private DurationObject duration;
public LegsObject(DurationObject
duration, DistanceObject distance, List
steps) {
this.duration = duration;
this.distance = distance;
this.steps = steps;
}
public List getSteps() {
return steps;
}
public DistanceObject getDistance() {
return distance;
}
public DurationObject getDuration() {
return duration;
}
}
```

**elmahdi** | October 28, 2016[Log in to Reply](#)

hi Henry,  
there is no implementation of :  
1) DistanceObject class  
2) DurationObject class  
can you plz put the code.

**jo\_177** | January 21, 2018[Log in to Reply](#)

please add the codes for  
1) DistanceObject class

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**Brian** | October 17, 2016[Log in to Reply](#)

Hi Henry,  
The update seems not to work. Are there two other classes missing or the methods are not clearly defined.

**Rafelcf** | October 19, 2016[Log in to Reply](#)

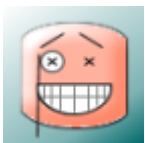
The perfect place to learn and use enough for my application would fragments code, since it is based on many json files. You can download the code ?  
thanks Henry

**Rafelcf** | October 20, 2016 [Log in to Reply](#)

Sorry, too complicated for me, GSON for me is new, only I pretended to renew my app but I find it very difficult. Thank you

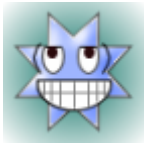
**Brian** | November 11, 2016[Log in to Reply](#)

Can you assist with the source code?

**Sophie** | September 11, 2017[Log in to Reply](#)

Hello Henry,  
Nice. Thanks for sharing.  
Please have a look at this issue on SO:  
<https://stackoverflow.com/q/46103680/3585072>

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**selo** | September 13, 2017[Log in to Reply](#)

hi Henry,  
there is no implementation of :  
1) DistanceObject class  
2) DurationObject class  
can you plz put the code

**Naveena** | October 26, 2017[Log in to Reply](#)

Can you pls share the link for the source code?

**saikrr** | January 30, 2018[Log in to Reply](#)

please provide implementation of : DistanceObject  
class, DurationObject class

**kainat** | March 22, 2018[Log in to Reply](#)

hi your tutorial is very useful  
i am beginner and i am working on map can u help  
me i want to store current latitude and longitude in  
database using volley library and then want to  
retrieve that latitude and longitude and display on  
google map plz help me its urgent thanks in advance

## ADD A COMMENT

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