

Location Tracker (Android)

Generated by Doxygen 1.8.13

Contents

1	Namespace Index	2
1.1	Packages	2
2	Hierarchical Index	2
2.1	Class Hierarchy	2
3	Class Index	2
3.1	Class List	2
4	File Index	3
4.1	File List	3
5	Namespace Documentation	3
5.1	Package com	3
5.2	Package com.example	3
5.3	Package com.example.myapplication	3
6	Class Documentation	3
6.1	com.example.myapplication.Main3Activity.LocationListener Class Reference	3
6.1.1	Detailed Description	4
6.1.2	Member Function Documentation	4
6.2	com.example.myapplication.Main3Activity Class Reference	5
6.2.1	Detailed Description	6
6.2.2	Member Function Documentation	6
6.2.3	Member Data Documentation	7
6.3	com.example.myapplication.MainActivity Class Reference	9
6.3.1	Detailed Description	9
6.3.2	Member Function Documentation	9
6.3.3	Member Data Documentation	10

7 File Documentation	11
7.1 app/src/main/java/com/example/myapplication/Main3Activity.java File Reference	11
7.2 app/src/main/java/com/example/myapplication/MainActivity.java File Reference	11
Index	13

1 Namespace Index

1.1 Packages

Here are the packages with brief descriptions (if available):

com	3
com.example	3
com.example.myapplication	3

2 Hierarchical Index

2.1 Class Hierarchy

This inheritance list is sorted roughly, but not completely, alphabetically:

LocationListener	
com.example.myapplication.Main3Activity.LocationListener	3
AppCompatActivity	
com.example.myapplication.Main3Activity	5
com.example.myapplication.MainActivity	9

3 Class Index

3.1 Class List

Here are the classes, structs, unions and interfaces with brief descriptions:

com.example.myapplication.Main3Activity.LocationListener	
Class which implements android.location.LocationListener class to override its methods	3
com.example.myapplication.Main3Activity	
Main3Activity class	5
com.example.myapplication.MainActivity	
Main Activity	9

4 File Index

4.1 File List

Here is a list of all files with brief descriptions:

`app/src/main/java/com/example/myapplication/Main3Activity.java` 11

`app/src/main/java/com/example/myapplication/MainActivity.java` 11

5 Namespace Documentation

5.1 Package com

Packages

- package [example](#)

5.2 Package com.example

Packages

- package [myapplication](#)

5.3 Package com.example.myapplication

Classes

- class [Main3Activity](#)
- class [MainActivity](#)

6 Class Documentation

6.1 `com.example.myapplication.Main3Activity.LocationListener` Class Reference

Inherits `LocationListener`.

Public Member Functions

- void [onLocationChanged](#) (`Location location`)
- void [onProviderDisabled](#) (`String provider`)
- void [onStatusChanged](#) (`String provider`, `int status`, `Bundle extras`)
- void [onProviderEnabled](#) (`String provider`)

6.1.1 Detailed Description

Class which implements android.location.LocationListener class to override its methods.

6.1.2 Member Function Documentation

6.1.2.1 onLocationChanged()

```
void com.example.myapplication.Main3Activity.LocationListener.onLocationChanged (
    Location location )
```

Invoked whenever there is change is a change in location.

Parameters

<i>location</i>	Object which is used to get latitude and longitude of the device's location
-----------------	---

6.1.2.2 onProviderDisabled()

```
void com.example.myapplication.Main3Activity.LocationListener.onProviderDisabled (
    String provider )
```

Invoked when GPS or internet on tracker device is disabled.

Parameters

<i>provider</i>	Provider
-----------------	----------

6.1.2.3 onProviderEnabled()

```
void com.example.myapplication.Main3Activity.LocationListener.onProviderEnabled (
    String provider )
```

Called when the provider is enabled by the user.

Parameters

<i>provider</i>	Provider
-----------------	----------

6.1.2.4 onStatusChanged()

```
void com.example.myapplication.Main3Activity.LocationListener.onStatusChanged (
```

```
String provider,  
int status,  
Bundle extras )
```

This is a deprecated method.

Parameters

<i>provider</i>	Provider
<i>status</i>	Status
<i>extras</i>	Bundle of extra parameters

The documentation for this class was generated from the following file:

- app/src/main/java/com/example/myapplication/[Main3Activity.java](#)

6.2 com.example.myapplication.Main3Activity Class Reference

Inherits AppCompatActivity.

Classes

- class [LocationListener](#)

Public Member Functions

- RequestQueue [getRequestQueue](#) ()

Protected Member Functions

- void [onCreate](#) (Bundle savedInstanceState)

Private Member Functions

- void [sendRequestAndPrintResponse](#) (String latitude, String longitude)

Private Attributes

- RequestQueue [mRequestQueue](#)
- final String [serverAddress](#) = "34.93.44.41"
- final String [deviceUnregisterURL](#) = "http://" + serverAddress + "/api/unregisterDevice"
- final String [sendLocationURL](#) = "http://" + serverAddress + "/api/submitLocation"
- final String [TAG](#) = "tag"
- String [APIKey](#)
- String [deviceId](#)

Static Private Attributes

- static final String `FILE_NAME` = "API_KEY.txt"

6.2.1 Detailed Description

`Main3Activity` class.

6.2.2 Member Function Documentation

6.2.2.1 `getRequestQueue()`

```
RequestQueue com.example.myapplication.Main3Activity.getRequestQueue ( )
```

Generates new request queue if not already present.

Returns

request queue object

6.2.2.2 `onCreate()`

```
void com.example.myapplication.Main3Activity.onCreate (
    Bundle savedInstanceState ) [protected]
```

Invoked when app instance is created This method is invoked when the application is created It has definitions of contents on the UI and it overrides the onclick methods of the content.

get API key from the file

get unique device ID

OnClick listner for Enable/Disable button on the UI

Function to be executed when clicked on Enable/Disable button It starts/stops sending the data to the server

Parameters

v	View on the UI
-------------------	--------------------------------

OnClick listner for unregister button on the UI

Function to be executed when clicked on unregister button It unregisters the data

Parameters

v	View on the UI
-------------------	--------------------------------

6.2.2.3 sendRequestAndPrintResponse()

```
void com.example.myapplication.Main3Activity.sendRequestAndPrintResponse (
    String latitude,
    String longitude ) [private]
```

Send location details to the server.

Parameters

<i>latitude</i>	Stores latitude
<i>longitude</i>	Stored longitude

Tries to convert string in JSON format to JSON object

Makes an HTTP post request to server Sends the API key and device id as parameters in JSON object Hits on URL: SERVER_ADDRESS/api/submitLocation

Invoked when call to server was successful

Parameters

<i>response</i>	stores the output returned by the server in JSON object
-----------------	---

Invoked when call to server is not successful

Parameters

<i>error</i>	Stores the error response received from server
--------------	--

6.2.3 Member Data Documentation

6.2.3.1 APIKey

```
String com.example.myapplication.Main3Activity.APIKey [private]
```

Stores API key.

6.2.3.2 deviceId

```
String com.example.myapplication.Main3Activity.deviceID [private]
```

Stores device ID.

6.2.3.3 deviceUnregisterURL

```
final String com.example.myapplication.Main3Activity.deviceUnregisterURL = "http://" + server↵  
Address + "/api/unregisterDevice" [private]
```

URL to hit the server for device unregistration.

6.2.3.4 FILE_NAME

```
final String com.example.myapplication.Main3Activity.FILE_NAME = "API_KEY.txt" [static],  
[private]
```

Stores filename in which API key to be stored.

6.2.3.5 mRequestQueue

```
RequestQueue com.example.myapplication.Main3Activity.mRequestQueue [private]
```

Stores request to be made to server in queue.

6.2.3.6 sendLocationURL

```
final String com.example.myapplication.Main3Activity.sendLocationURL = "http://" + server↵  
Address + "/api/submitLocation" [private]
```

URL to hit the server to send location of device.

6.2.3.7 serverAddress

```
final String com.example.myapplication.Main3Activity.serverAddress = "34.93.44.41" [private]
```

Stores IP address of the server.

6.2.3.8 TAG

```
final String com.example.myapplication.Main3Activity.TAG = "tag" [private]
```

Used for logging purpose.

The documentation for this class was generated from the following file:

- [app/src/main/java/com/example/myapplication/Main3Activity.java](#)

6.3 com.example.myapplication.MainActivity Class Reference

Inherits AppCompatActivity.

Public Member Functions

- RequestQueue [getRequestQueue](#) ()

Protected Member Functions

- void [onCreate](#) (Bundle savedInstanceState)

Private Attributes

- RequestQueue [mRequestQueue](#)
- final String [serverAddress](#) = "34.93.44.41"
- final String [deviceRegisterURL](#) = "http://" + serverAddress + "/api/registerDevice"
- final String [TAG](#) = "tag"
- String [APIKey](#)
- String [deviceId](#)

Static Private Attributes

- static final String [FILE_NAME](#) = "API_KEY.txt"

6.3.1 Detailed Description

Main Activity.

6.3.2 Member Function Documentation

6.3.2.1 getRequestQueue()

```
RequestQueue com.example.myapplication.MainActivity.getRequestQueue ( )
```

Generates new request queue if not already present.

Returns

request queue object

6.3.2.2 onCreate()

```
void com.example.myapplication.MainActivity.onCreate (
    Bundle savedInstanceState ) [protected]
```

Invoked when app instance is created This method is invoked when the application is created It has definitions of contents on the UI and it overrides the onclick methods of the content.

Checks for Location permission Requests for permission if not gotten already

OnClick listner for submit button on the UI

Function to be executed when clicked on submit button It attempts to register the device

Parameters

v	View on the UI
---	----------------

6.3.3 Member Data Documentation

6.3.3.1 APIKey

```
String com.example.myapplication.MainActivity.APIKey [private]
```

Stores API key.

6.3.3.2 deviceId

```
String com.example.myapplication.MainActivity.deviceID [private]
```

Stores device ID.

6.3.3.3 deviceRegisterURL

```
final String com.example.myapplication.MainActivity.deviceRegisterURL = "http://" + server↵  
Address + "/api/registerDevice" [private]
```

URL to hit the server for device registration.

6.3.3.4 FILE_NAME

```
final String com.example.myapplication.MainActivity.FILE_NAME = "API_KEY.txt" [static], [private]
```

Stores filename in which API key to be stored.

6.3.3.5 mRequestQueue

```
RequestQueue com.example.myapplication.MainActivity.mRequestQueue [private]
```

Stores request to be made to server in queue.

6.3.3.6 serverAddress

```
final String com.example.myapplication.MainActivity.serverAddress = "34.93.44.41" [private]
```

Stores IP address of the server.

6.3.3.7 TAG

```
final String com.example.myapplication.MainActivity.TAG = "tag" [private]
```

Used for logging purpose.

The documentation for this class was generated from the following file:

- [app/src/main/java/com/example/myapplication/MainActivity.java](#)

7 File Documentation

7.1 app/src/main/java/com/example/myapplication/Main3Activity.java File Reference

Classes

- class [com.example.myapplication.Main3Activity](#)
- class [com.example.myapplication.Main3Activity.LocationListener](#)

Packages

- package [com.example.myapplication](#)

7.2 app/src/main/java/com/example/myapplication/MainActivity.java File Reference

Classes

- class [com.example.myapplication.MainActivity](#)

Packages

- package [com.example.myapplication](#)

Index

APIKey

com::example::myapplication::Main3Activity, 7

com::example::myapplication::MainActivity, 10

app/src/main/java/com/example/myapplication/Main3Activity.java, 11

app/src/main/java/com/example/myapplication/MainActivity.java, 11

com, 3

com.example, 3

com.example.myapplication, 3

com.example.myapplication.Main3Activity, 5

com.example.myapplication.Main3Activity.LocationListener, 3

com.example.myapplication.MainActivity, 9

com::example::myapplication::Main3Activity

APIKey, 7

deviceId, 7

deviceUnregisterURL, 8

FILE_NAME, 8

getRequestQueue, 6

mRequestQueue, 8

onCreate, 6

sendLocationURL, 8

sendRequestAndPrintResponse, 7

serverAddress, 8

TAG, 8

com::example::myapplication::Main3Activity::LocationListener

onLocationChanged, 4

onProviderDisabled, 4

onProviderEnabled, 4

onStatusChanged, 4

com::example::myapplication::MainActivity

APIKey, 10

deviceId, 10

deviceRegisterURL, 10

FILE_NAME, 11

getRequestQueue, 9

mRequestQueue, 11

onCreate, 10

serverAddress, 11

TAG, 11

deviceId

com::example::myapplication::Main3Activity, 7

com::example::myapplication::MainActivity, 10

deviceRegisterURL

com::example::myapplication::MainActivity, 10

deviceUnregisterURL

com::example::myapplication::Main3Activity, 8

FILE_NAME

com::example::myapplication::Main3Activity, 8

com::example::myapplication::MainActivity, 11

getRequestQueue

com::example::myapplication::Main3Activity, 6

com::example::myapplication::MainActivity, 9

mRequestQueue

com::example::myapplication::Main3Activity, 8

com::example::myapplication::MainActivity, 11

onCreate

com::example::myapplication::Main3Activity, 6

com::example::myapplication::MainActivity, 10

onLocationChanged

com::example::myapplication::Main3Activity::LocationListener, 4

onProviderDisabled

com::example::myapplication::Main3Activity::LocationListener, 4

onProviderEnabled

com::example::myapplication::Main3Activity::LocationListener, 4

onStatusChanged

com::example::myapplication::Main3Activity::LocationListener, 4

sendLocationURL

com::example::myapplication::Main3Activity, 8

sendRequestAndPrintResponse

com::example::myapplication::Main3Activity, 7

serverAddress

com::example::myapplication::Main3Activity, 8

com::example::myapplication::MainActivity, 11

TAG

com::example::myapplication::Main3Activity, 8

com::example::myapplication::MainActivity, 11