

## **User Manual**

### **The EasyPark android app is licensed under the apache license**

Please see the file COPYING in <https://github.com/swethavs/EasyPark/blob/master/COPYING> for license terms

### **Build Instructions:**

1. Make sure you have JDK 8 and eclipse Luna installed in your machine
2. Install the google play services and add it as a library to eclipse workspace.
3. Download the android code for EasyPark from <https://github.com/swethavs/EasyPark/tree/master/EasyParkAndroidSourceCode> and add it to work space
4. Reference google play services library in the project
5. Generate google maps API key and add it in the android.manifest file.
6. Make sure you have installed the Android 5.1.1 with the API from Android SDK manager
7. Now, put your android mobile in debugging mode after enabling the location service and run the app.
8. If you wish to modify the PHP/MySQL code then you need to have XAMPP/WAMP server installed in your system. Follow the below steps
  - a. Copy the PHP code in htdocs folder
  - b. Import the SQL file in PHPMyAdmin console
  - c. Run the SQL server and Apache web server
  - d. Replace the website address in android code with your IP address
  - e. Re-run the android app

### **Pre-Requisites:**

1. Android device with location service enabled and internet connection
2. Your system with eclipse and JDK installed
3. Android plugin should be installed for Eclipse

### **Screen Shots:**

Refer to the ppt in GitHub in order to know how to use this app

### **API Request and Reply:**

## 1. Get Parking Lots:

### URL:

<http://easypark.net46.net/easypark/getparkinglotsdata.php>

### Sample Request:

latitude=45.5236118&longitude=-122.889051&isradius=true&radius=2.0&zipcode=0&fromtime=1437692880000&endtime=1437696480000

### Sample Response:

```
{"success":1,"parkinglots":[{"parkinglotsid":"1","address":"611 NW Garswodd Ter Beaverton 97006","miles":"0.00416591895179231","cost":"12","latitude":"45.5236201","longitude":"-122.8889657"},{"parkinglotsid":"8","address":"612 NW Garswood Ter Beaverton","miles":"0.0771588745646188","cost":"16","latitude":"45.5236201","longitude":"-122.887456"}]}
```

<!-- Hosting24 Analytics Code -->

<script type="text/javascript" src="http://stats.hosting24.com/count.php"></script>

<!-- End Of Analytics Code -->

## 2. Get Parking Spots:

### URL:

<http://easypark.net46.net/easypark/getparkingspots.php>

### Sample Request:

individualparkinglotid=1&fromtime=1437708000000&endtime=1437711600000

### Sample Response:

```
{"success":1,"parkingspots":[{"parkingspotid":"1","parkingspotname":"Level 3: C2"}, {"parkingspotid":"2","parkingspotname":"Level 2: B7"}]}
```

<!-- Hosting24 Analytics Code -->

<script type="text/javascript" src="http://stats.hosting24.com/count.php"></script>

<!-- End Of Analytics Code -->

## 3. Update Parking Spot:

**URL:**

<http://easypark.net46.net/easypark/updateparkingspot.php>

**Sample Request:**

individualparkinglotid=1&fromtime=1437708000000&endtime=1437711600000&parkingspotid=1

**Sample Response:**

```
{"success":1,"parkingaddressarray":[{"parkingaddress":"611 NW Garswodd Ter Beaverton 97006","latitude":"45.5236201","longitude":"-122.8889657"}]}
```

<!-- Hosting24 Analytics Code -->

<script type="text/javascript" src="http://stats.hosting24.com/count.php"></script>

<!-- End Of Analytics Code -->

**4. Free Parking Get Parking Lots:****URL:**

<http://easypark.net46.net/easypark/selectfreeparkinglots.php>

**Sample Request:**

latitude=45.5235808&longitude=-122.8890029

**Sample Response:**

```
{"success":1,"freeparkinglots":[{"latitude":"45.523742","longitude":"-122.889676","nooflots":"5","miles":"0.0344103453785116","time":"1439222460000","user":"hi","address":"20630 NW Delamere Terrace\nHillsboro, OR 97006\nHillsboro\n"}, {"latitude":"45.523419","longitude":"-122.889449","nooflots":"3","miles":"0.0242999641521018","time":"1439174580000","user":"hi","address":"20614 NW Delamere Terrace\nBeaverton, OR 97006\nBeaverton\n"}, {"latitude":"45.524228","longitude":"-122.888683","nooflots":"65","miles":"0.0472896867300036","time":"1439168700000","user":"hi","address":"649 NW Garswood Terrace\nBeaverton, OR 97006\nBeaverton\n"}, {"latitude":"45.523592","longitude":"-122.888702","nooflots":"9","miles":"0.0145763123511702","time":"1439164560000","user":"hi","address":"20578 NW Brentford Terrace\nHillsboro, OR 97006\nHillsboro\n"}, {"latitude":"45.523812","longitude":"-122.888382","nooflots":"6","miles":"0.0340140305455641","time":"1439164320000","user":"hi","address":"610 NW Garswood Terrace\nBeaverton, OR 97006\nBeaverton\n"}, {"latitude":"45.523859","longitude":"-122.887389","nooflots":"9","miles":"0.0803991491153977","time":"1439163780000","user":"hi","address":"636 NW Adwick Dr\nBeaverton, OR 97006\nBeaverton\n"}, {"latitude":"45.5235798","longitude":"-122.8890506","nooflots":"6","miles":
```

```

"0.00230848051418883","time":"1439151780000","user":"hi","address":"611 NW Garswood
Terrace\nBeaverton, OR
97006\nBeaverton\n"},"{"latitude":"45.5235747","longitude":"-122.8890372","nooflots":"2","miles":
"0.00171185470081542","time":"1439151720000","user":"hi","address":"611 NW Garswood
Terrace\nBeaverton, OR
97006\nBeaverton\n"},"{"latitude":"45.517223","longitude":"-122.870319","nooflots":"8","miles":"1.
00482790674428","time":"1439078820000","user":"hi","address":"18775 SW Lisa
Ct\nBeaverton, OR
97006\nBeaverton\n"},"{"latitude":"45.5235721","longitude":"-122.8889703","nooflots":"36","miles
":"0.00168752928881285","time":"1439077260000","user":"hi","address":"611 NW Garswood
Terrace\nBeaverton, OR
97006\nBeaverton\n"},"{"latitude":"45.539101","longitude":"-122.878786","nooflots":"10","miles":
"1.18004966920175","time":"1439075340000","user":"hi","address":"2796 NW Palazza
Way\nHillsboro, OR
97124\nHillsboro\n"},"{"latitude":"45.523844","longitude":"-122.888122","nooflots":"9","miles":"0.0
463259064066872","time":"1439074680000","user":"hi","address":"629 NW Adwick
Dr\nBeaverton, OR
97006\nBeaverton\n"},"{"latitude":"45.521935","longitude":"-122.886917","nooflots":"6","miles":"0.
151969334096096","time":"1439074380000","user":"hi","address":"363-365 NW Gina
Way\nBeaverton, OR
97006\nBeaverton\n"},"{"latitude":"45.524424","longitude":"-122.893737","nooflots":"3","miles":"0.
236290892276667","time":"1439073660000","user":"hi","address":"20960 NW Nick
Way\nHillsboro, OR
97006\nHillsboro\n"},"{"latitude":"45.5235808","longitude":"-122.8890029","nooflots":"1","miles":
"0","time":"1438979460000","user":"swethavs","address":"611 NW Garswood
Terrace\nBeaverton, OR 97006\nBeaverton\n"}]]}
<!-- Hosting24 Analytics Code -->
<script type="text/javascript" src="http://stats.hosting24.com/count.php"></script>
<!-- End Of Analytics Code -->

```

## 5. Insert Free Parking Lots:

### URL:

<http://easypark.net46.net/easypark/insertfreeparkinglots.php>

### Sample Request:

latitude=45.5235808&longitude=-122.8890029&address=611+NW+Garswood+Terrace%0ABea  
verton%2C+OR+97006%0ABeaverton%0A&nooflots=1&time=1438979460000&user=swethavs

### Sample Response:

```

{"success":1}
<!-- Hosting24 Analytics Code -->
<script type="text/javascript" src="http://stats.hosting24.com/count.php"></script>

```

<!-- End Of Analytics Code -->

**OTHER POSSIBLE RESPONSE:**

1. {"success":0,"message":"Required field(s) is missing"}  
<!-- Hosting24 Analytics Code →  
    <script type="text/javascript"  
src="<http://stats.hosting24.com/count.php>"></script>  
<!-- End Of Analytics Code →
2. {"success":0,"message":"No parkinglots found"}  
<!-- Hosting24 Analytics Code →  
    <script type="text/javascript"  
src="<http://stats.hosting24.com/count.php>"></script>  
<!-- End Of Analytics Code -->