**Google Cloud Messaging:**

* Open xampp control panel and create new database: gcm
* Create new table gcm\_users (copy following query)

CREATE TABLE IF NOT EXISTS `gcm\_users` (

`id` int(11) NOT NULL AUTO\_INCREMENT,

`gcm\_regid` text,

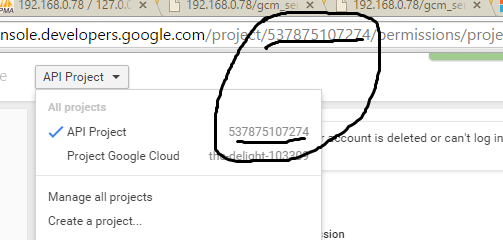
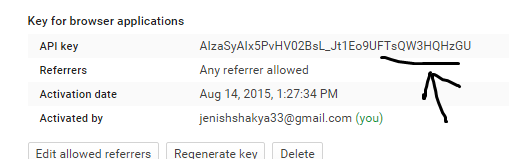
`name` varchar(50) NOT NULL,

`email` varchar(255) NOT NULL,

`created\_at` timestamp NOT NULL DEFAULT CURRENT\_TIMESTAMP,

PRIMARY KEY (`id`)

) ENGINE=InnoDB DEFAULT CHARSET=latin1 AUTO\_INCREMENT=1 ;

* Save project number: 537875107274
* 
* Generate google api key:
* Open console – Api’s n auth – credentials – create new key – browser key – create (leave box empty)
* 
* Make new folder “gcm\_server\_php” and inside this folder, save following php files and save this folder inside “htdocs” which is inside xampp.
* **Config.php**

<?php

/\*\*

\* Database config variables

\*/

define("DB\_HOST", "localhost");

define("DB\_USER", "root");

define("DB\_PASSWORD", "");

define("DB\_DATABASE", "gcm");

/\*

\* Google API Key

\*/

define("GOOGLE\_API\_KEY", "AIzaSyDR5seV3JP3yM8HbfUWPmsu7K9MaFlfmLE"); // Place your Google API Key (key for browser application not key for server application)

?>

**Db\_connect.php**

<?php

class DB\_Connect {

// constructor

function \_\_construct() {

}

// destructor

function \_\_destruct() {

// $this->close();

}

// Connecting to database

public function connect() {

require\_once 'config.php';

// connecting to mysql

$con = mysql\_connect(DB\_HOST, DB\_USER, DB\_PASSWORD);

// selecting database

mysql\_select\_db(DB\_DATABASE);

// return database handler

return $con;

}

// Closing database connection

public function close() {

mysql\_close();

}

}

?>

**Db\_functions.php**

<?php

class DB\_Functions {

private $db;

//put your code here

// constructor

function \_\_construct() {

include\_once './db\_connect.php';

// connecting to database

$this->db = new DB\_Connect();

$this->db->connect();

}

// destructor

function \_\_destruct() {

}

/\*\*

\* Storing new user

\* returns user details

\*/

public function storeUser($name, $email, $gcm\_regid) {

// insert user into database

$result = mysql\_query("INSERT INTO gcm\_users(name, email, gcm\_regid, created\_at) VALUES('$name', '$email', '$gcm\_regid', NOW())");

// check for successful store

if ($result) {

// get user details

$id = mysql\_insert\_id(); // last inserted id

$result = mysql\_query("SELECT \* FROM gcm\_users WHERE id = $id") or die(mysql\_error());

// return user details

if (mysql\_num\_rows($result) > 0) {

return mysql\_fetch\_array($result);

} else {

return false;

}

} else {

return false;

}

}

/\*\*

\* Get user by email and password

\*/

public function getUserByEmail($email) {

$result = mysql\_query("SELECT \* FROM gcm\_users WHERE email = '$email' LIMIT 1");

return $result;

}

/\*\*

\* Getting all users

\*/

public function getAllUsers() {

$result = mysql\_query("select \* FROM gcm\_users");

return $result;

}

/\*\*

\* Check user is existed or not

\*/

public function isUserExisted($email) {

$result = mysql\_query("SELECT email from gcm\_users WHERE email = '$email'");

$no\_of\_rows = mysql\_num\_rows($result);

if ($no\_of\_rows > 0) {

// user existed

return true;

} else {

// user not existed

return false;

}

}

}

?>

**GCM.php**

<?php

/\*

\* To change this template, choose Tools | Templates

\* and open the template in the editor.

\*/

/\*\*

\* Description of GCM

\*

\* @author Ravi Tamada

\*/

class GCM {

//put your code here

// constructor

function \_\_construct() {

}

/\*\*

\* Sending Push Notification

\*/

public function send\_notification($registatoin\_ids, $message) {

// include config

include\_once './config.php';

// Set POST variables

$url = 'https://android.googleapis.com/gcm/send';

$fields = array(

'registration\_ids' => $registatoin\_ids,

'data' => $message,

);

$headers = array(

'Authorization: key=' . GOOGLE\_API\_KEY,

'Content-Type: application/json'

);

// Open connection

$ch = curl\_init();

// Set the url, number of POST vars, POST data

curl\_setopt($ch, CURLOPT\_URL, $url);

curl\_setopt($ch, CURLOPT\_POST, true);

curl\_setopt($ch, CURLOPT\_HTTPHEADER, $headers);

curl\_setopt($ch, CURLOPT\_RETURNTRANSFER, true);

// Disabling SSL Certificate support temporarly

curl\_setopt($ch, CURLOPT\_SSL\_VERIFYPEER, false);

curl\_setopt($ch, CURLOPT\_POSTFIELDS, json\_encode($fields));

// Execute post

$result = curl\_exec($ch);

if ($result === FALSE) {

die('Curl failed: ' . curl\_error($ch));

}

// Close connection

curl\_close($ch);

echo $result;

}

}

?>

**Index.php**

<!--

To change this template, choose Tools | Templates

and open the template in the editor.

-->

<!DOCTYPE html>

<html>

<head>

<title></title>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<script src="http://ajax.googleapis.com/ajax/libs/jquery/1.8.2/jquery.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

});

function sendPushNotification(id){

var data = $('form#'+id).serialize();

$('form#'+id).unbind('submit');

$.ajax({

url: "send\_message.php",

type: 'GET',

data: data,

beforeSend: function() {

},

success: function(data, textStatus, xhr) {

$('.txt\_message').val("");

},

error: function(xhr, textStatus, errorThrown) {

}

});

return false;

}

</script>

<style type="text/css">

.container{

width: 950px;

margin: 0 auto;

padding: 0;

}

h1{

font-family: 'Helvetica Neue', Helvetica, Arial, sans-serif;

font-size: 24px;

color: #777;

}

div.clear{

clear: both;

}

ul.devices{

margin: 0;

padding: 0;

}

ul.devices li{

float: left;

list-style: none;

border: 1px solid #dedede;

padding: 10px;

margin: 0 15px 25px 0;

border-radius: 3px;

-webkit-box-shadow: 0 1px 5px rgba(0, 0, 0, 0.35);

-moz-box-shadow: 0 1px 5px rgba(0, 0, 0, 0.35);

box-shadow: 0 1px 5px rgba(0, 0, 0, 0.35);

font-family: 'Helvetica Neue', Helvetica, Arial, sans-serif;

color: #555;

}

ul.devices li label, ul.devices li span{

font-family: 'Helvetica Neue', Helvetica, Arial, sans-serif;

font-size: 12px;

font-style: normal;

font-variant: normal;

font-weight: bold;

color: #393939;

display: block;

float: left;

}

ul.devices li label{

height: 25px;

width: 50px;

}

ul.devices li textarea{

float: left;

resize: none;

}

ul.devices li .send\_btn{

background: -webkit-gradient(linear, 0% 0%, 0% 100%, from(#0096FF), to(#005DFF));

background: -webkit-linear-gradient(0% 0%, 0% 100%, from(#0096FF), to(#005DFF));

background: -moz-linear-gradient(center top, #0096FF, #005DFF);

background: linear-gradient(#0096FF, #005DFF);

text-shadow: 0 1px 0 rgba(0, 0, 0, 0.3);

border-radius: 3px;

color: #fff;

}

</style>

</head>

<body>

<?php

include\_once 'db\_functions.php';

$db = new DB\_Functions();

$users = $db->getAllUsers();

if ($users != false)

$no\_of\_users = mysql\_num\_rows($users);

else

$no\_of\_users = 0;

?>

<div class="container">

<h1>No of Devices Registered: <?php echo $no\_of\_users; ?></h1>

<hr/>

<ul class="devices">

<?php

if ($no\_of\_users > 0) {

?>

<?php

while ($row = mysql\_fetch\_array($users)) {

?>

<li>

<form id="<?php echo $row["id"] ?>" name="" method="post" onsubmit="return sendPushNotification('<?php echo $row["id"] ?>')">

<label>Name: </label> <span><?php echo $row["name"] ?></span>

<div class="clear"></div>

<label>Email:</label> <span><?php echo $row["email"] ?></span>

<div class="clear"></div>

<div class="send\_container">

<textarea rows="3" name="message" cols="25" class="txt\_message" placeholder="Type message here"></textarea>

<input type="hidden" name="regId" value="<?php echo $row["gcm\_regid"] ?>"/>

<input type="submit" class="send\_btn" value="Send" onclick=""/>

</div>

</form>

</li>

<?php }

} else { ?>

<li>

No Users Registered Yet!

</li>

<?php } ?>

</ul>

</div>

</body>

</html>

**Register.php**

<?php

// response json

$json = array();

/\*\*

\* Registering a user device

\* Store reg id in users table

\*/

if (isset($\_POST["name"]) && isset($\_POST["email"]) && isset($\_POST["regId"])) {

$name = $\_POST["name"];

$email = $\_POST["email"];

$gcm\_regid = $\_POST["regId"]; // GCM Registration ID

// Store user details in db

include\_once './db\_functions.php';

include\_once './GCM.php';

$db = new DB\_Functions();

$gcm = new GCM();

$res = $db->storeUser($name, $email, $gcm\_regid);

$registatoin\_ids = array($gcm\_regid);

$message = array("product" => "shirt");

$result = $gcm->send\_notification($registatoin\_ids, $message);

echo $result;

} else {

// user details missing

}

?>

**Send\_message.php**

<?php

/\*

\* To change this template, choose Tools | Templates

\* and open the template in the editor.

\*/

if (isset($\_GET["regId"]) && isset($\_GET["message"])) {

$regId = $\_GET["regId"];

$message = $\_GET["message"];

include\_once './GCM.php';

$gcm = new GCM();

$registatoin\_ids = array($regId);

$message = array("price" => $message);

$result = $gcm->send\_notification($registatoin\_ids, $message);

echo $result;

}

?>

**Test.php**

<!--

To change this template, choose Tools | Templates

and open the template in the editor.

-->

<!DOCTYPE html>

<html>

<head>

<title></title>

<meta http-equiv="Content-Type" content="text/html; charset=UTF-8">

<script src="http://ajax.googleapis.com/ajax/libs/jquery/1.8.2/jquery.min.js"></script>

<script type="text/javascript">

$(document).ready(function(){

});

</script>

</head>

<body>

<form name="" method="post" action="register.php">

<input type="text" name="name"/>

<input type="text" name="email"/>

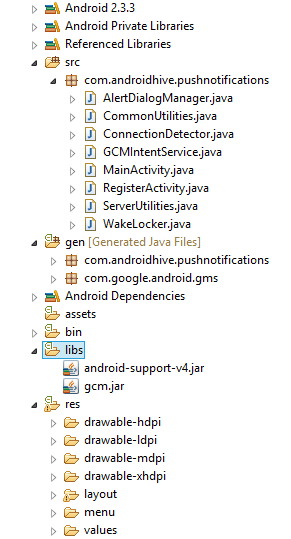
<input type="text" name="regId"/>

<input type="submit"/>

</form>

</body>

</html>



* Now import your project to your eclipse.
* Import the working project from github (repository name is **AndroidPushNotificaitonUsingGCM**)
* You to have reference google play services as a library project as you did with google map.
* To run, first connect to internet then run, it will register device to GCM.
* To register device to local server(mysql), connect to local network, then click register.
* To get push notifications, connect to internet, open your browser, type <http://192.168.0.78/gcm_server_php/> then send push notifications to device.
* 192.168.0.78 is server pc ip address, you can replace 192.168.0.78 by localhost if the database and gcm\_server\_php folder is in your pc.

<http://www.androidhive.info/2012/10/android-push-notifications-using-google-cloud-messaging-gcm-php-and-mysql/>

(for downloading full source code)