

1. Create Web GIS Application Using Google Map API, PHP and MySQL

In this tutorial I am going to explain to you how to create simple web GIS application using Google Map API as map service and MySQL database to store our data and PHP programming language.

I am using XAMPP Web Server which consist of Apache web server and MySQL database server. You can use any web server that support a PHP.

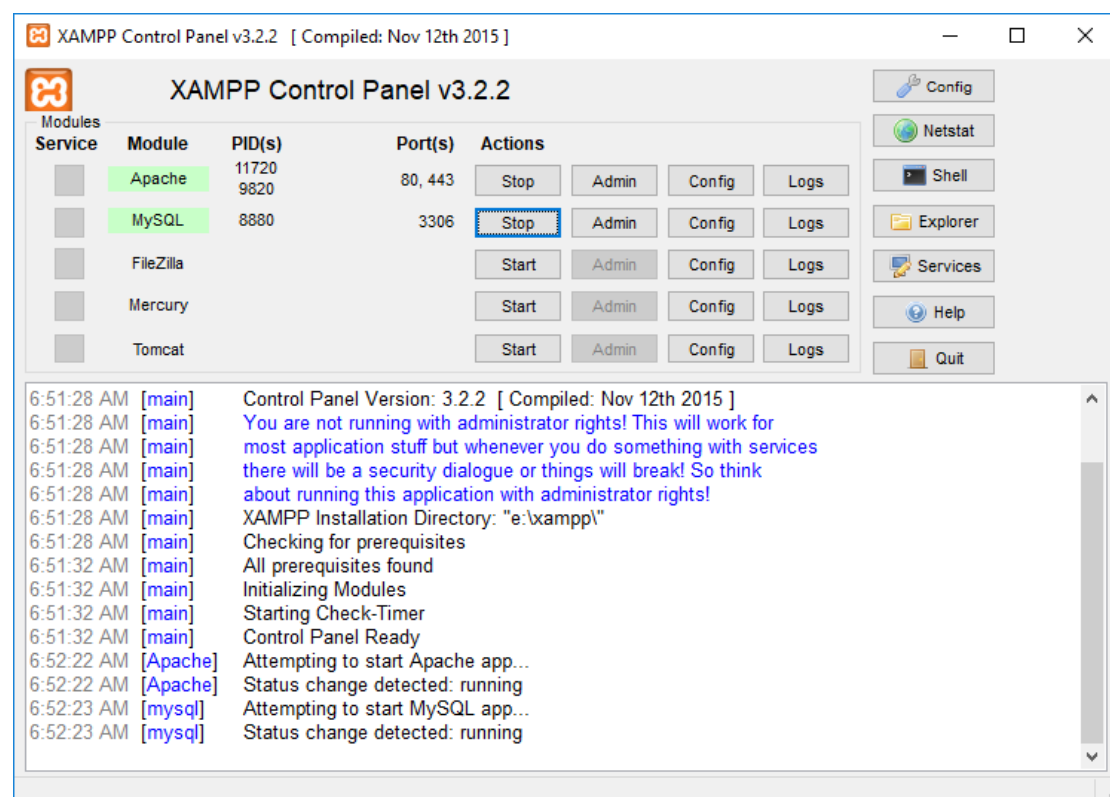
1.1. Scenario:

We are going to create a simple database for hotels which used to store the Name, Description, Phone, Email and Stars in addition to Longitude and Latitude to store the geographical coordinates of the hotel.

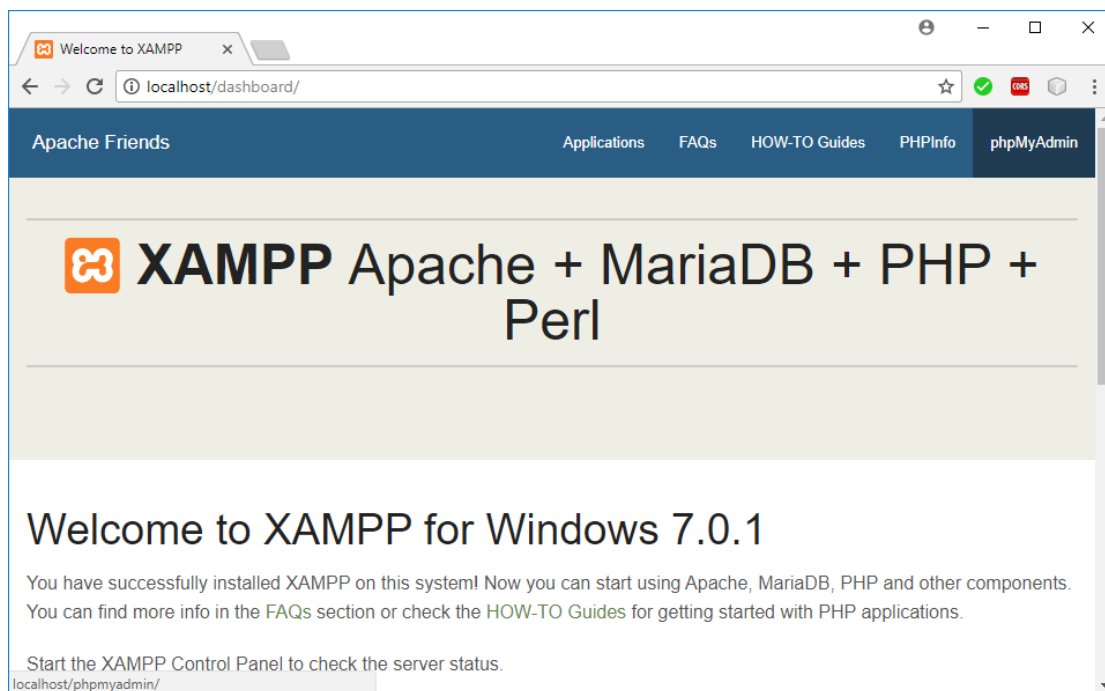
And the hotels data which include the longitude and latitude is projected on the google map in web page.

1.2. Create the Database:

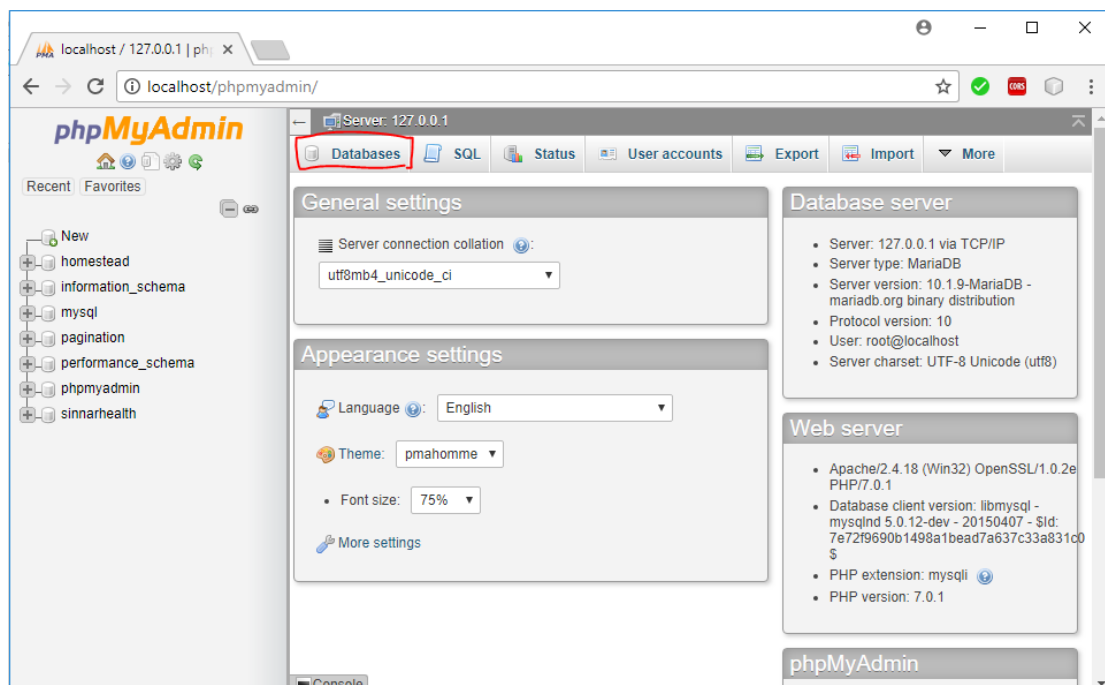
Open the XAMPP Control Panel and start the Apache web server and MySQL database server.



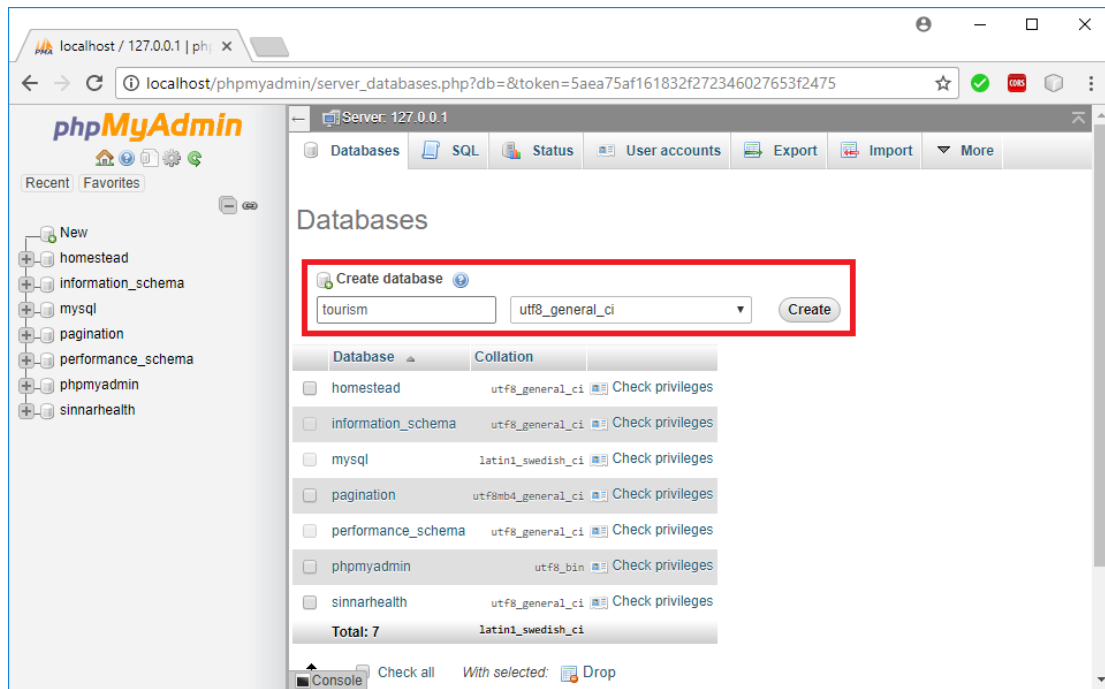
And then open your web browser and in the address bar write [http://localhost/] and press enter. Click on **phpMyAdmin** link. **phpMyAdmin** is web based interface for MySQL database.



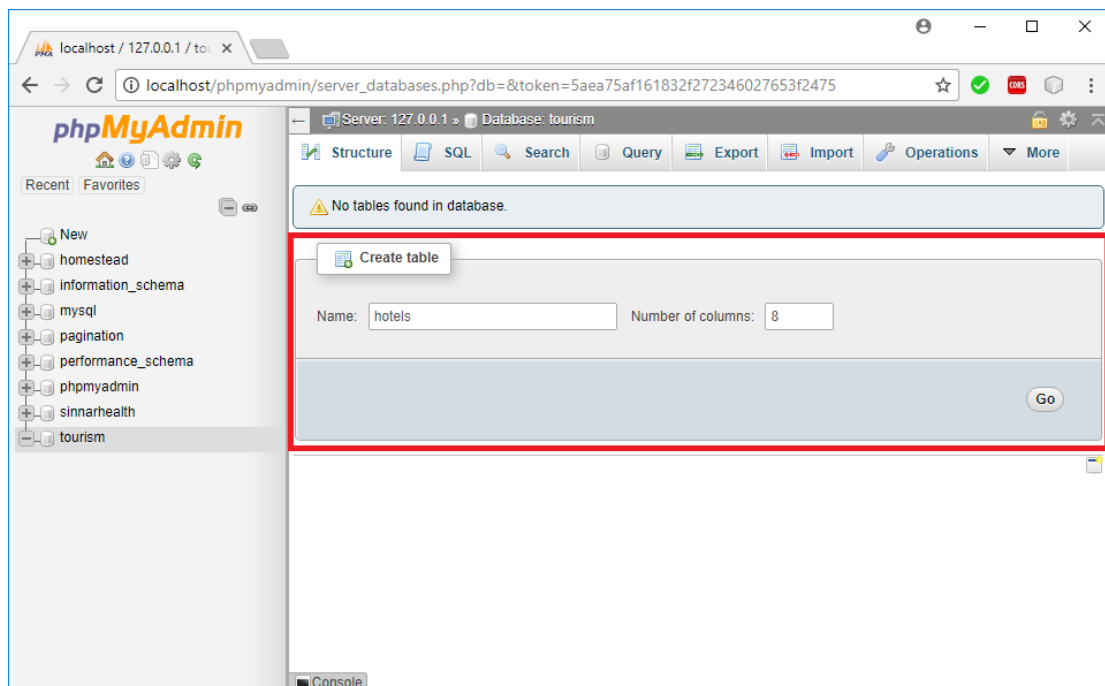
To create new database click on Databases button.



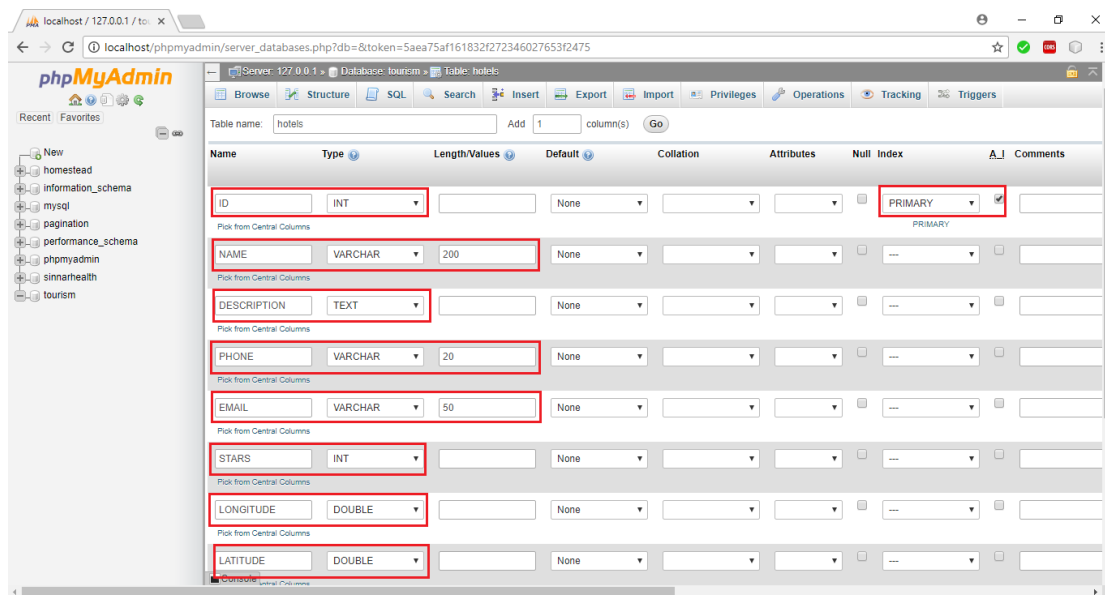
In the Database Name field write the database name and specify the database collection. In database name write [tourism] and in collection select [utf8-general-ci]. And then click on create button.



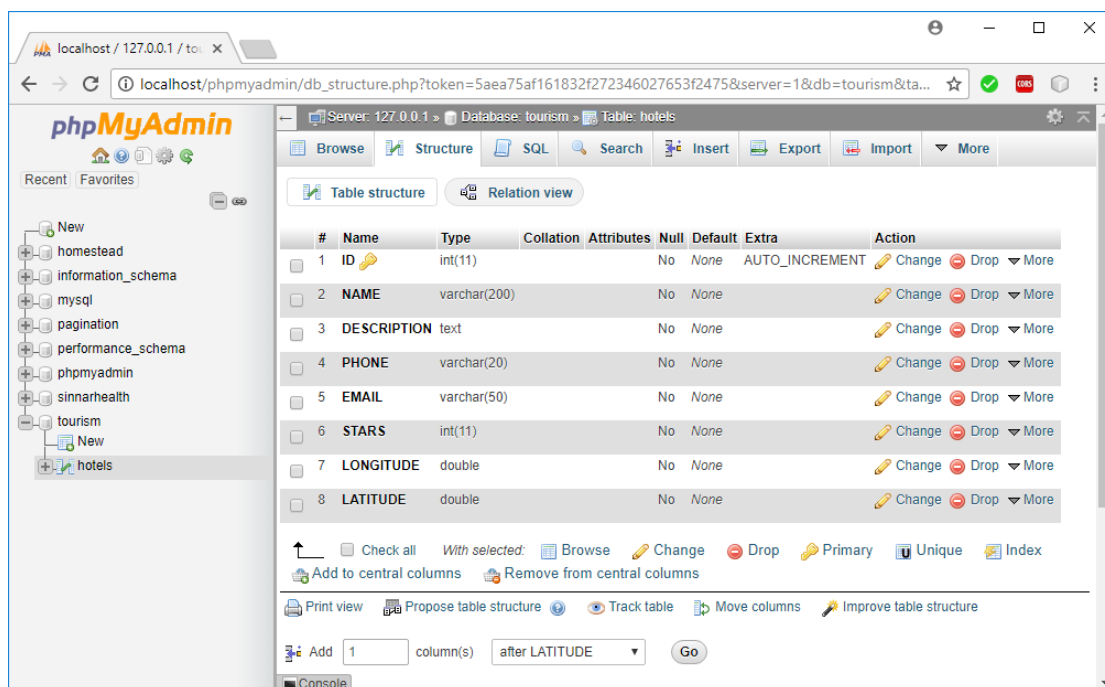
Once the database created the phpMyAdmin asking you to create table. In the create table form write [hotels] for the table name, for Number of Columns write [8]. And then click Go.



Now we have to specify the properties of eight columns. The columns are (ID, NAME, DESCRIPTION, PHONE, EMAIL, STARS, LONGITUDE, LATITUDE).



And then click save. The following screen explain the structure of the hotels table.



Click on the insert link to insert some data for testing purpose. insert the following information and click Go.

Column	Type	Function	Null	Value
ID	int(11)			
NAME	varchar(200)			Coral Hotel
DESCRIPTION	text			Jassaa Street Al Bogga Area, Khartoum
PHONE	varchar(20)			+249183774100
EMAIL	varchar(50)			coral@gmail.com
STARS	int(11)			5
LONGITUDE	double			32.5042777
LATITUDE	double			15.6098783

We need to insert information for another hotel. You can insert the following data. And click on the Go button.

Column	Type	Function	Null	Value
ID	int(11)			
NAME	varchar(200)			kanon Hotel
DESCRIPTION	text			15th St, Khartoum
PHONE	varchar(20)			+249900902157
EMAIL	varchar(50)			kanon@gmail.com
STARS	int(11)			4
LONGITUDE	double			32.5456374
LATITUDE	double			15.5803441

Now we have created our database and table for hotels information and we have inserted information about two hotels.

1.3. Create PHP Application to Display Hotels Information from MySQL:

You can use any text editor software to write PHP codes. I am using Notepad++.

Create a new folder in XAMPP root directory (X:\xampp\htdocs\) and rename the new folder [hotelsmap]. And then open Notepad++ editor. From main menu change select language and change the language to PHP.

The `mysqli_connect(HOST, USERNAME, PASSWORD, DATABASE)` command used to link your PHP application to MySQL Database. in notepad++ type the following code.

```
<?php
$con = mysqli_connect("localhost","root","root","tourism")
    or die(" Connection Error ! ");
?>
```

Save your file in the hotelsmap folder and name it getHotels.php. `mysqli_query(DATABASE_LINK, SQL_STATEMENT)` is used to execute any SQL query in MySQL database.

```
<?php
$con = mysqli_connect("localhost","root","root","tourism")
    or die(" Connection Error ! ");

$query = mysqli_query($con , "SELECT * FROM hotels;");

?>
```

We create an array to store the SQL query results. The following command is used to create array in PHP.

```
$temp = Array();
```

`Mysqli_fetch_assoc(QUERY_VARIABLE)` is used to read query result data from MySQL database row by row, we will put it in while loop to read all query result rows. And store this rows in our temp array.

```
<?php
$con = mysqli_connect("localhost","root","root","tourism")
    or die(" Connection Error ! ");

$query = mysqli_query($con , "SELECT * FROM hotels;");
$temp = Array();
while($row = mysqli_fetch_assoc($query)) {
    $temp[] = $row ;
}
?>
```

Echo statement used to display text in the web page, and `json_encode` is used to convert the query result array to JSON format.

```
<?php
$con = mysqli_connect("localhost","root","root","tourism")
    or die(" Connection Error ! ");

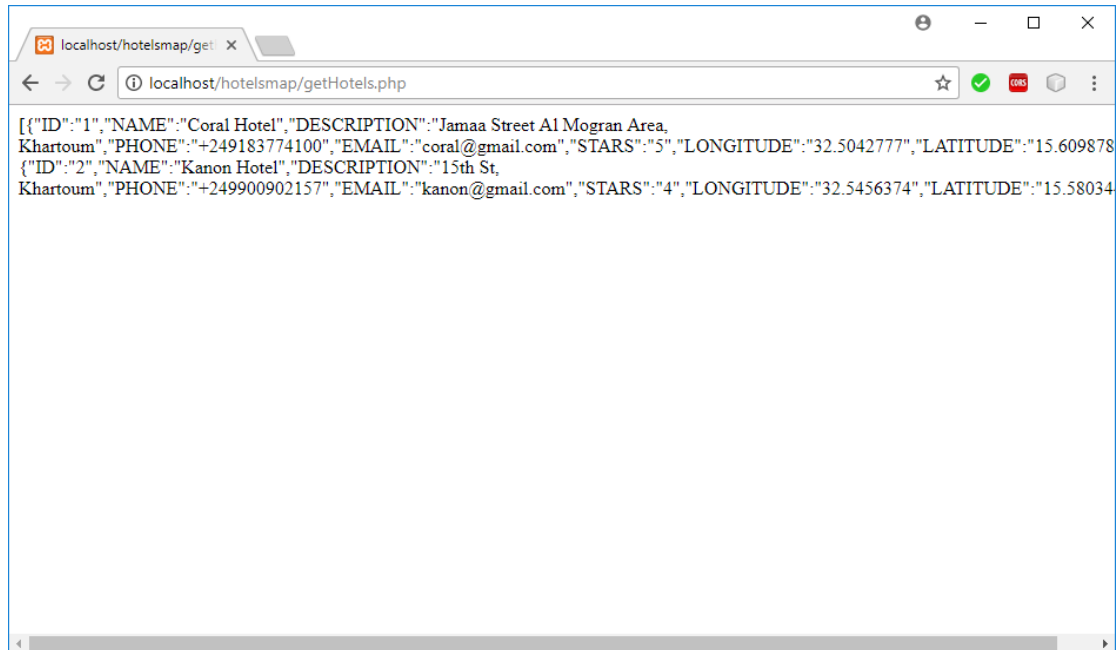
$query = mysqli_query($con , "SELECT * FROM hotels;");
$temp = Array();
while($row = mysqli_fetch_assoc($query)) {
```

```

    $temp[] = $row ;
}
echo json_encode($temp) ;
?>

```

Now save your edits and open your web browser and in address bar type the following URL: <http://localhost/hotelsmap/getHotels.php>.



The above screenshot shows the output of our PHP application which display data from MySQL database in JSON format.

1.4. Using Google Map API to show the hotels on Google Map:

Google Map API is a set of methods that allow you to display google map on your web site. You have to create Google Map API Key to use google map in your application.

In Notepad++ from file menu create a new file and change the language to HTML. And type the basic code of HTML page.

```

<html>
<head>
<title> Hotels Information System </title>
</head>
<body>
<div id="mapDiv" style="width:600px; height:600px;"></div>
</body>
</html>

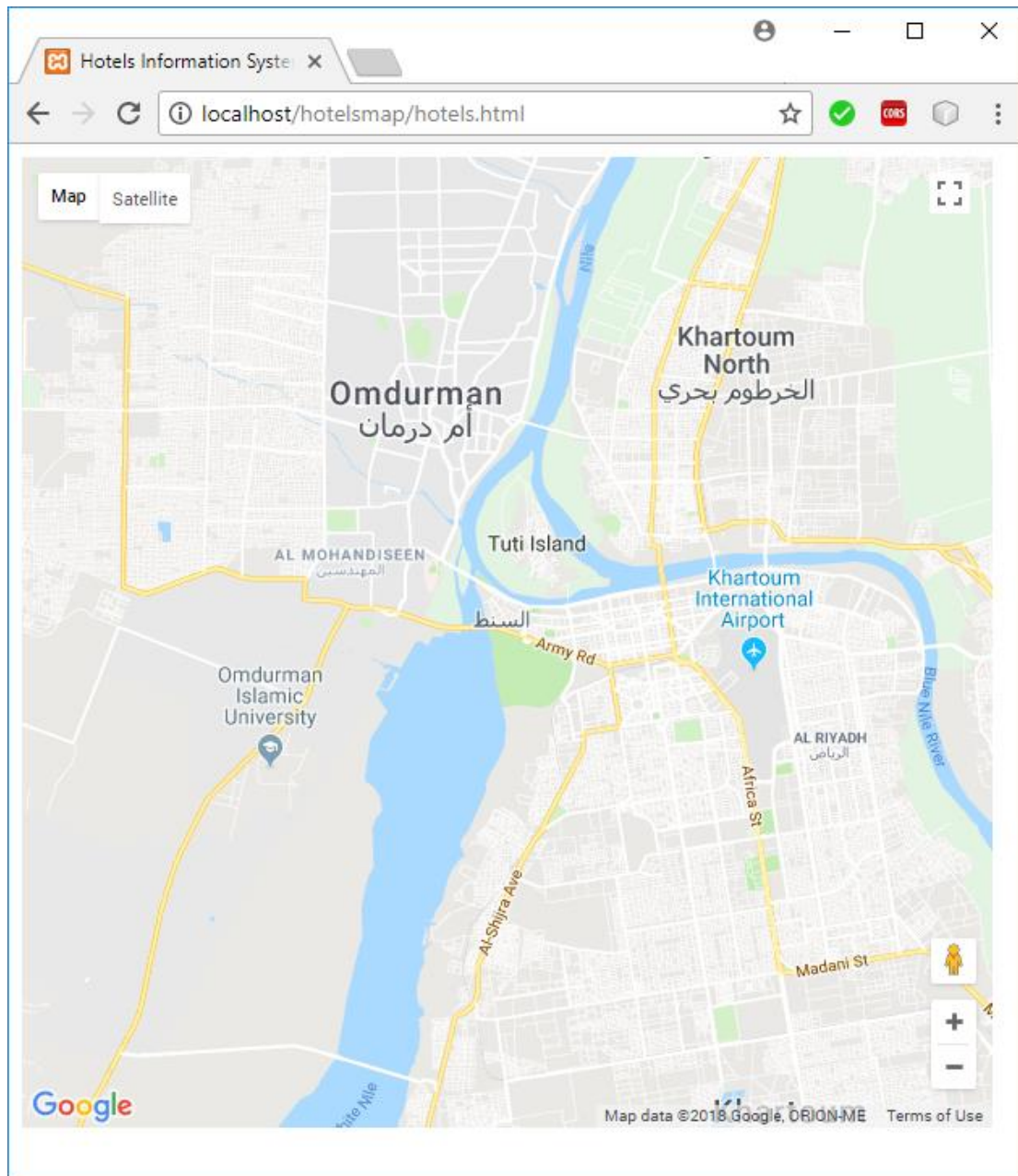
```

Google map API is JavaScript library and you can use script tag to load it on your page.

```
<script  
src="https://maps.googleapis.com/maps/api/js?key=AIzaSyDacd2StMFpb4xOdQk2Gg5Gk-CjJoc"></script>
```

Open a script tag to write your javascript code to load google map on your page. The first step you have to specify the properties of the map. Which include center and zoom level and map type, and then use the google.maps.Map (MAPCONTAINER, MAPPROPERTIES) function to create the map. The google.maps.event.addDomListener(OBJECT, 'EVENT', HANDELERMETHOD) function used to implement events.

```
<html>  
<head>  
<title> Hotels Information System </title>  
<script  
src="https://maps.googleapis.com/maps/api/js?key=AIzaSyDacd2StMFpb4xOdQk2Gg5Gk-CjJoc"></script>  
  
<script>  
function loadMap() {  
    var mapOption = {  
        center: new google.maps.LatLng(15.6, 32.5),  
        zoom: 12,  
        mapTypeId: google.maps.MapTypeId.ROAD  
    };  
    map = new google.maps.Map(document.getElementById('mapDiv'),  
mapOption);  
}  
google.maps.event.addDomListener(window, 'load', loadMap);  
</script>  
  
</head>  
<body>  
<div id="mapDiv" style="width:600px; height:600px;"></div>  
</body>  
</html>
```

To load hotels data from PHP application which display the hotels information in JSON format, we will use jQuery library. jQuery is a fast and concise JavaScript Library created by John Resig in 2006 with a nice motto: **Write less, do more**. jQuery simplifies HTML document traversing, event handling, animating, and Ajax interactions for rapid web development. You can include jQuery to your web pages using the script tag.

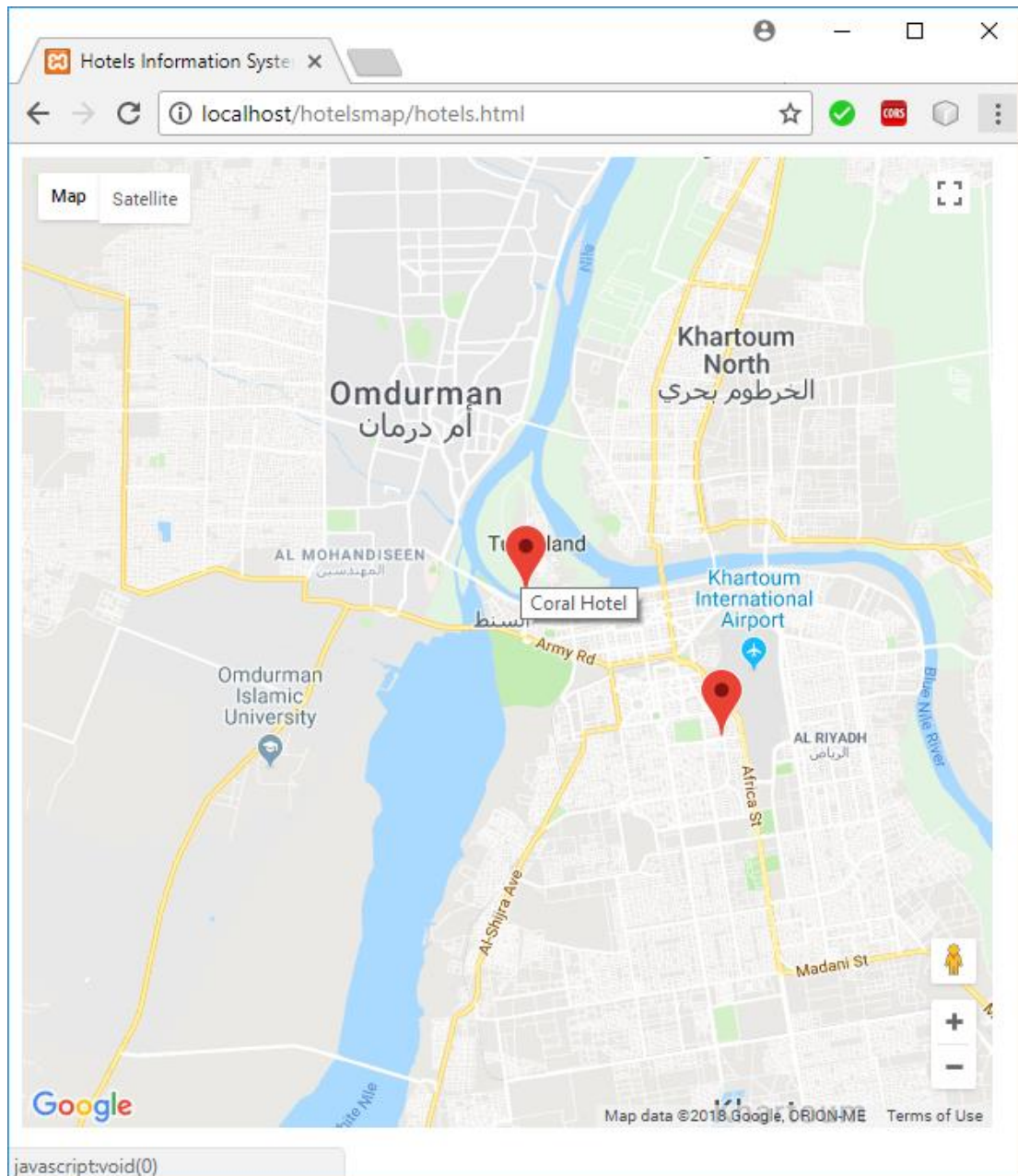
```
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js
"></script>
```

The \$.post("serverpage", {DATA}, function(result)); jQuery method is used to send and get information from server side applications. JSON.parse(data) is used to convert the results of PHP application from JSON format to JavaScript objects array.

The google.maps.LatLng(LATITUDE, LONGITUDE) is used specify the coordinates of hotel position. And the google.maps.Marker(MAP, POSITION, TITLE, ICON, DRAGGABLE, ANIMATION) is used to create marker on top of google map.

We will create a new function above the loadMap() function to create the marker. And we will create a variable.

```
<script>
function createMarker(latlng, hdata){
    var mark = new google.maps.Marker({
        map:map, position:latlng, title:hdata.NAME});
}
function loadMap(){
    var mapOption = {
        center:new google.maps.LatLng(15.6, 32.5),
        zoom:12,
        mapTypeId:google.maps.MapTypeId.ROAD
    };
    map = new google.maps.Map(
        document.getElementById('mapDiv'), mapOption);
    var hotelsData ;
    $.post('getHotels.php', function(data){
        hotelsData = JSON.parse(data);
        for(i = 0 ; i < hotelsData.length; i++){
            var latlng = new google.maps.LatLng(
                hotelsData[i].LATITUDE, hotelsData[i].LONGITUDE);
            var hdata = hotelsData[i];
            createMarker(latlng, hdata);
        }
    });
}
google.maps.event.addDomListener(window, 'load', loadMap);
</script>
```



1.5. Show Hotels Information in InfoWindow:

Inside the createMarker() function and after google.maps.Marker() create a new instance of google.maps.InfoWindow(). And then use the setContent() method to set the content of InfoWindow and then use the google.maps.event.addListener(OBJECT, 'EVENT', HANDLER) to open the infoWindow when user click on the marker. We will show the information in HTML form.

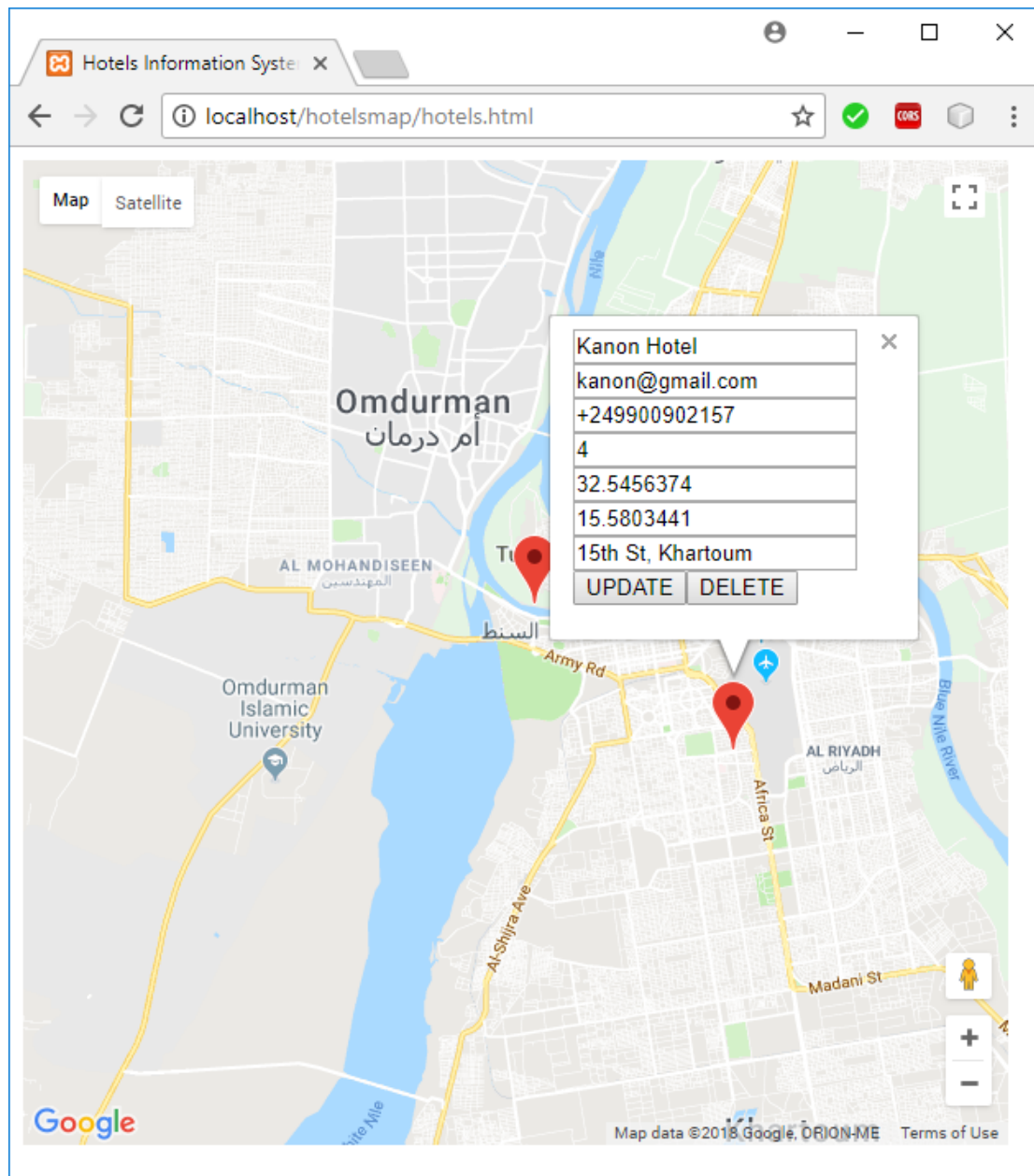
```
<html>
```

```

<head>
<title> Hotels Information System </title>
<script
src="https://maps.googleapis.com/maps/api/js?key=AIzaSyDacd2StMFpb4xO
dQk2Gg5Gk-CjJoc"></script>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js
"></script>
<script>
function createMarker(latlng, hdata){
    var mark = new google.maps.Marker({map:map, position:latlng,
title:hdata.NAME});
    google.maps.event.addDomListener(mark, 'click', function(evt){
        info = new google.maps.InfoWindow();
        var info = '<form id="frmData">' +
            '<input type="hidden" name="ID" value="'+ hdata.ID +'>' +
            '<input type="text" name="NAME" value="'+ hdata.NAME
+ '><br/>' +
            '<input type="text" name="EMAIL" value="'+ hdata.EMAIL
+ '><br/>' +
            '<input type="text" name="PHONE" value="'+ hdata.PHONE
+ '><br/>' +
            '<input type="text" name="STARS" value="'+ hdata.STARS
+ '><br/>' +
            '<input type="text" name="LONGITUDE" value="'+
hdata.LONGITUDE +'><br/>' +
            '<input type="text" name="LATITUDE" value="'+
hdata.LATITUDE +'><br/>' +
            '<input type="text" name="DESCRIPTION" value="'+
hdata.DESCRPTION +'><br/>' +
            '<input type="button" value="UPDATE">' +
            '<input type="button" value="DELETE">' +
            '</form>';
        info.setContent('' + i);
        info.open(map , mark);
    });
}
function loadMap(){
    var mapOption = {
        center:new google.maps.LatLng(15.6, 32.5),
        zoom:12,
        mapTypeId:google.maps.MapTypeId.ROAD
    };
    map = new google.maps.Map(document.getElementById('mapDiv'),
mapOption);
    var hotelsData ;
    $.post('getHotels.php', function(data){
        hotelsData = JSON.parse(data);
        for(i = 0 ; i < hotelsData.length; i++){
            var latlng = new
google.maps.LatLng(hotelsData[i].LATITUDE, hotelsData[i].LONGITUDE);
            var hdata = hotelsData[i];
            createMarker(latlng, hdata);
        }
    });
}
google.maps.event.addDomListener(window, 'load', loadMap);
</script>
</head>
<body>
<div id="mapDiv" style="width:600px; height:600px;"></div>

```

```
</body>  
</html>
```



We will use the update and delete buttons later.

1.6. Add a new Hotels:

we will create a new function to add a new hotels. The can add a new hotel by click on hotel location in google map and then fill the hotel information. Under loadMap() function create the following function.

```
function newHotel () {  
    google.maps.event.addDomListener (map, 'click', function (evt) {
```



```

        var pos = new google.maps.LatLng(evt.latLng.lat(),
        evt.latLng.lng());
        var mark = new google.maps.Marker({map:map, position:pos});
        var info = new google.maps.InfoWindow();
        info.setContent('<form id="frm">' +
        '<input type="text" name="NAME" placeholder="Name
        ..."><br/>' +
        '<input type="text" name="EMAIL" placeholder="Email
        ..."><br/>' +
        '<input type="text" name="PHONE" placeholder="Phone
        ..."><br/>' +
        '<input type="text" name="STARS" placeholder="Stars
        ..."><br/>' +
        '<input type="text" name="DESC" placeholder="Description
        ..."><br/>' +
        '<input type="text" name="LONGITUDE" value="' +
        evt.latLng.lng() + '"><br/>' +
        '<input type="text" name="LATITUDE" value="' +
        evt.latLng.lat() + '"><br/>' +
        '<input type="button" value=" Save "
        onclick="saveHotel();"></form>'
        );
        info.open(map, mark);
    });
}

```

At the end of loadMap() function call the newHotel() function. And now we will create a new function to save the information in database. The \$("#frm").serializeArray(); is used to set the form data as array of objects and we will use \$.post('serverapplication', {data},handler) to sent the form data to the server side application in order to store it in MySQL database server.

```

function saveHotel(){
    var frm = $("#frm").serializeArray();
    $.post("addHotel.php" , frm, function(data){
        alert(data);
    });
}

```

now we will create the addHotel.php application. And receive the form date and insert it into hotels table. From file menu in notepad++ click on new to create a new file and change the language to PHP. And write the following code.

```

<?php
$NAME = $_POST['NAME'];
$EMAIL = $_POST['EMAIL'];
$PHONE = $_POST['PHONE'];
$STARS = $_POST['STARS'];
$DESC = $_POST['DESC'];
$LONGITUDE = $_POST['LONGITUDE'];
$LATITUDE = $_POST['LATITUDE'];

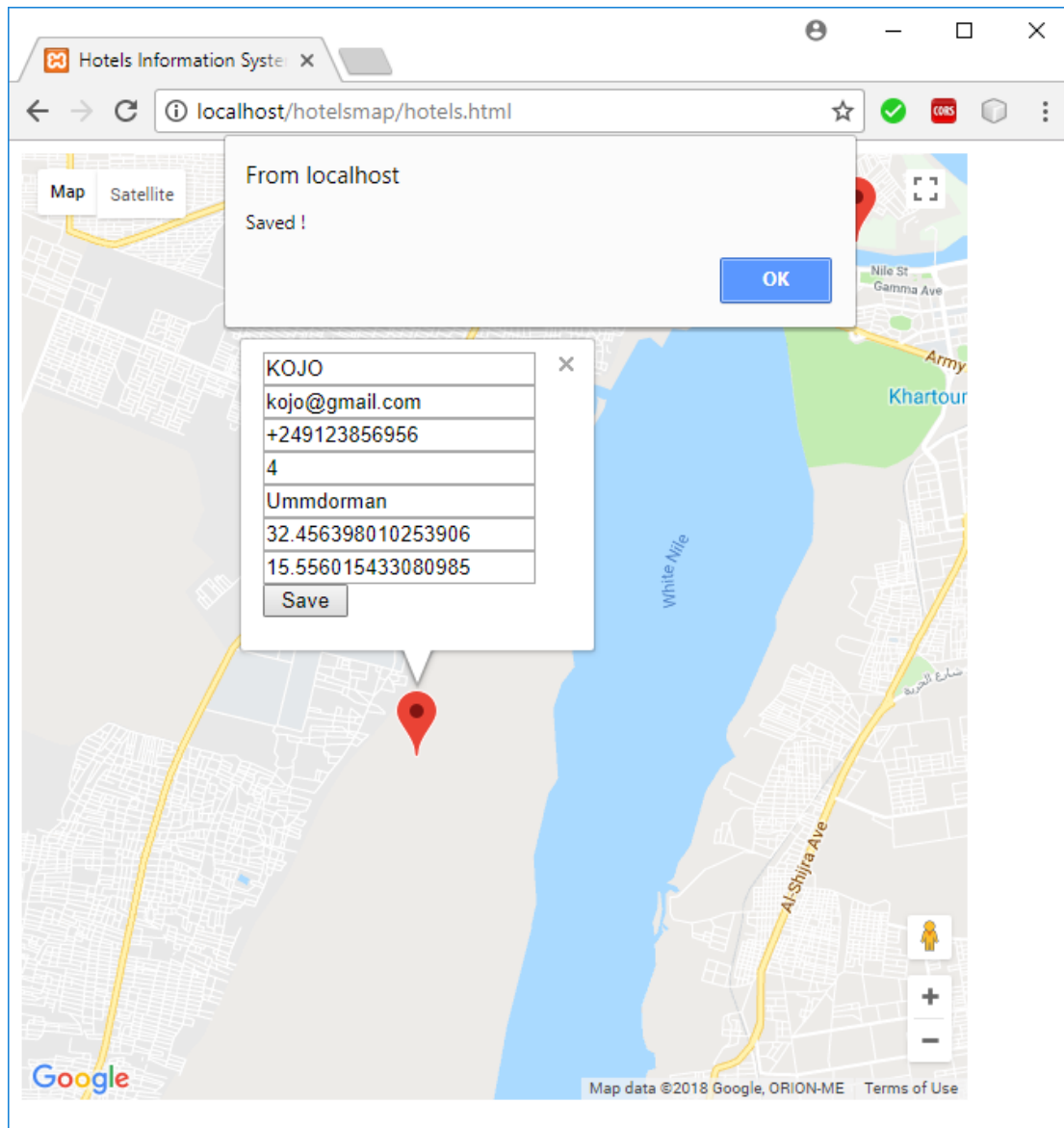
```

```

$con = mysqli_connect("localhost","root","root","tourism") or
die("Connection Error ! ");
$query = mysqli_query($con , "INSERT INTO hotels VALUES
('','$NAME','$DESC','$PHONE','$EMAIL','$STARS','$LONGITUDE','$LATITUDE')");
if($query){echo "Saved ! ";}else{echo " Not Saved ! ";}
?>

```

Save application in our project folder with addHotel.php and open your browser and type the following url in address bar <http://localhost/hotelsmap/hotels.html> .



1.7. Update Hotels Information:

In hotels.html page within createMarker() function change the update button to.

```

<input type="button" value="UPDATE" onclick="updateHotel()">

```

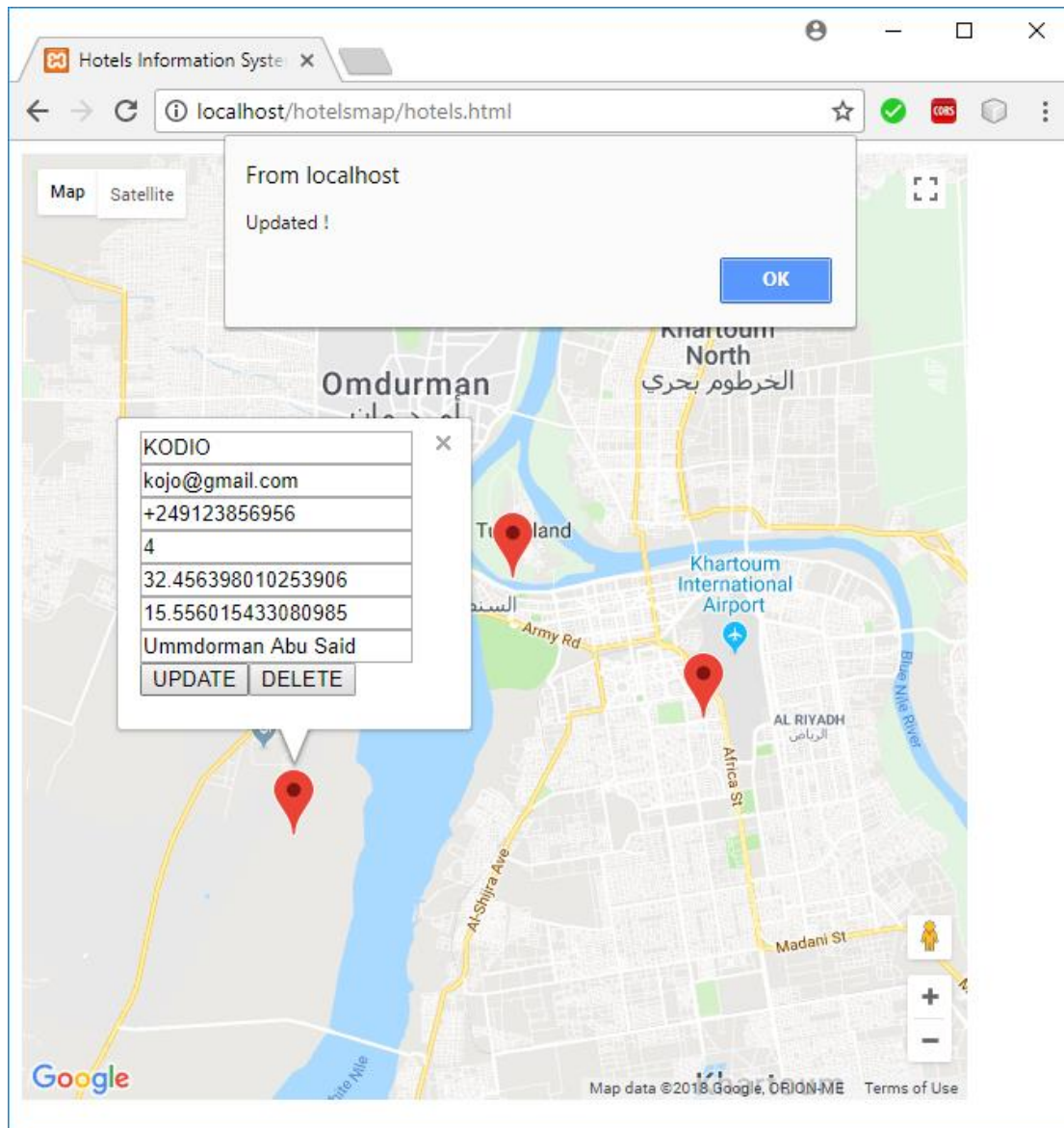
And we will create updateHotel() function to send the changes to the PHP application.

```
function updateHotel(){
    var frmData = $("#frmData").serializeArray();
    $.post("updateHotel.php", frmData, function(data){
        alert(data);
    });
}
```

now we will create the updateHotel.php application. And receive the form data and save changes into hotels table. From file menu in notepad++ click on new to create a new file and change the language to PHP. And write the following code.

```
<?php
$ID = $_POST['ID'];
$NAME = $_POST['NAME'];
$EMAIL = $_POST['EMAIL'];
$PHONE = $_POST['PHONE'];
$STARS = $_POST['STARS'];
$DESC = $_POST['DESC'];
$LONGITUDE = $_POST['LONGITUDE'];
$LATITUDE = $_POST['LATITUDE'];
$con = mysqli_connect("localhost","root","root","tourism") or
die("Connection Error !");
$query = mysqli_query($con , "UPDATE hotels SET NAME='$NAME',
DESCRIPTION='$DESC', PHONE='$PHONE', EMAIL='$EMAIL', STARS='$STARS',
LONGITUDE='$LONGITUDE', LATITUDE='$LATITUDE' WHERE ID='$ID'");
if($query){echo "Updated ! ";}else{echo " Not Updated ! ";}
?>
```

Save application in our project folder with updateHotel.php and open your browser and type the following url in address bar <http://localhost/hotelsmap/hotels.html> .



1.8. Delete Existing Hotel:

In hotels.html page within createMarker() function change the delete button to.

```
'<input type="button" value="DELETE" onclick="deleteHotel()">'
```

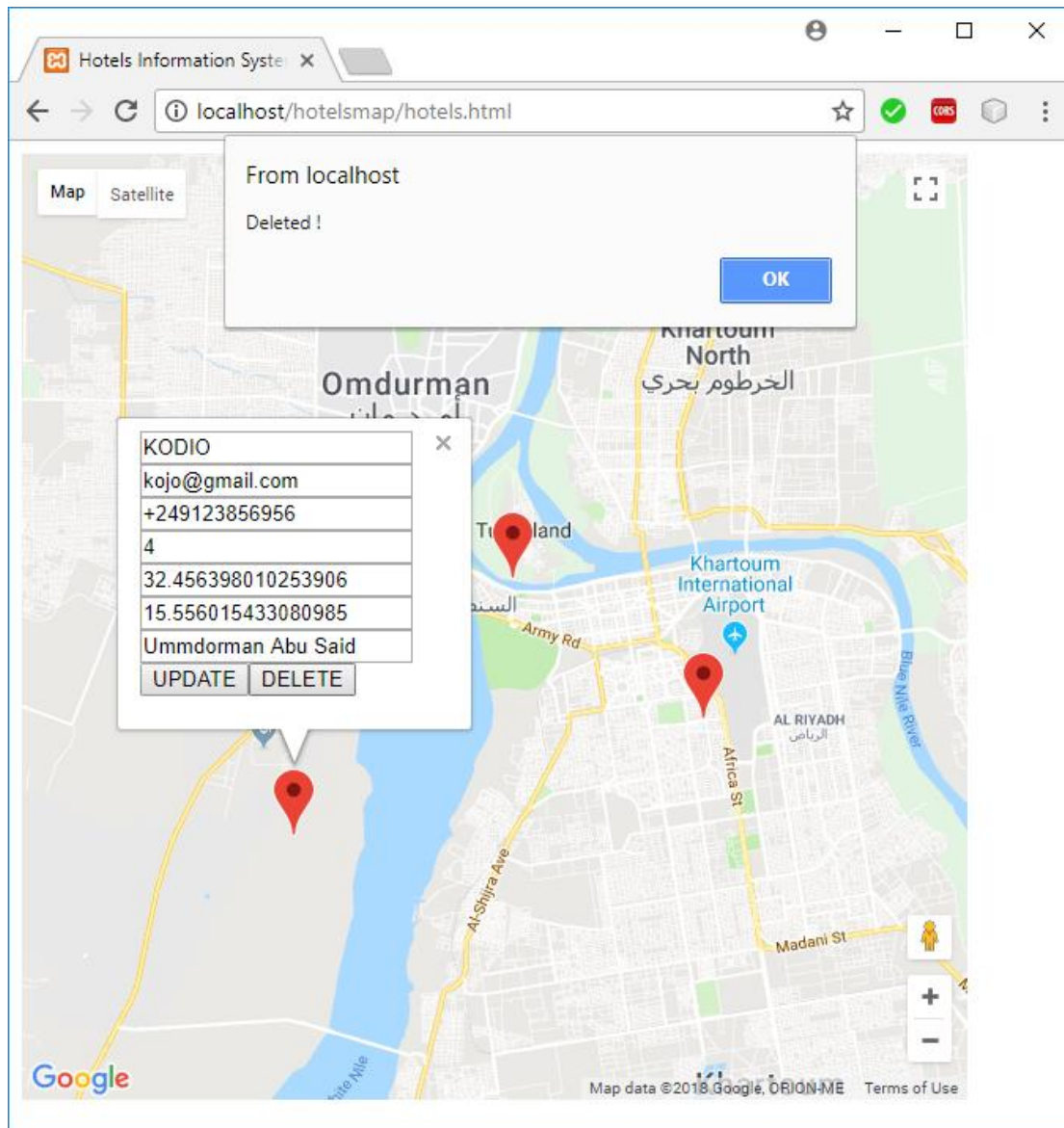
And we will create deleteHotel() function to send the ID of hotels that we want to delete to the PHP application.

```
function deleteHotel(){
    var frmData = $("#frmData").serializeArray();
    $.post("deleteHotel.php", frmData, function(data){
        alert(data);
    });
}
```

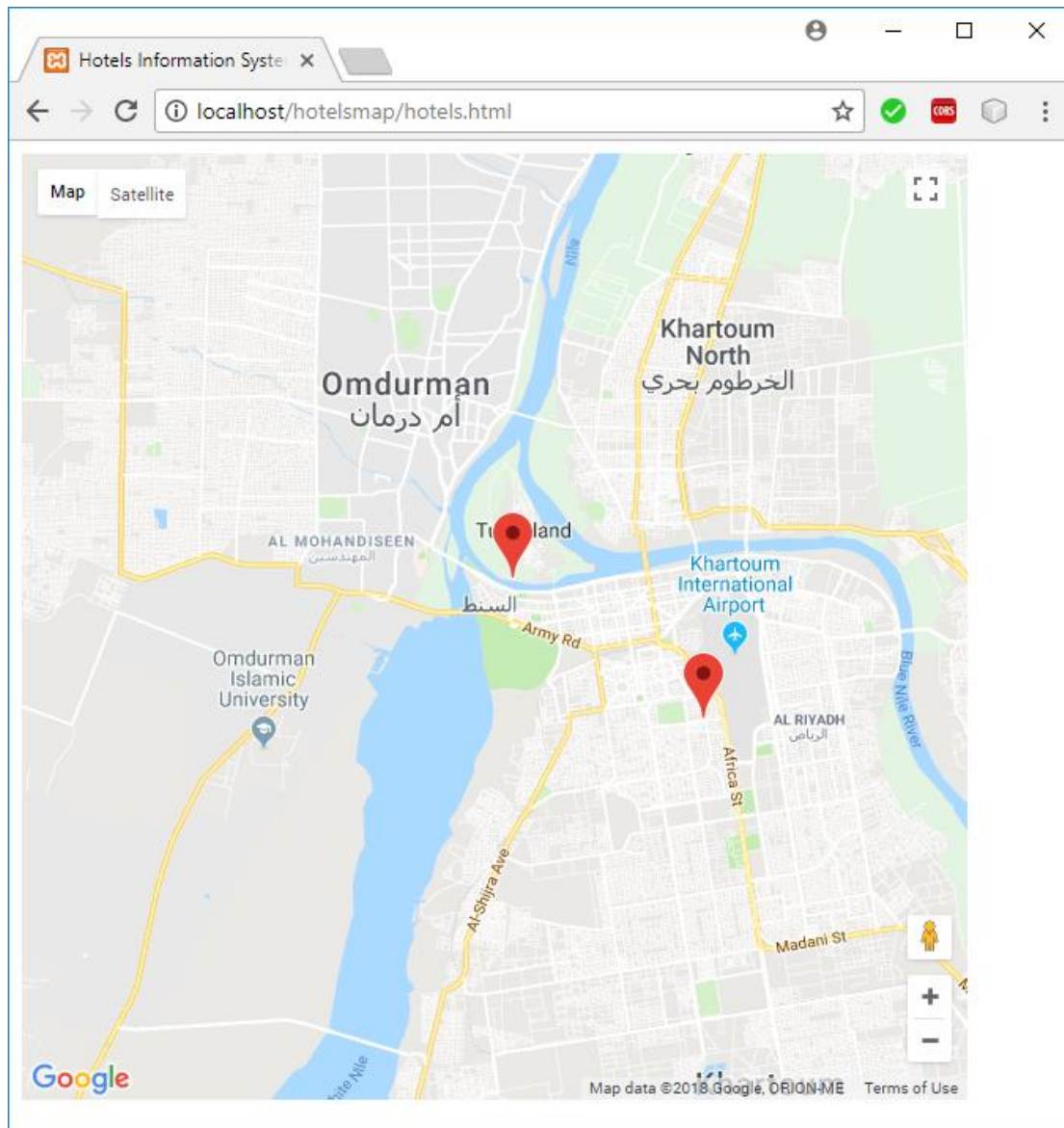
now we will create the deleteHotel.php application. And receive the form date and save changes into hotels table. From file menu in notepad++ click on new to create a new file and change the language to PHP. And write the following code.

```
<?php
$ID = $_POST['ID'];
$con = mysqli_connect("localhost","root","root","tourism") or
die("Connection Error ! ");
$query = mysqli_query($con , "DELETE FROM hotels WHERE ID='$ID'");
if($query){echo "Deleted ! ";}else{echo " Not Deleted ! ";}
?>
```

Save application in our project folder with deleteHotel.php and open your browser and type the following url in address bar <http://localhost/hotelsmap/hotels.html> .



Click on hotel that you want to delete and click on the delete button. And then click Ok. And refresh your page. You will see the hotel has been deleted.



1.9. Export Hotel information to CSV:

Now we need to export our information to csv for farther analysis using excel, SPSS or ArcGIS. We will create a link under the mapDiv element and this link will open PHP application to export the hotels information from MySQL database. Under mapDiv add the following HTML code.

```
<a href="exportHotels.php"> EXPORT DATA to CSV</a>
```

Now we will create the exportHotels.php application to export our data into CSV format for farther analysis. From file menu in notepad++ click on new to create a new file and change the language to PHP. And write the following code.

```
<?php
$con = mysqli_connect("localhost","root","root","tourism") or die(
Connection Error ! ");
$query = mysqli_query($con , "SELECT * FROM hotels;");
```

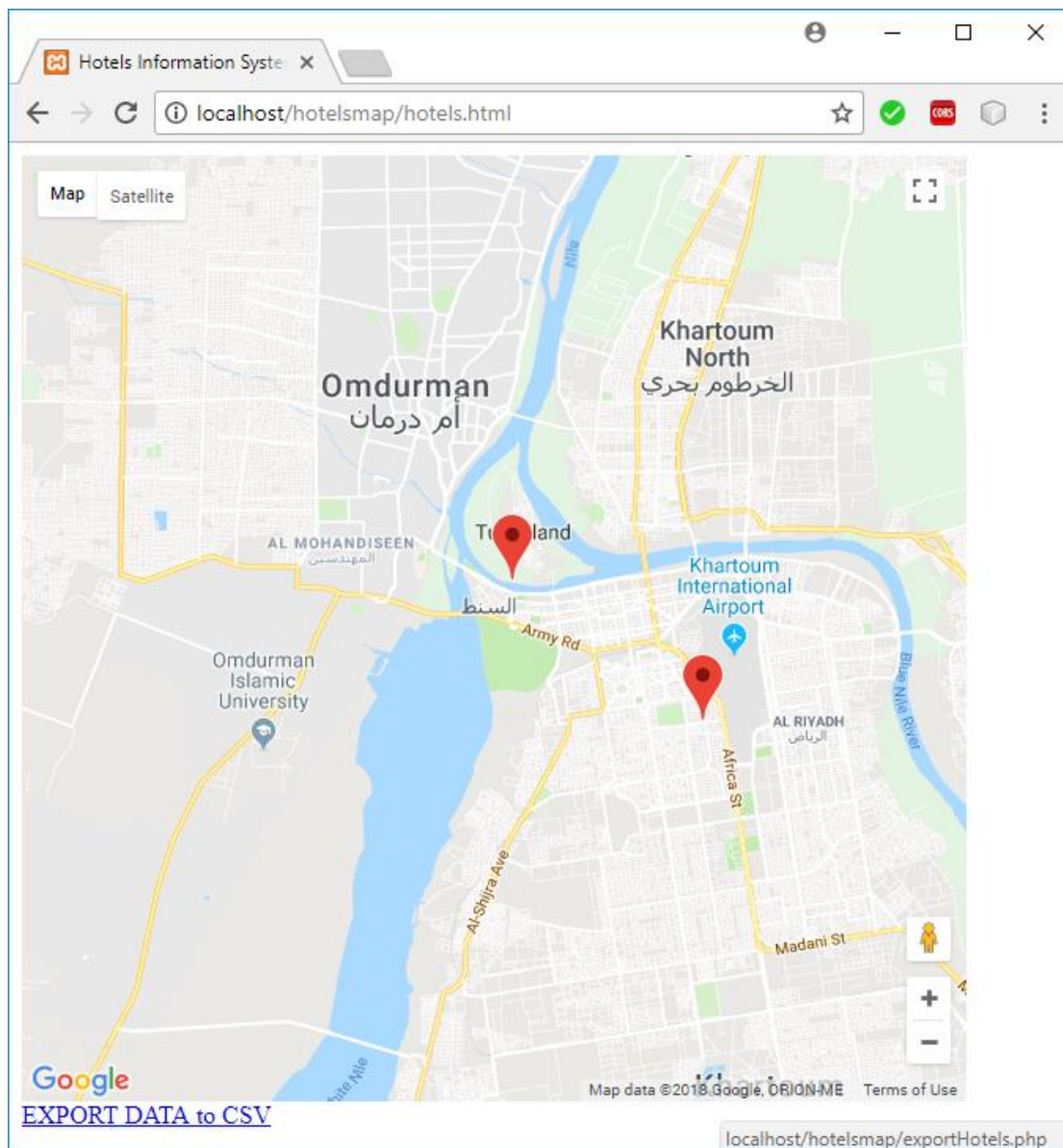


```

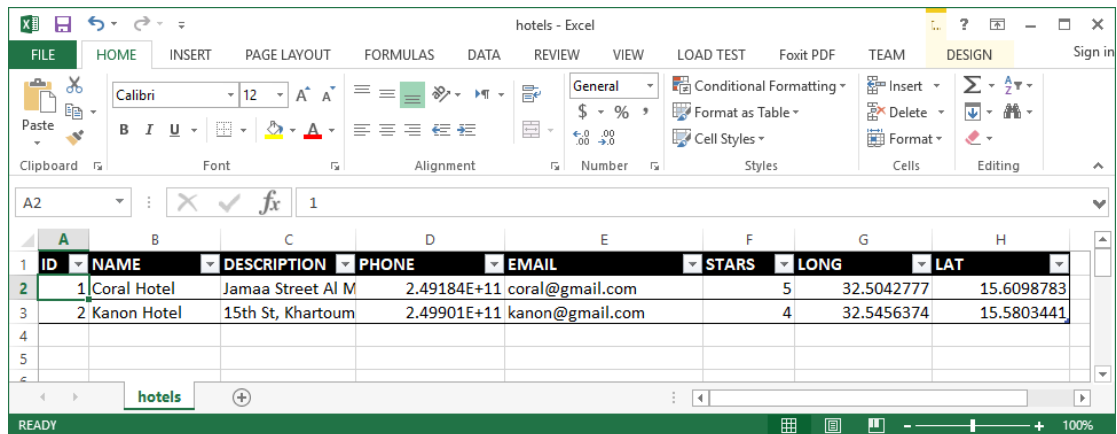
$temp = Array();
while($row = mysqli_fetch_assoc($query)) {
    $temp[] = $row ;
}
header('Content-Type: text/csv; charset=utf-8; encoding=UTF-8');
header('Content-Disposition: attachment; filename=hotels.csv');
$output = fopen('php://output', 'w');
fputcsv($output, array('ID', 'NAME', 'DESCRIPTION', 'PHONE', 'EMAIL',
'STARS', 'LONG', 'LAT'));
if (count($temp) > 0) {
    foreach ($temp as $row) {
        fputcsv($output, $row);
    }
}
?>

```

Save the application with exportHotels.php and type the following URL in your browser address bar <http://localhost/hotelsmap/hotels.html> .



Click on the EXPORT DATA to CSV link. The download of data will start and you can open the downloaded CSV file using Excel.



The screenshot shows an Excel spreadsheet titled 'hotels - Excel'. The 'DESIGN' tab is active. The spreadsheet contains a table with the following data:

ID	NAME	DESCRIPTION	PHONE	EMAIL	STARS	LONG	LAT
1	Coral Hotel	Jamaa Street Al M	2.49184E+11	coral@gmail.com	5	32.5042777	15.6098783
2	Kanon Hotel	15th St, Khartoum	2.49901E+11	kanon@gmail.com	4	32.5456374	15.5803441

2. APPENDIXES:

2.1. getHotels.php:

```
<?php
$con = mysqli_connect("localhost","root","root","tourism")
    or die(" Connection Error ! ");

$query = mysqli_query($con , "SELECT * FROM hotels;");
$temp = Array();
while($row = mysqli_fetch_assoc($query)){
    $temp[] = $row ;
}
echo json_encode($temp);
?>
```

2.2. Hotels.html:

```
<html>
<head>
<title> Hotels Information System </title>
<script
src="https://maps.googleapis.com/maps/api/js?key=AIzaSyDacd2StMFpb4xO
dQk2Gg5Gk-CjJoc"></script>
<script
src="https://ajax.googleapis.com/ajax/libs/jquery/3.3.1/jquery.min.js
"></script>
<script>
function createMarker(latlng, hdata){
    var mark = new google.maps.Marker({map:map, position:latlng,
title:hdata.NAME});
    google.maps.event.addDomListener(mark, 'click', function(evt){
        info = new google.maps.InfoWindow();
        var i = '<form id="frmData">' +
            '<input type="hidden" name="ID" value="'+ hdata.ID +'>'
+
            '<input type="text" name="NAME" value="'+ hdata.NAME
+' "><br/>' +
            '<input type="text" name="EMAIL" value="'+ hdata.EMAIL
+' "><br/>' +
            '<input type="text" name="PHONE" value="'+ hdata.PHONE
+' "><br/>' +
            '<input type="text" name="STARS" value="'+ hdata.STARS
+' "><br/>' +
            '<input type="text" name="LONGITUDE" value="'+
hdata.LONGITUDE +' "><br/>' +
            '<input type="text" name="LATITUDE" value="'+
hdata.LATITUDE +' "><br/>' +
            '<input type="text" name="DESC" value="'+
hdata.DESCRPTION +' "><br/>' +
            '<input type="button" value="UPDATE"
onclick="updateHotel()">' +
            '<input type="button" value="DELETE"
onclick="deletHotel()">' +
            '</form>';
        info.setContent('' + i);
        info.open(map , mark);
    });
}
function loadMap(){
```

```

        var mapOption = {
            center: new google.maps.LatLng(15.6, 32.5),
            zoom: 12,
            mapTypeId: google.maps.MapTypeId.ROAD
        };
        map = new google.maps.Map(document.getElementById('mapDiv'),
mapOption);
        var hotelsData ;
        $.post('getHotels.php', function(data){
            hotelsData = JSON.parse(data);
            for(i = 0 ; i < hotelsData.length; i++){
                var latlng = new
google.maps.LatLng(hotelsData[i].LATITUDE, hotelsData[i].LONGITUDE);
                var hdata = hotelsData[i];
                createMarker(latlng, hdata);
            }
        });
        newHotel();
    }
    function newHotel() {
        google.maps.event.addDomListener(map, 'click', function(evt) {
            var pos = new google.maps.LatLng(evt.latLng.lat(),
evt.latLng.lng());
            var mark = new google.maps.Marker({map:map, position:pos});
            var info = new google.maps.InfoWindow();
            info.setContent('<form id="frm">' +
                '<input type="text" name="NAME" placeholder="Name
..."><br/>' +
                '<input type="text" name="EMAIL" placeholder="Email
..."><br/>' +
                '<input type="text" name="PHONE" placeholder="Phone
..."><br/>' +
                '<input type="text" name="STARS" placeholder="Stars
..."><br/>' +
                '<input type="text" name="DESC" placeholder="Description
..."><br/>' +
                '<input type="text" name="LONGITUDE" value="' +
evt.latLng.lng() +' "><br/>' +
                '<input type="text" name="LATITUDE" value="' +
evt.latLng.lat() +' "><br/>' +
                '<input type="button" value=" Save "
onclick="saveHotel();"></form>'
            );
            info.open(map, mark);
        });
    }
    function saveHotel() {
        var frm = $("#frm").serializeArray();
        $.post("addHotel.php" , frm, function(data) {
            alert(data);
        });
    }
    function updateHotel() {
        var frmData = $("#frmData").serializeArray();
        $.post("updateHotel.php", frmData, function(data) {
            alert(data);
        });
    }
    function deletHotel() {
        var frmData = $("#frmData").serializeArray();
        $.post("deleteHotel.php", frmData, function(data) {

```



```

        alert(data);
    });
}
google.maps.event.addDomListener(window, 'load', loadMap);
</script>
</head>
<body>
<div id="mapDiv" style="width:600px; height:600px;"></div>
<a href="exportHotels.php"> EXPORT DATA to CSV</a>
</body>
</html>

```

2.3. addHotel.php:

```

<?php
$NAME = $_POST['NAME'];
$EMAIL = $_POST['EMAIL'];
$PHONE = $_POST['PHONE'];
$STARS = $_POST['STARS'];
$DESC = $_POST['DESC'];
$LONGITUDE = $_POST['LONGITUDE'];
$LATITUDE = $_POST['LATITUDE'];
$con = mysqli_connect("localhost","root","root","tourism") or
die("Connection Error ! ");
$query = mysqli_query($con , "INSERT INTO hotels VALUES
('',' $NAME',' $DESC',' $PHONE',' $EMAIL',' $STARS',' $LONGITUDE',' $LATITUDE')");
if($query){echo "Saved ! ";}else{echo " Not Saved ! ";}
?>

```

2.4. updateHotel.php:

```

<?php
$ID = $_POST['ID'];
$NAME = $_POST['NAME'];
$EMAIL = $_POST['EMAIL'];
$PHONE = $_POST['PHONE'];
$STARS = $_POST['STARS'];
$DESC = $_POST['DESC'];
$LONGITUDE = $_POST['LONGITUDE'];
$LATITUDE = $_POST['LATITUDE'];
$con = mysqli_connect("localhost","root","root","tourism") or
die("Connection Error ! ");
$query = mysqli_query($con , "UPDATE hotels SET NAME='$NAME',
DESCRIPTION='$DESC', PHONE='$PHONE', EMAIL='$EMAIL', STARS='$STARS',
LONGITUDE='$LONGITUDE', LATITUDE='$LATITUDE' WHERE ID='$ID'");
if($query){echo "Updated ! ";}else{echo " Not Updated ! ";}
?>

```

2.5. deleteHotel.php:

```

<?php
$ID = $_POST['ID'];
$con = mysqli_connect("localhost","root","root","tourism") or
die("Connection Error ! ");
$query = mysqli_query($con , "DELETE FROM hotels WHERE ID='$ID'");
if($query){echo "Deleted ! ";}else{echo " Not Deleted ! ";}
?>

```

2.6. exportHotels.php:

```
<?php
$con = mysqli_connect("localhost","root","root","tourism") or die("
Connection Error ! ");
$query = mysqli_query($con , "SELECT * FROM hotels;");
$temp = Array();
while($row = mysqli_fetch_assoc($query)){
    $temp[] = $row ;
}
header('Content-Type: text/csv; charset=utf-8; encoding=UTF-8');
header('Content-Disposition: attachment; filename=hotels.csv');
$output = fopen('php://output', 'w');
fputcsv($output, array('ID', 'NAME', 'DESCRIPTION', 'PHONE', 'EMAIL',
'STARS', 'LONG', 'LAT'));
if (count($temp) > 0) {
    foreach ($temp as $row) {
        fputcsv($output, $row);
    }
}
?>
```