



Final Report

Phase 2

SWE363-162, Group 9

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Implementation Details

Technologies and Tools:

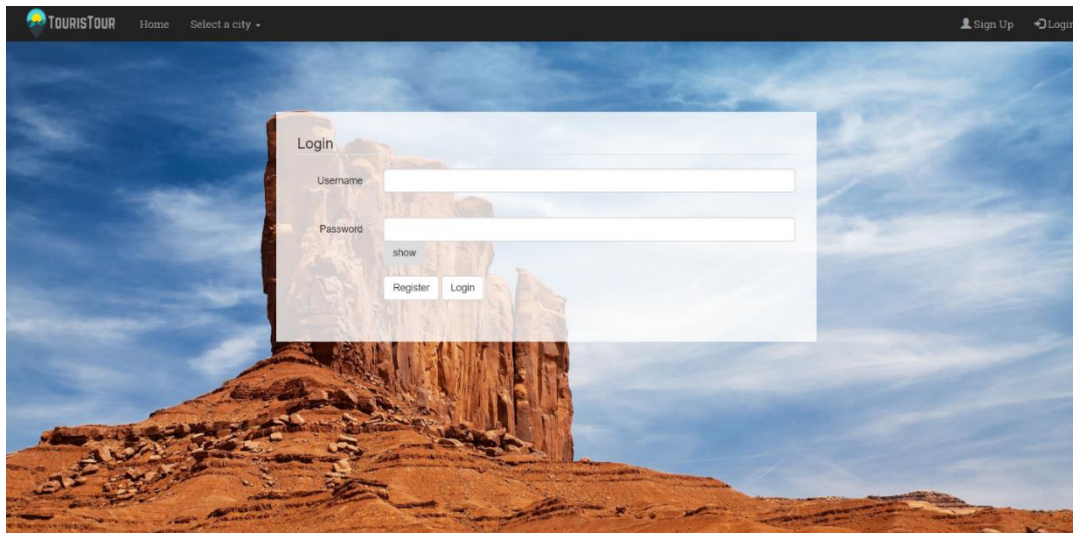
- i. XAMPP: Local server (WEB/DB Server).
 - ii. HTML
 - iii. CSS
 - iv. Bootstrap: A library of CSS classes
 - v. JavaScript
 - vi. PHP
 - vii. MySQL
-

GUI Screen Shots:

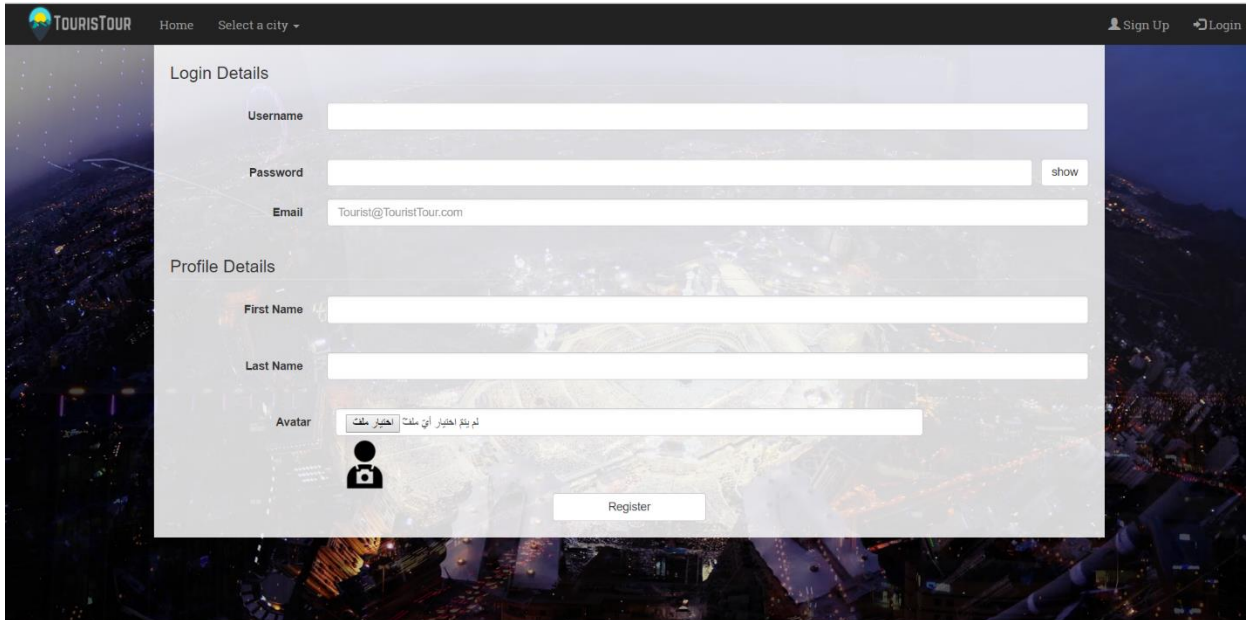
Homepage



Login Page



Sign-up Page

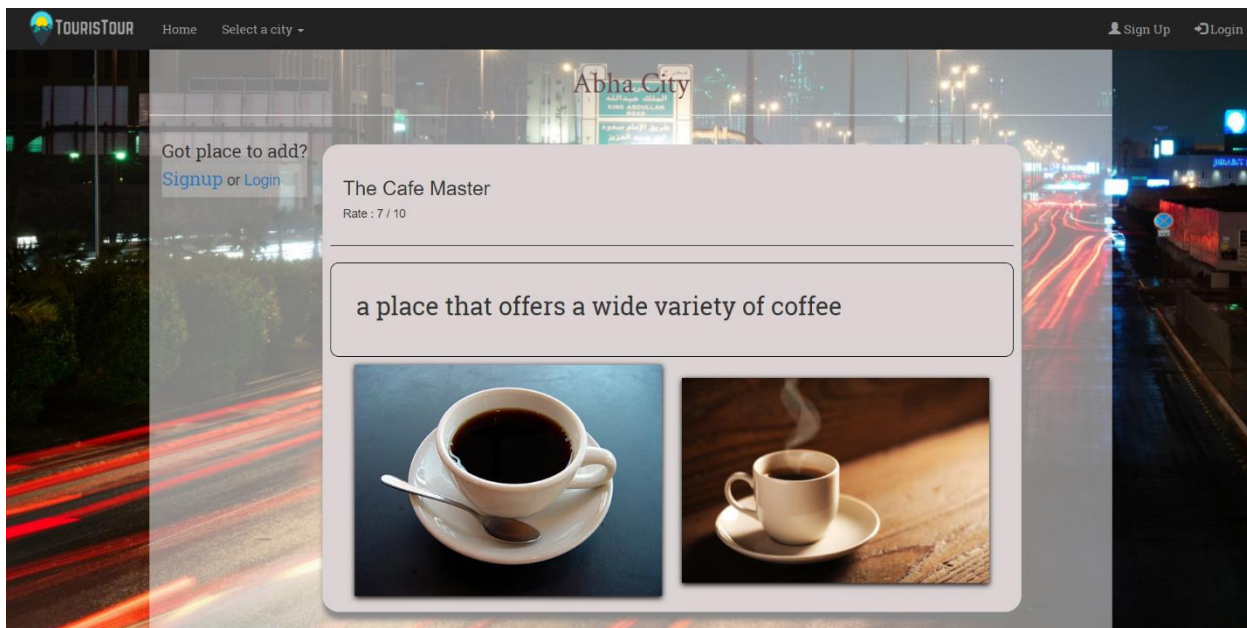


The screenshot shows the 'Sign-up Page' of the TouristTour application. The page has a dark header with the 'TOURISTTOUR' logo, 'Home', 'Select a city', and 'Sign Up' / 'Login' links. The main content area is a light gray overlay with a background image of a city at night. It contains two sections: 'Login Details' and 'Profile Details'. The 'Login Details' section has input fields for 'Username', 'Password' (with a 'show' button), and 'Email' (pre-filled with 'Tourist@TouristTour.com'). The 'Profile Details' section has input fields for 'First Name', 'Last Name', and 'Avatar' (with a button to 'لم يبق الخيار: أني صلات' and a 'show' button). A 'Register' button is at the bottom.

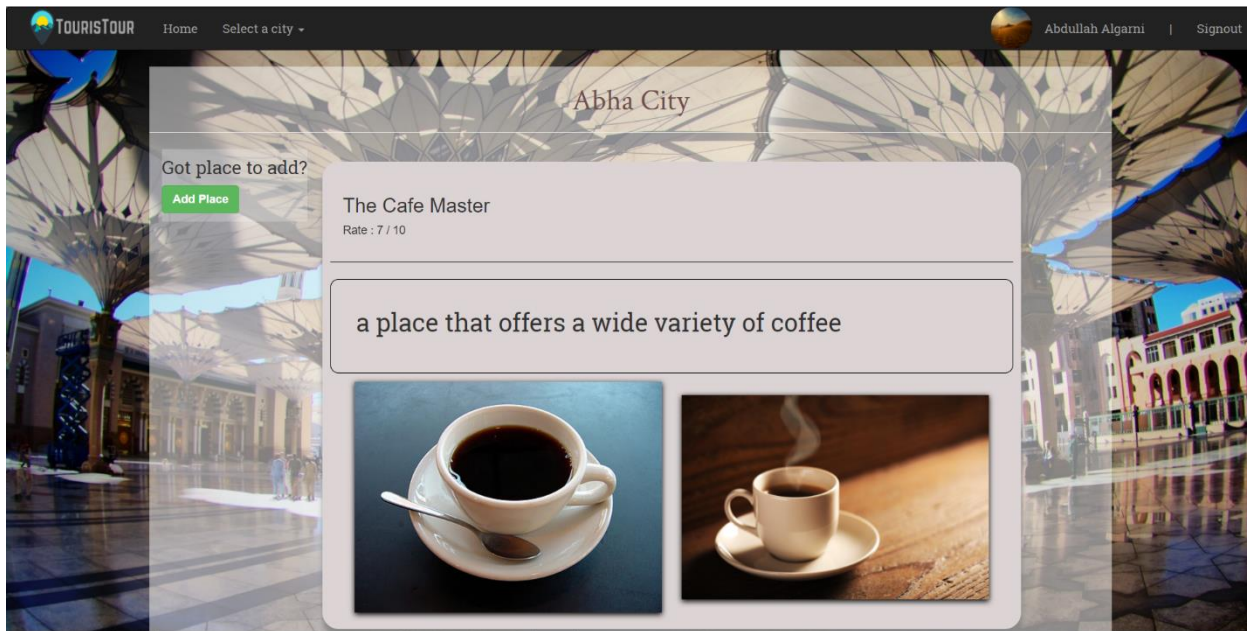
City Page

The city page contains the added places and it is shown after the city is selected

Scenario #1: Not Logged in.

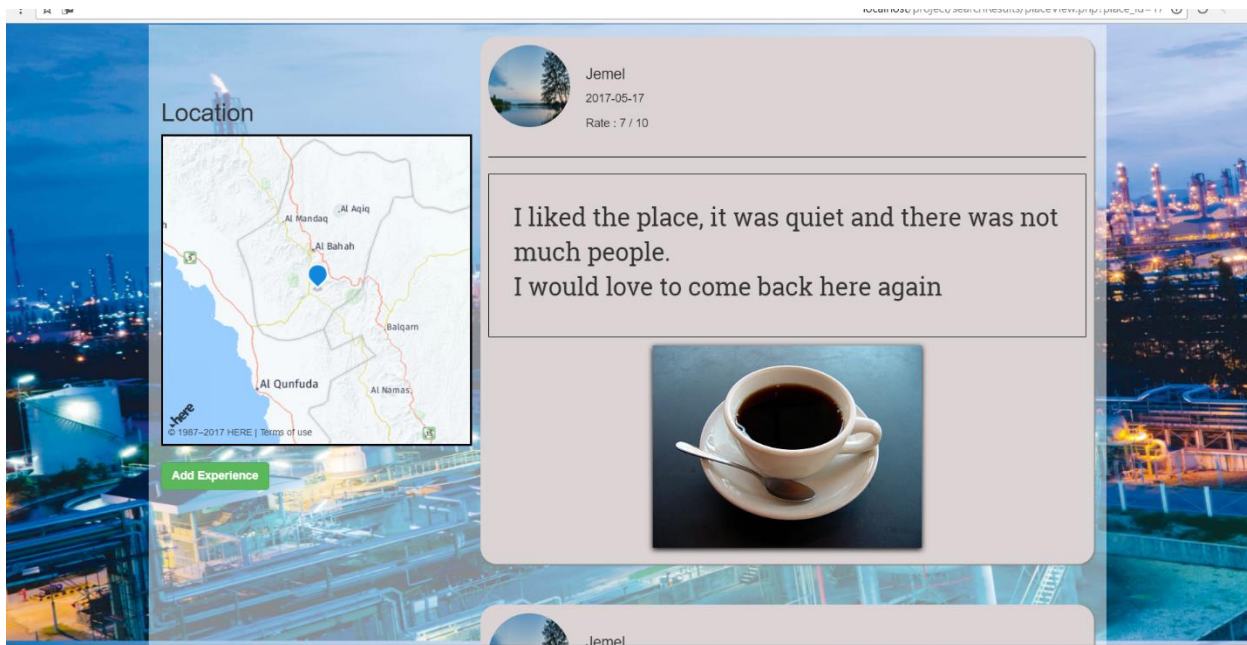


Scenario #2: Already Logged in.



Place Page

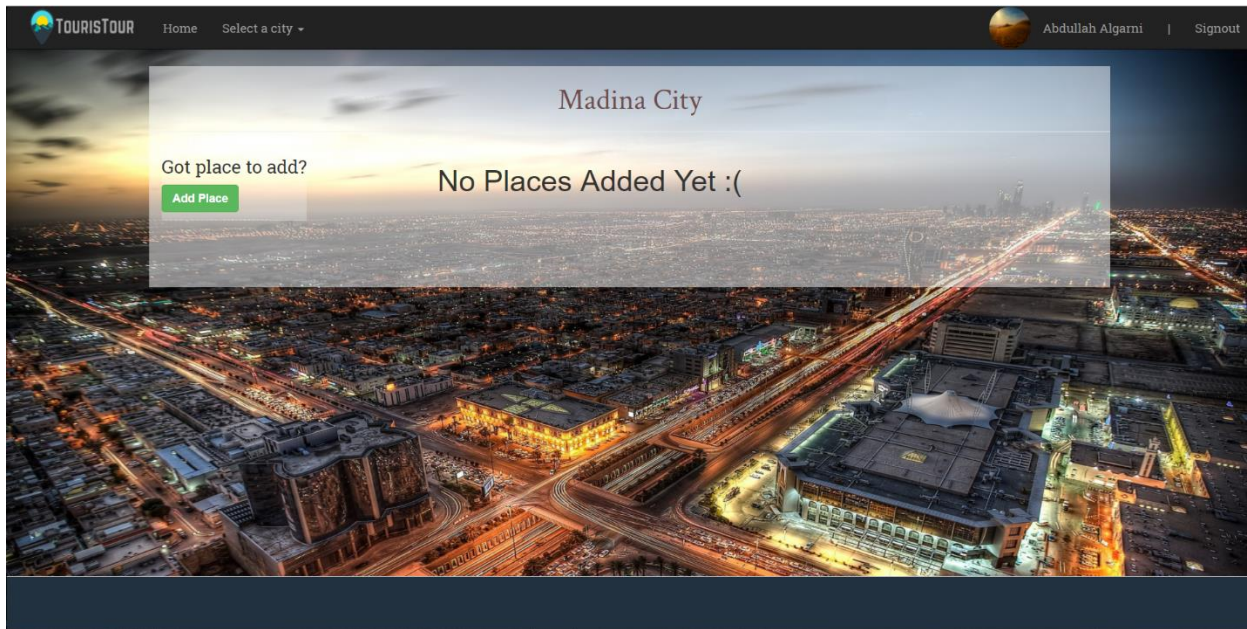
It contains what users have posted and it will show up after clicking one of cards on the City Page
(After logging in).



Empty city Page

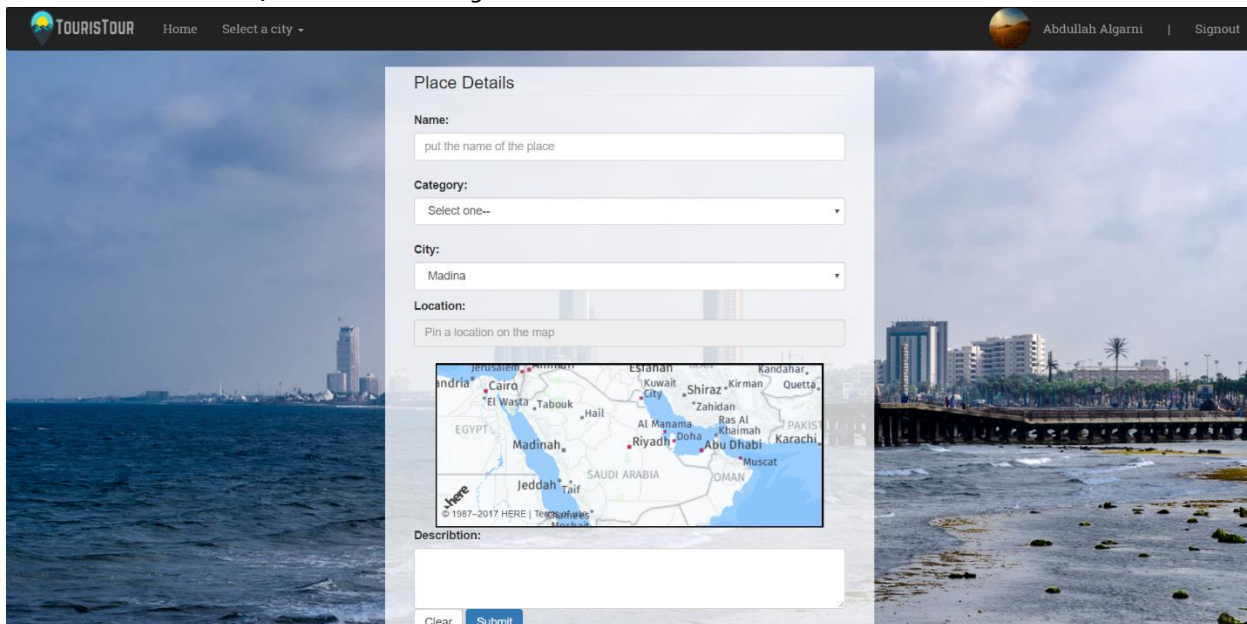
Now, let's get back to the City Page. If the city has not places added to it, the following will be shown.

(After logging in).



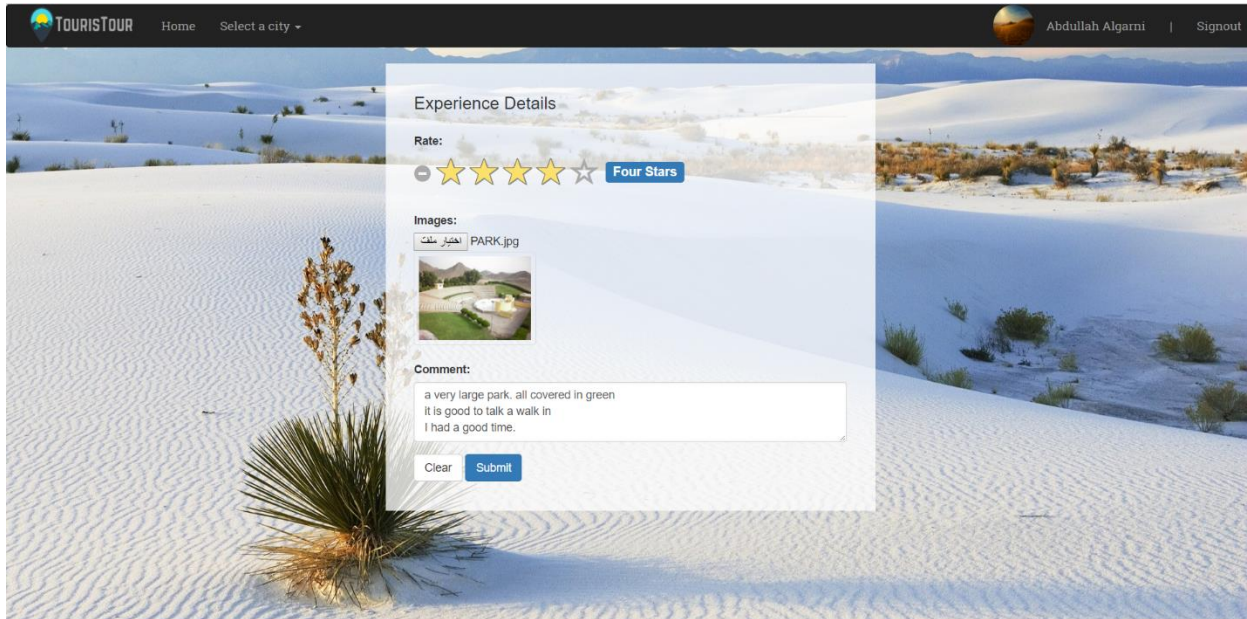
Add Place page

If "Add Place" is clicked, the "Add Place Page" will be shown :



Add Experience page

After clicking submit, the "Add Experience Page" will be shown.



Place Page

After clicking Submit, the "Place Page" of this place will be appear, and it will show the recent added post.



Source Code:

Database Operation Functions (PHP)

```
1 <?php
2 require $_SERVER['DOCUMENT_ROOT'].'./project/Classes/DataClasses.php';
3 class DBQuery
4 {
5     protected $pdo ;
6     public function __construct($pdo)
7     {
8         $this->pdo = $pdo ;
9     }
10    public function selectAll($table , $className) { // returns records in the table as Class objects, given the className.
11        $statement = $this->pdo->prepare("select * from {$table}") ;
12        $statement->execute() ;
13        return $statement->fetchAll(PDO::FETCH_CLASS , $className) ;
14    }
15
16    public function getUser($username){
17        $statement = $this->pdo->prepare("SELECT * FROM user WHERE username = ?") ;
18        $statement->execute(array($username)) ;
19        $users = $statement->fetchAll(PDO::FETCH_CLASS,"User");
20        //echo count($users);
21        return $users[0];
22    }
23
24    public function getPlaces($city){
25        $statement = $this->pdo->prepare("select * from PLACE where city = ?") ;
26        $statement->execute(array($city));
27        $placeArray = $statement->fetchAll(PDO::FETCH_CLASS , "Place");
28        return $placeArray;
29    }
30
31    public function getExp($placeId){
32        $statement = $this->pdo->prepare("select * from EXPERIENCE where place_id = ?") ;
33        $statement->execute(array($placeId));
34        $ExpArray = $statement->fetchAll(PDO::FETCH_CLASS , "Experience");
35        return $ExpArray;
36    }
37
38    public function getPlaceByPlaceId($placeId){
39        $statement = $this->pdo->prepare("select * from place where id = ?") ;
40        $statement->execute(array($placeId));
41
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62
63    public function insertUser($arrayMap) {
64
65        $username = $arrayMap['username'] ;
66        $name = $arrayMap['name'] ;
67        $email = $arrayMap['email'] ;
68        $password = $arrayMap['password'] ;
69        $avatar = $arrayMap['avatar'] ;
70
71        $statement = $this->pdo->prepare("insert into USER (username , name , email , password , avatar) values(?,?,?,?,?)") ;
72        $statement->execute(array($username , $name , $email , $password , $avatar)) ;
73
74        return $statement->rowCount() ; // returns number of rows affected, should be one
75    }
76
77    public function insertPlace($arrayMap) {
78        // $id = $arrayMap['id'] ;
79        $name = $arrayMap['name'] ;
80        $city = $arrayMap['city'];
81        $latitude = $arrayMap['latitude'] ;
82        $longitude = $arrayMap['longitude'] ;
83        $category = $arrayMap['category'] ;
84        $description = $arrayMap['description'];
85
86        $statement = $this->pdo->prepare(
87            "insert into PLACE (name , city , latitude , longitude , category , description ) values(?,?,?,?,?,?)") ;
88        $statement->execute(array( $name , $city , $latitude , $longitude , $category , $description)) ;
89
90        $statement2 = $this->pdo->prepare("select LAST_INSERT_ID() as id") ;
91        $statement2->execute() ;
92        $row = $statement2->fetch() ;
93        $id = $row['id'] ;
94        return $id ; // returns id of this last inserted row ;
95    }
96
97    public function insertExperience($arrayMap) { /* Returns the ID of the record after insert in it*/
98
99        $user_id = $arrayMap['user_id'] ;
100        $place_id = $arrayMap['place_id'] ;
```

Add Experience Code (PHP)

```
1 <?php
2
3 $rootPath = $_SERVER['DOCUMENT_ROOT'] . '/project/';
4 require $rootPath . 'Headers/startupfunctions.php';
5
6 if(!isset($_SESSION['username']) or !isset($_GET['place_id'])) { // id the user is not already logged in, they cannot add Experience.
7     header('Location: /project/homepage/homepage.php'); // also id no place_id, then no adding experience.
8     die();
9 }
10
11
12 $place_id = $_GET['place_id'];
13 if($query->getPlaceById($place_id) == null) { // in case the place_id does not exist in the database
14     header('Location: /project/homepage/homepage.php');
15     die();
16 }
17
18 $rate = isset($_POST['rate']) ? $_POST['rate'] : "0";
19 $image = isset($_POST['image']) ? $_POST['image'] : "";
20 $comment = isset($_POST['comment']) ? $_POST['comment'] : "";
21 if(floatval($rate) != "0") {
22     $place_id = $_GET['place_id'];
23     $rating = 2 * floatval($_POST['rate']);
24     $expInfoArray['rate'] = $rating;
25     $expInfoArray['comment'] = $_POST['comment'];
26     $expInfoArray['user_id'] = $_SESSION['username'];
27     $expInfoArray['place_id'] = $place_id;
28     $exp_id = $query->insertExperience($expInfoArray);
29     $prefix = "exp_id" . rand(0, 1000000);
30     $target_dir = $_SERVER['DOCUMENT_ROOT'] . '/project/resources/expImages/';
31     $imageName = save_image('image', $prefix, $target_dir);
32     $imagePath = '/project/resources/expImages/' . $imageName;
33     if(isset($_FILES['image']['tmp_name'])) {
34         if(strlen($_FILES['image']['tmp_name']) != 0) {
35             $imageInfoArray['exp_id'] = $exp_id;
36             $imageInfoArray['image'] = $imagePath;
37             $query->insertImageToExperience($imageInfoArray);
38         }
39     }
40     $url = '/project/searchResults/placeView.php?place_id=' . $place_id;
41     header("Location: " . $url);
42     die();
43 }
44 require $rootPath . 'Headers/header.php';
45
46 <link href="starRating/css/star-rating.min.css" media="all" rel="stylesheet" type="text/css"/>
```

Add Place Code

```
1 <?php
2
3 $rootPath = $_SERVER['DOCUMENT_ROOT'] . '/project/' ;
4 require $rootPath . 'Headers/startupfunctions.php' ;
5
6 if(!isset($_SESSION['username'])) { // id the user is not already logged in, they cannot add place.
7     header('Location: /project/homepage/homepage.php') ;
8     die();
9 }
10 if(isset($_POST['name']) && isset($_POST['location']) && isset($_POST['categories']) && isset($_POST['city']) && isset($_POST['discription']) ){
11     $locArray = str_split($_POST['location'], 13);
12     $lat = substr($locArray[0],4,7);
13     $long = substr($locArray[1],4,7);
14     $placeInfoArray['name'] = $_POST['name'] ;
15     $placeInfoArray['latitude'] = $lat ;
16     $placeInfoArray['longitude'] = $long ;
17     $placeInfoArray['category'] = $_POST['categories'] ;
18     $placeInfoArray['city'] = $_POST['city'] ;
19     $placeInfoArray['description'] = $_POST['discription'];
20     $place_id = $query->insertPlace($placeInfoArray);
21     $url = '/project/Adders/addExperience.php?place_id=' . $place_id;
22     header("Location: ".$url);
23     die();
24 }
25 require $rootPath . 'Headers/header.php';
26 >
27 <link rel="stylesheet" type="text/css" href="https://js.cit.api.here.com/v3/3.0/mapsjs-ui.css" />
28 <script type="text/javascript" src="https://js.cit.api.here.com/v3/3.0/mapsjs-core.js"></script>
29 <script type="text/javascript" src="https://js.cit.api.here.com/v3/3.0/mapsjs-service.js"></script>
30 <script type="text/javascript" src="https://js.cit.api.here.com/v3/3.0/mapsjs-ui.js"></script>
31 <script type="text/javascript" src="https://js.cit.api.here.com/v3/3.0/mapsjs-mapevents.js"></script>
32 <body>
33 <style type="text/css">
34     .scrollable-menu {
35         height : auto ;
36         max-height : 320px ;
37         overflow-x : hidden ;
38     }
39     #form-container {
40         margin : auto ;
41         width : 40% ;
42         background-color : #f7f7f7 ;
43         padding : 10px
44     }
```

Place Page View (PHP and HTML)

```
94 <div class="col-md-8">
95     <?php
96     require $rootPath . 'cards/placeStyle.php' ;
97     if(isset($_GET['place_id'])) {
98         $selectedPlaceId = $_GET['place_id'];
99         $ExpArray = $query->getExp($selectedPlaceId);
100         for( $i = 0 ; $i < count($ExpArray) ; $i++){
101             $exp = $ExpArray[$i];
102             $comment = $exp->comment;
103             $date = $exp->date;
104             $rate = $exp->rate;
105             $userName = $exp->user_id;
106             $user = $query->getUser($userName) ;
107             $avatarPath = $user->avatar ;
108             $images = $query->getExpImgs($exp->id) ;
109             $rate = $rate . " / 10" ;
110             require $rootPath . 'cards/expCard.php' ;
111         }
112     }
113 >
114 </div>
```

Place Card Template (PHP and HTML)

```
1
2 <div class="place-card" placeId="<?php echo $p_id ?>">
3     <div class="user-info">
4         <h3><?php echo $name ?></h3>
5         <h5><?php echo $rate ?></h5>
6     </div>
7     <hr style="border-top-color: black">
8     <div class="comment">
9         <p><?php echo $desc ?>
10    </p>
11 </div>
12 <div class="exper-imgs">
13     <?php foreach ($images as $img): ?>
14         
15     <?php endforeach ?>
16 </div>
17 </div>
```

Map (JavaScript)

```
42▼ var platform = new H.service.Platform({
43   app_id: 'M040hFMJOCgdTeoZ1Mbj',
44   app_code: '4ZNFItaFmmg_LjyuckMNVg',
45   useCIT: true,
46   useHTTPS: true
47 });
48 var defaultLayers = platform.createDefaultLayers();
49 //Step 2: initialize a map
50▼ var map = new H.Map(document.getElementById('map'),
51   defaultLayers.normal.map, {
52     center: {lng: <?php echo $placeLocLon ;?>, lat: <?php echo $placeLocAlt ;?>},
53     zoom: 8
54   });
55   //var marker = new H.map.Marker({lng: <?php echo $placeLocLon ?>, lat: <?php echo $placeLocAlt ?>});
56   // map.addObject(marker);
57   //});
58 var marker = new H.map.Marker({lng: <?php echo $placeLocLon ;?>, lat: <?php echo $placeLocAlt ;?>});
59 map.addObject(marker);
60 // var behavior = new H.mapevents.Behavior(new H.mapevents.MapEvents(map));
61 // Enable the event system on the map instance:
62 var mapEvents = new H.mapevents.MapEvents(map);
63 // Add event listeners:
64 map.addEventListener('tap', function(evt) {
65   // Log 'tap' and 'mouse' events:
66   console.log(evt.type, evt.currentPointer.type);
67 });
68 // Instantiate the default behavior, providing the mapEvents object:
69 var behavior = new H.mapevents.Behavior(mapEvents);
```


City Page of Places (PHP and HTML)

```
20 <div class="container">
21 <div class="row this-one" style="text-align: center; color: #704d4d; ">
22 <h1 class="cityName"><?php echo $_GET['search'] ?> City</h1>
23 <hr>
24 </div>
25 <div class="row this-one" style="">
26
27 <div class="col-md-2">
28 <div style="background: rgba(255,255,255,0.23) ; position: fixed; ">
29 <h4 class="prompt-to-login">Got place to add? </h4>
30 <?php if (isset($_SESSION['username'])) {
31 <echo ' <a href="/project/Adds/addPlace.php?city='.$_GET['search'].' "> <button type="button" class="btn btn-success">
32 <b>Add Place</b></button></a>' ;
33 } else {
34 <echo ' <h4><a class="prompt-to-login" href="/project/register/signup.php">Signup</a> or <a href="/project/register/login.php">
35 <Login</a><br></h4>' ;
36 }
37 <?>
38 <p style="margin-bottom: 10px; "></p>
39 </div>
40 </div>
41 <div class="col-md-7">
42 <?php
43 <require $rootPath . 'cards/cardStyle.php' ;
44 <if (isset($_GET['search'])) {
45 <$selectedCity = $_GET['search'];
46 <$placesArray = $query->getPlaces($selectedCity);
47 <$placesFound = false ;
48 <for ($i = 0 ; $i < count($placesArray) ; $i++){
49 <$placesFound = true ;
50 <$place = $placesArray[$i];
51 <$p_id = $place->id;
52 <$desc = $place->description;
53 <$name = $place->name ;
54 <$rate = $query->getAverageRate($p_id) ;
55 <$rate = round($rate , 2) ;
56 <if ($rate) {
57 <$rate = "Rate : " . $rate . ' / 10' ;
58 <} else {
59 <$rate = "Not Rated Yet." ;
```

Open source code reusability:

Here maps

"Here" maps services are chosen to provide us with this service instead of google map because it is updated periodically and cover more spaces than google map. Moreover, "Here" map API is easier to understand. For these reasons, it is used as navigation services in many cars companies like BMW, AUDI, and HYUNDAI.

It is a JavaScript code with its links or library (API). There are some examples and explained codes in their website. We read it and understand it well and then we start coding our map in the website. Also, they provide us and their customers with 24/7 customer service.

Bootstrap framework

Was used as a front-end framework to facilitate building consistent web pages and to speed up the development of the web front -end.

Star rating plugin for bootstrap

Was also used to convert an HTML element to stars and to supports advanced features likes fractional star rating. And we choose this specific code because it uses Bootstrap markup and styling by default. And because the code is very understandable and easy to change.

Conclusion

Learnings from the project

- Group work is only productive when organized
- Always do dependent tasks first
- Having **multiple** communication channels is harmful

Limitations of your work

- It only covers the region inside Saudi Arabia.
- No supervision over the content

What would you do differently if you had more time

- Profile Page for users
 - Statistics information appended to the "City Page of Places"
 - Suggestion Page: the user can select a city and his desired description about the place he wants to see. Then, based on keywords in the description, a list of places will be suggested to the user.
 - Notify Me Service: a service where users can set to a certain place, so that when a new experience is added to place, a notification will be sent to the user's email.
 - Add more exciting visual effects.
 - Completely responsive design
-

Worksheet

Task No.	Task Description	Assigned To	Start Date	Finish Date
1	Design pages on paper	All members	28/4/2017	1/5/2017
2	Define and model Database schema	All Members	28/4/2017	1/5/2017
3	Develop Database Schema	Abdalmajeed Alothman Yazeed Allahim	2/5/2017	4/5/2017
4	Milestone: deliver database final model	---	4/5/2017	
5	Develop HTML files for Home Page and Search results page	Abdullah Algarni Abdalmajeed Alothman	1/5/2017	5/5/2017
6	Develop HTML files for "add experience page" and "Place view page"	Yazeed Allahim Abdullah Alnahdi	1/5/2017	5/5/2017
7	Milestone: Deliver final HTML files	---	5/5/2017	
8	Customize the HTML files with bootstrap and our own CSS	Yazeed Allahim Abdullah Algarni	5/5/2017	7/5/2017
9	Add interaction by including JavaScript	Abdullah Alnahdi, Abdalmajeed Alothman	7/5/2017	8/5/2017
10	Setup PHP files for our HTML files	All members	8/5/2017	11/5/2017
11	Integrate MySQL database with PHP.	All members	11/5/2017	12/5/2017
12	Milestone: deliver first draft of project	--	13/5/2017	
13	Testing the website by trying different test cases	All members	14/5/2017	
14	Milestone: Deliver Final Project and Presentation	--	15/5/2017	