

**Pune Institute of Computer Technology  
Dhankawadi, Pune**

**A MINI-PROJECT REPORT  
ON**

**BBQ HOUSE- ONLINE RESTAURANT SYSTEM**

**SUBMITTED BY**

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**DEPARTMENT OF COMPUTER ENGINEERING  
Academic Year 2019-20**



DEPARTMENT OF COMPUTER ENGINEERING  
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## **CERTIFICATE**

This is to certify that the mini-project report entitled

**“BBQ House- Online Restaurant System”**

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have satisfactorily mini project for Lab Practices-II: STQA under the guidance of Prof. S. N. Girme towards the partial fulfillment of fourth year Computer Engineering Semester I, Academic Year 2020-21 of Savitribai Phule Pune University.

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Place:

Date:

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# 1 Project Idea and Requirements

## 1.1 Project Idea:

BBQ House is an online web application for a restaurant. Customers can register and login to view the menu, place orders or even book tables for a given date. The user can experience table booking and food ordering facilities while sitting at home. Details about restaurant are also displayed with different branches and history.

## 1.2 Functional Requirements:

With this website, user can:

- Register to the website
- Login to the website
- View the menu
- Place food orders
- Calculate bill of current order
- Book a table
- View details of the restaurant on "About Us" page

## 1.3 Software and Hardware Requirements:

- While developing the system, the hardware used was: PC with Intel Core i5 with 4 GB RAM
- XAMPP Apache Web Server for Windows
- PHP 7.2
- MySQL 5.5 as database
- HTML,CSS, Javascript for Frontend
- Testing frameworks-
- Selenium IDE 3.17.0
- Selenium standalone server- 3.141.59
- JUnit and TestNG 4.1 with NetBeans 8.2 IDE
- Chrome web driver -Version 86.0.4240

## 2 DESIGN

### 2.1 Use case diagram

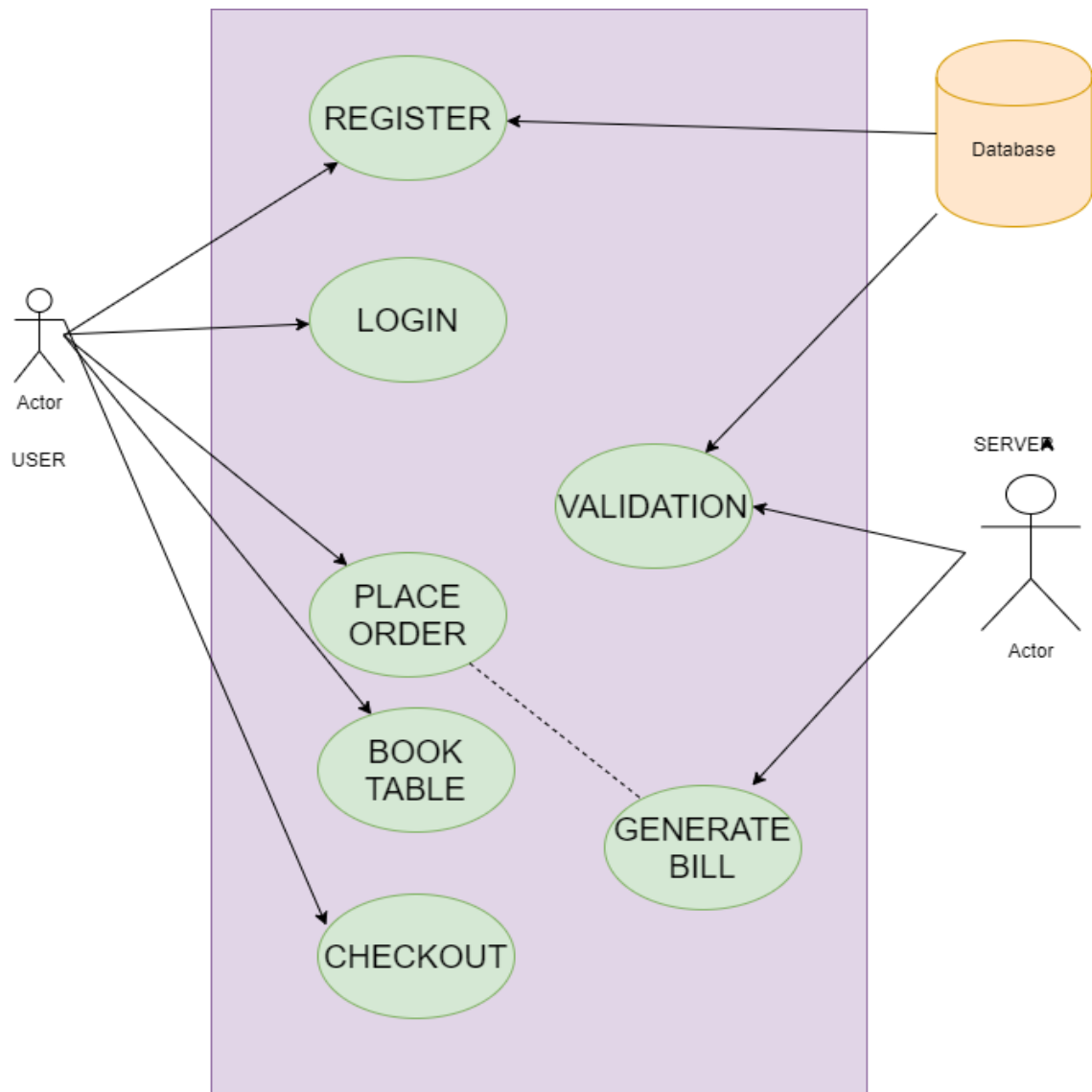


Figure 1: Use Case Diagram

## 2.2 Database Structure

```

MySQL 5.5 Command Line Client
Server version: 5.5.42 MySQL Community Server (GPL)

Copyright (c) 2000, 2015, Oracle and/or its affiliates. All rights reserved.

Oracle is a registered trademark of Oracle Corporation and/or its
affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> use bbqhouse;
Database changed
mysql> show TABLES;
+-----+
| Tables_in_bbqhouse |
+-----+
| bookings            |
| items               |
| orderdetails        |
| orders              |
| user                |
+-----+
5 rows in set (0.29 sec)

mysql> describe bookings;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| bookingid  | varchar(50)   | NO   | PRI |          |       |
| username   | varchar(50)   | YES  | MUL | NULL    |       |
| noofguests | int(11)       | YES  |     | NULL    |       |
| date       | date          | YES  |     | NULL    |       |
| timeslot   | varchar(50)   | YES  |     | NULL    |       |
+-----+
5 rows in set (0.31 sec)

mysql> describe items;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| itemid     | varchar(20)   | NO   | PRI |          |       |
| price      | double(10,2)  | YES  |     | NULL    |       |
| item       | varchar(50)   | YES  |     | NULL    |       |
+-----+
3 rows in set (0.30 sec)

mysql> describe user;
+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+
| fname      | varchar(50)   | YES  |     | NULL    |       |
| lname      | varchar(50)   | YES  |     | NULL    |       |
| username   | varchar(50)   | NO   | PRI |          |       |
| email      | varchar(128)  | YES  |     | NULL    |       |
| password   | varchar(50)   | YES  |     | NULL    |       |
| contact    | varchar(20)   | YES  |     | NULL    |       |
| address    | varchar(128)  | YES  |     | NULL    |       |
+-----+

```

Figure 2: Database structure

### 3 SOURCE CODE AND SCREENSHOTS

#### 3.1 Source code

System is designed using PHP, MySQL, AJAX and components from AngularJS, HTML for data and CSS for styling.

```

247
248 $stmt4= queryMySQL("update orders set bill='$x' where orderid='$oid'");
249
250 echo"<br>BILL:";
251
252 $stmt5= queryMySQL("select * from orders where username='$_SESSION[user]'");
253
254 $f= $stmt5->fetch_array(MYSQL_ASSOC);
255
256 echo"<br> ORDER ID:". $f['orderid'];
257 echo"<br> USERNAME:". $f['username'];
258 echo"<br> TOTAL BILL:". $f['bill'];
259
260 echo"<br> ORDER DETAILS: <br>";
261
262 $g=queryMySQL("select * from orderdetails where orderid='$oid'");
263
264 $rows=$g->num_rows;
265
266 for($j=0 ; $j<$rows ; $j++){
267
268     $g->data_seek($j);
269
270     echo ' Item Code: '. ($g->fetch_array())[1];
271
272
273
274 }
275
276 echo"<br>";
277
278 for($j=0 ; $j<$rows ; $j++){
279
280     $g->data_seek($j);
281
282
283
284     echo ' Qty: '. ($g->fetch_array())[2];
285
286 }
  
```

PHP Hypertext Preprocessor file      length: 5,385    lines: 318    Ln: 318    Col: 8    Sel: 0 | 0    Windows (CR LF)    UTF-8    INS

Figure 3: Code snippet  
Full source code has been sent separately in a folder.



## 3.2 Working Screenshots

### 1. Index page

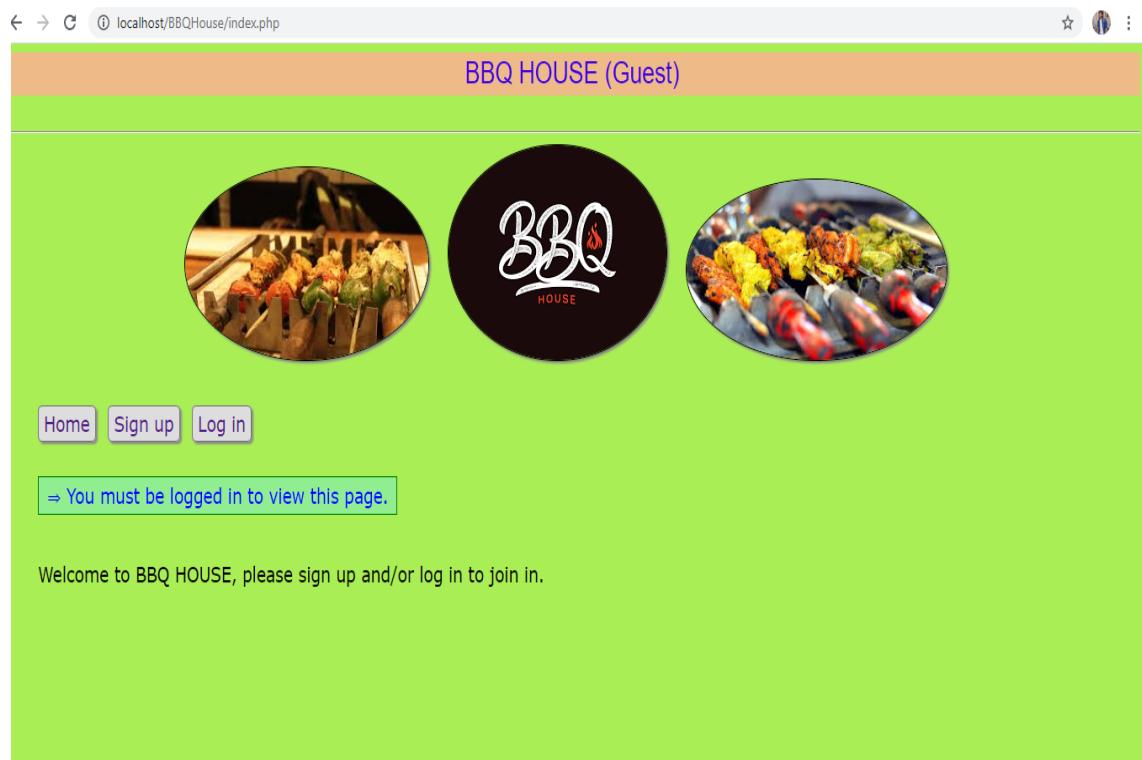


Figure 4: Index page

### 2. Sign up

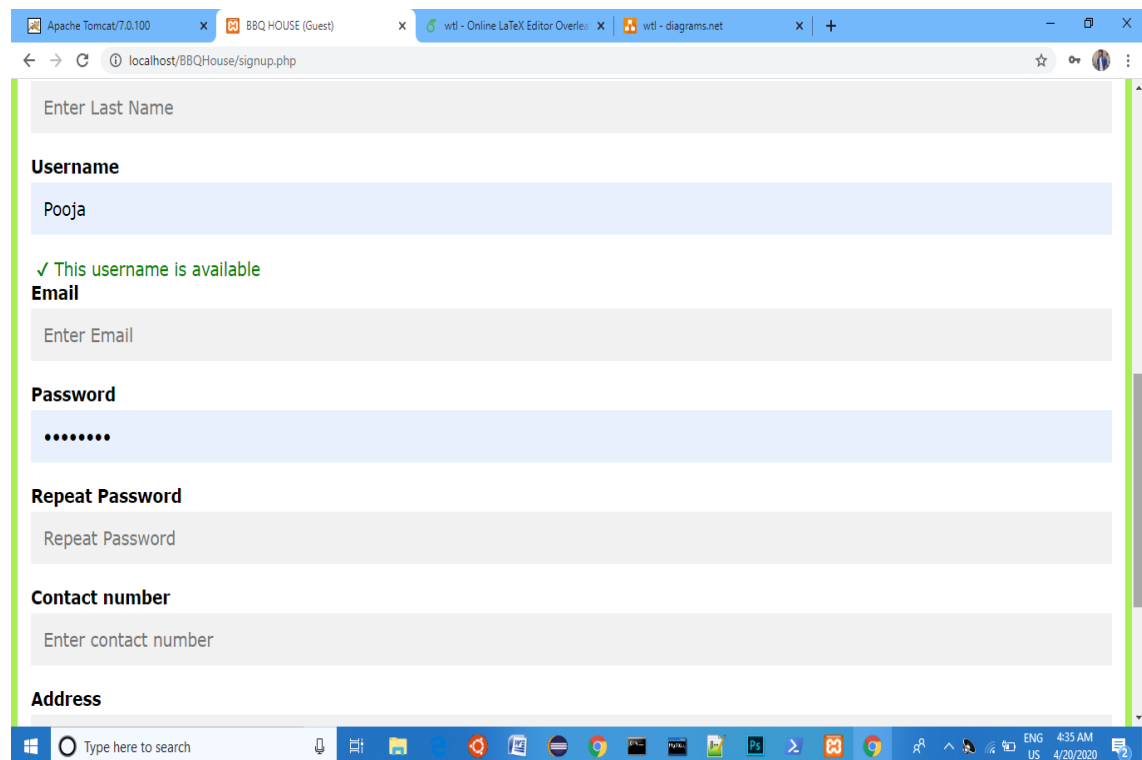


Figure 5: Sign up page

### 3. Login

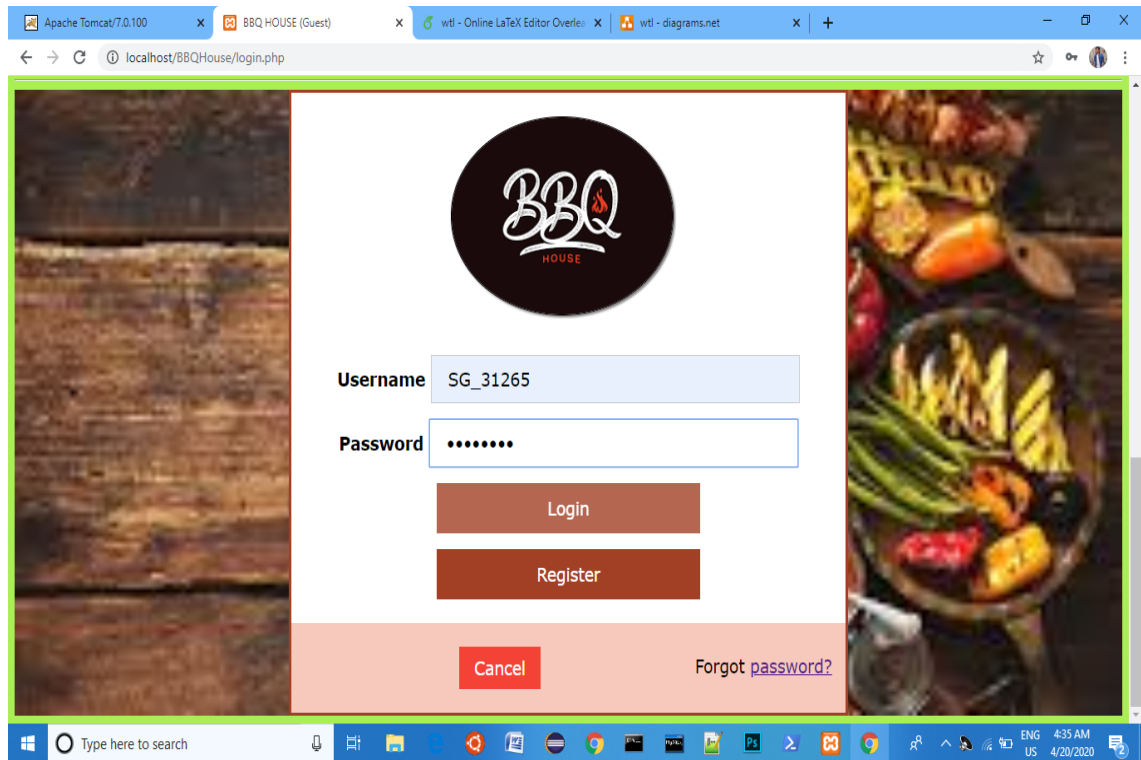


Figure 6: Login page

### 4. Menu

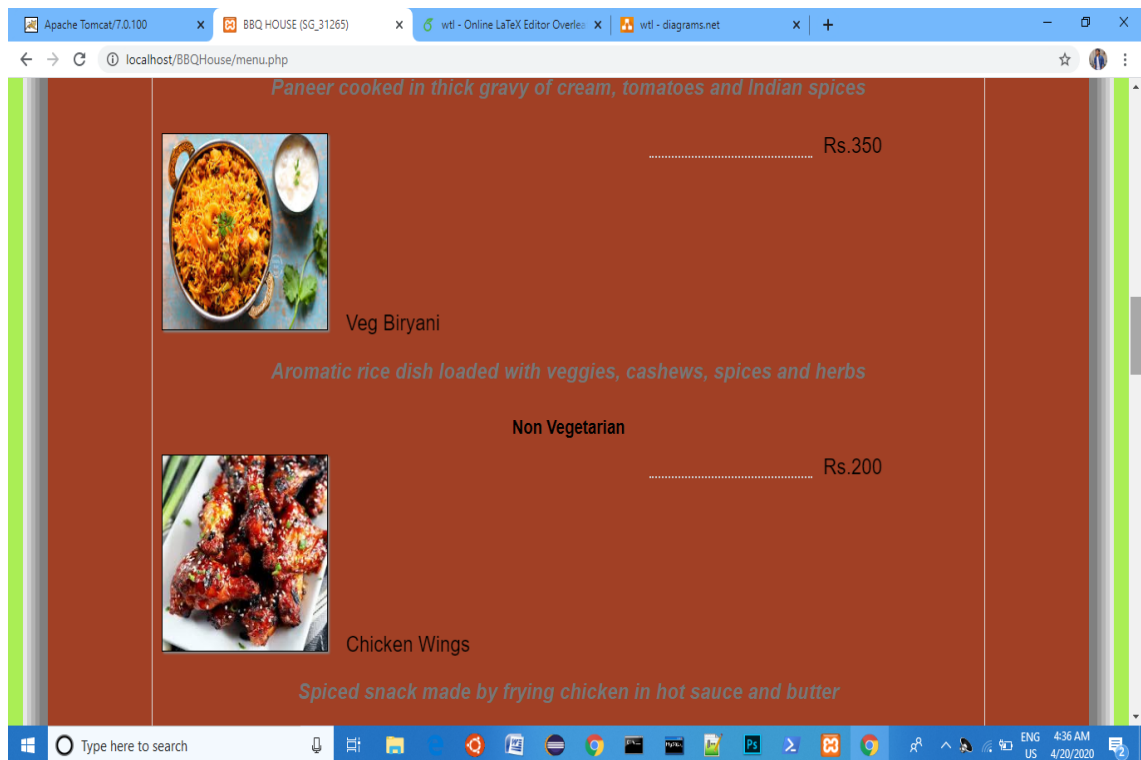


Figure 7: Menu

### 5. Order and Bill

Home Menu Card Order Book Table About Us Checkout

ADD TO CART			
Item	Price	Qty	Add
Choose Item: Crispy Corn	250.00	0	ADD

FINAL BILL

" Order id: 7  
 Amount to be paid: 500.00  
 BILL:  
 ORDER ID: 1  
 USERNAME: SG\_31265  
 TOTAL BILL: 750.00  
 ORDER DETAILS:  
 Item Code: D02B  
 Qty: 2  
 Amount: 500.00

CURRENT ITEM		
Item Id	Qty	Total
D02B	2	500

Figure 8: Order and Bill

## 6. Book Table

Home Menu Card Order Book Table About Us Checkout

Find a table			
Choose number of guests: 1-2	Select date: mm/dd/yyyy	Choose timeslot: 11 am	BOOK

Thank you for booking with us!

Booking details:

Booking Id: 552;  
 Username: SG\_31265;  
 Table for: max 2 guests;  
 Date: 2020-04-14;  
 Timeslot: 8pm;

Figure 9: Table Booking

## 7. About

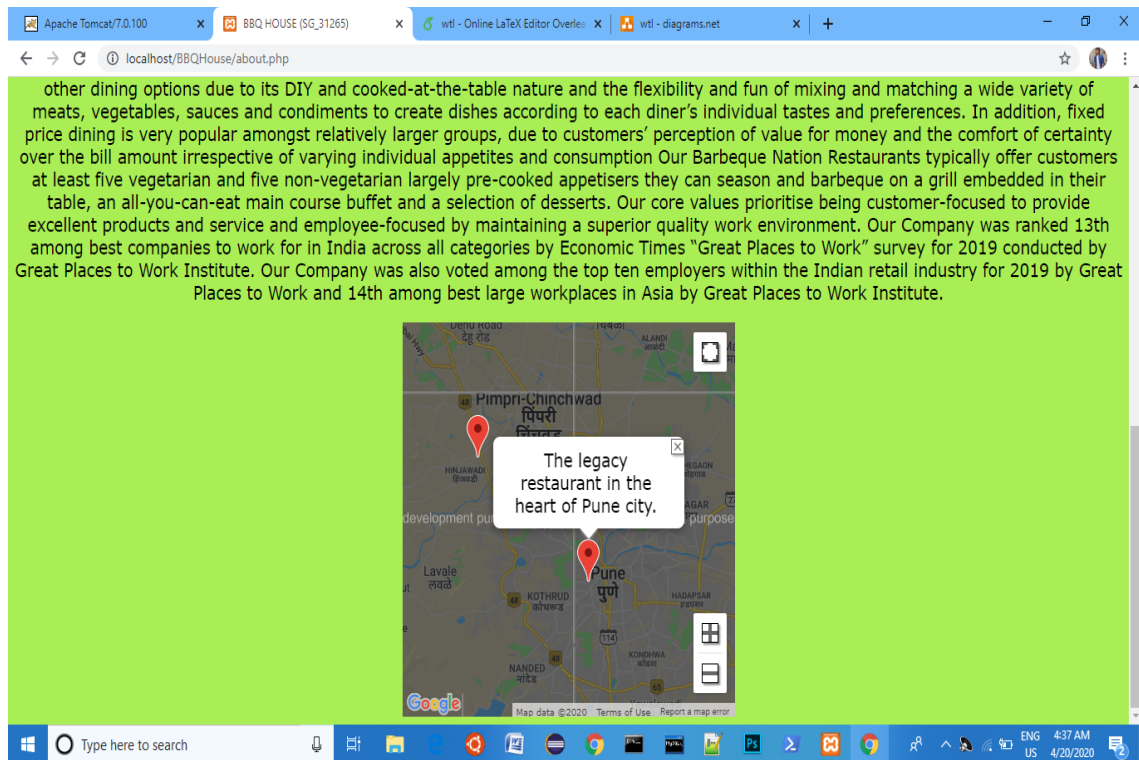


Figure 10: About

## 8. Check out

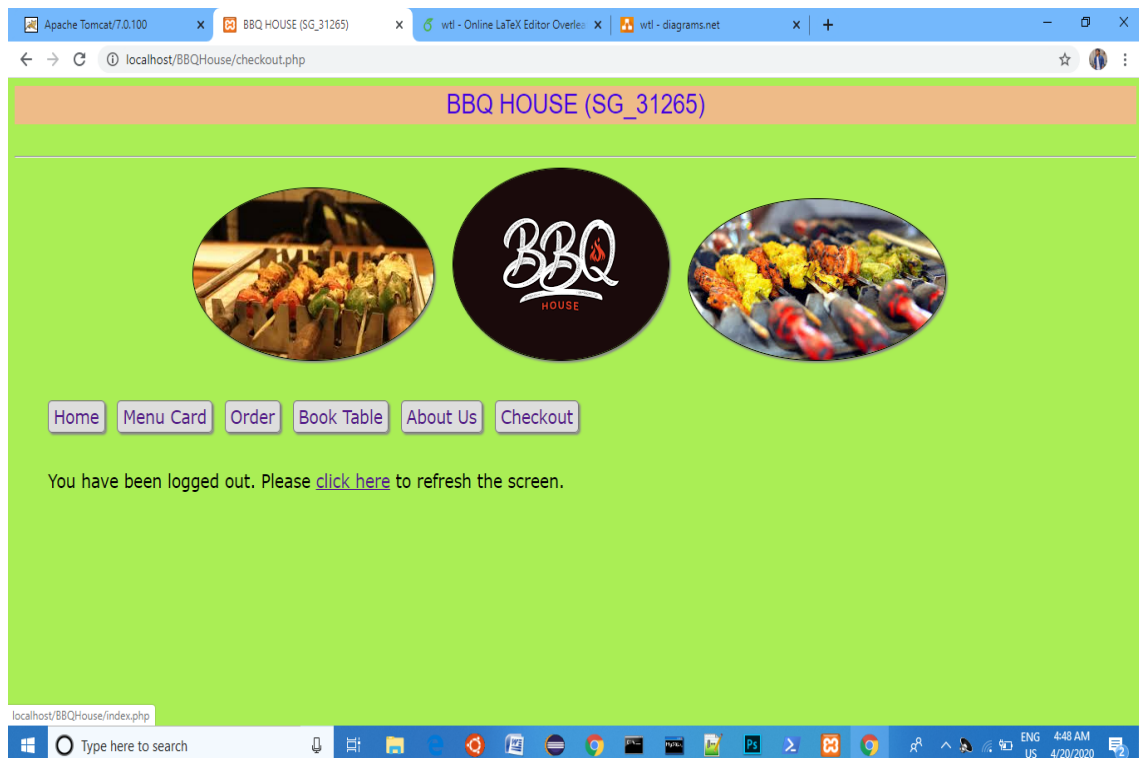


Figure 11: Checkout

Detailed working screenshots included separately

## 4 DEPLOYMENT

Steps for deployment

- Start xampp server on Windows/ lamp on Linux machines
- Apache web sever is used for deployment
- Notepad++ was used as text editor to write php files
- MySQL database is used to store user details
- AngularJS is used to display map in "About Us" page
- Client side validation is done using Javascript
- Server side validation is done using PHP and MySQL connection
- AJAX is used to check dynaminc availability of username.
- HTML to display data
- Inline, external CSS for styling

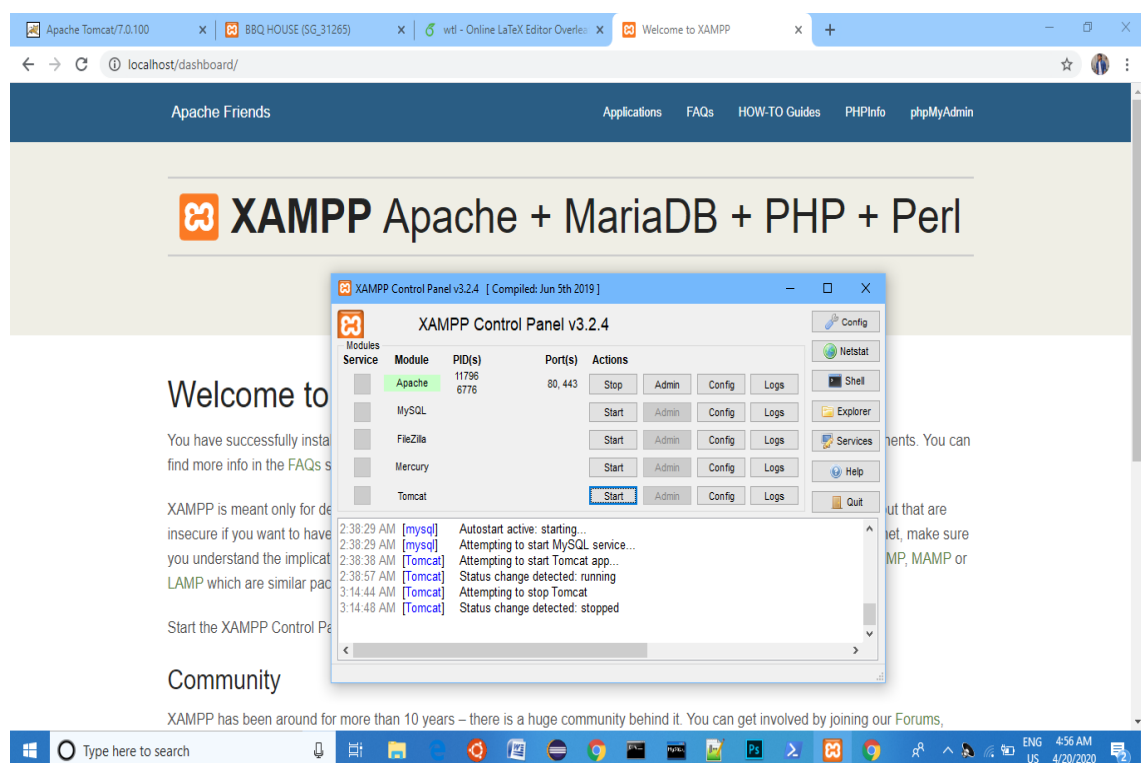


Figure 12: Deployment

## 5 Testing

Automated testing is done using Selenium tool.

- Download Selenium IDE plugin for browser( Chrome/Firefox)
- Download Selenium standalone server jar file to include in the Testing folder
- Run various exploratory tests to check functionality of the web app.

### 5.1 Exploratory Testing

- Tested all outgoing links, anchors and buttons.
- Session cookie tested- On checkout session details are reset
- Test all features like login, sign up, order and table booking.
- Business flow testing- End to end workflow tested.

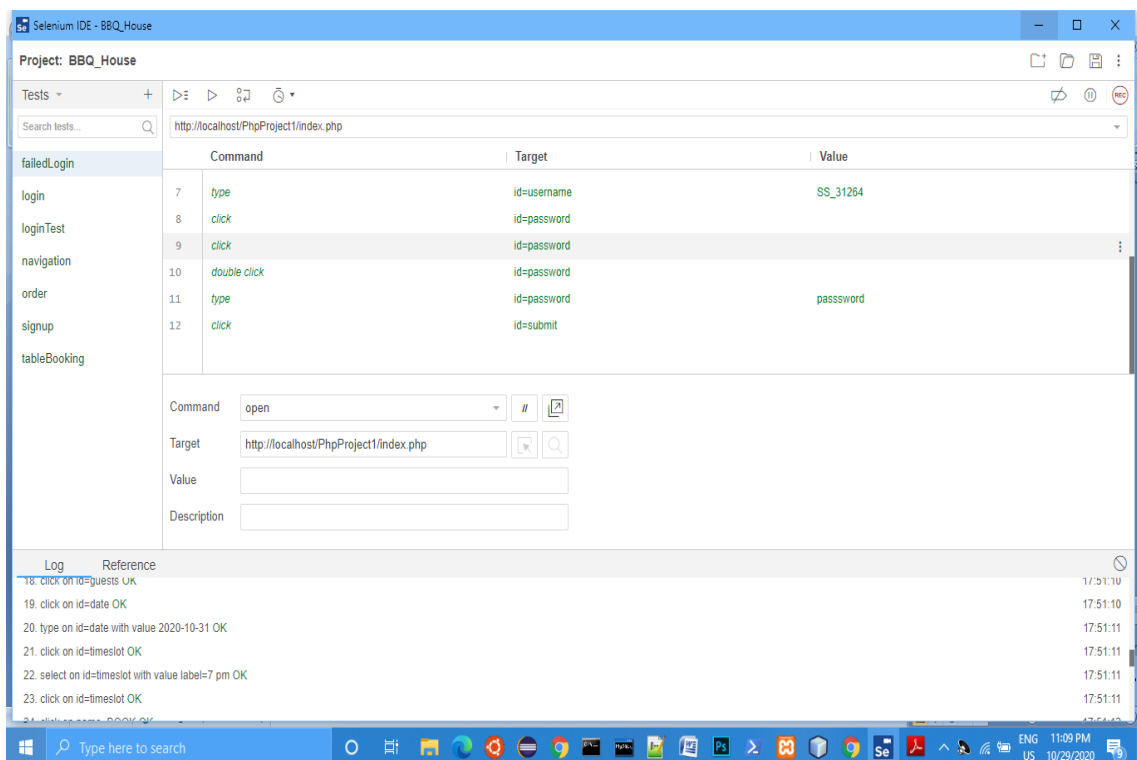


Figure 13: Selenium IDE

- Test the selenium scripts for different data inputs.
- Test passes for valid data and fails for invalid data inputs.

### **5.3 Functionality Testing**

- Tested all outgoing links, anchors and buttons.
- Session cookie tested- On checkout session details are reset
- Tested HTML/CSS- included proper stylesheets.
- Business flow testing- End to end workflow tested.

### **5.4 Usability Testing**

- Tested the site navigations.
- Content testing.
- Images with alt text.

### **5.5 Interface Testing**

- Application requests interact with DB properly
- Apache Web Server functioning properly.
- MySQL DB server working.

### **5.6 Database Testing**

- Integrity maintained
- Responses retrieved accurately
- Response time is fine

Detailed concise test plan, bug taxonomy and test scripts provided in separate file.



## 6 CONCLUSION

Implemented a web application for online restaurant food ordering and table booking system. Technologies used were PHP, MySQL, Javascript, HTML, CSS, AJAX, AngularJS and Apache web server(XAMPP).

Tested the navigations and explorations using automated testing tool Selenium(IDE and server). Report generation using TestNG.

## References

- [1] The Selenium Project documentation Available online at :[www.selenium.dev](http://www.selenium.dev)
- [2] Robin Nixon,"Learning PHP, MySQL and Javascript with JQuery, CSS and HTML5" O'Reilly , Edition 4, 2014.
- [3] Shyam Seshadri and Brad Green, "AngularJS Up and Running" O'Reilly, Edition 1, September 2014.