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

Pune Institute of Computer Technology

Dhankawadi, Pune-43

CERTIFICATE

This is to certify that the mini-project report entitled

"BBQ House- Online Restaurant System"

Submitted by

Shubhankar Gaikwad Roll No. 41270

and Shrut Shah Roll No. 41269

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.

Prof. S. N. Girme
Internal Guide

Prof. M.S.Takalikar
Head
Department of Computer Engineering

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

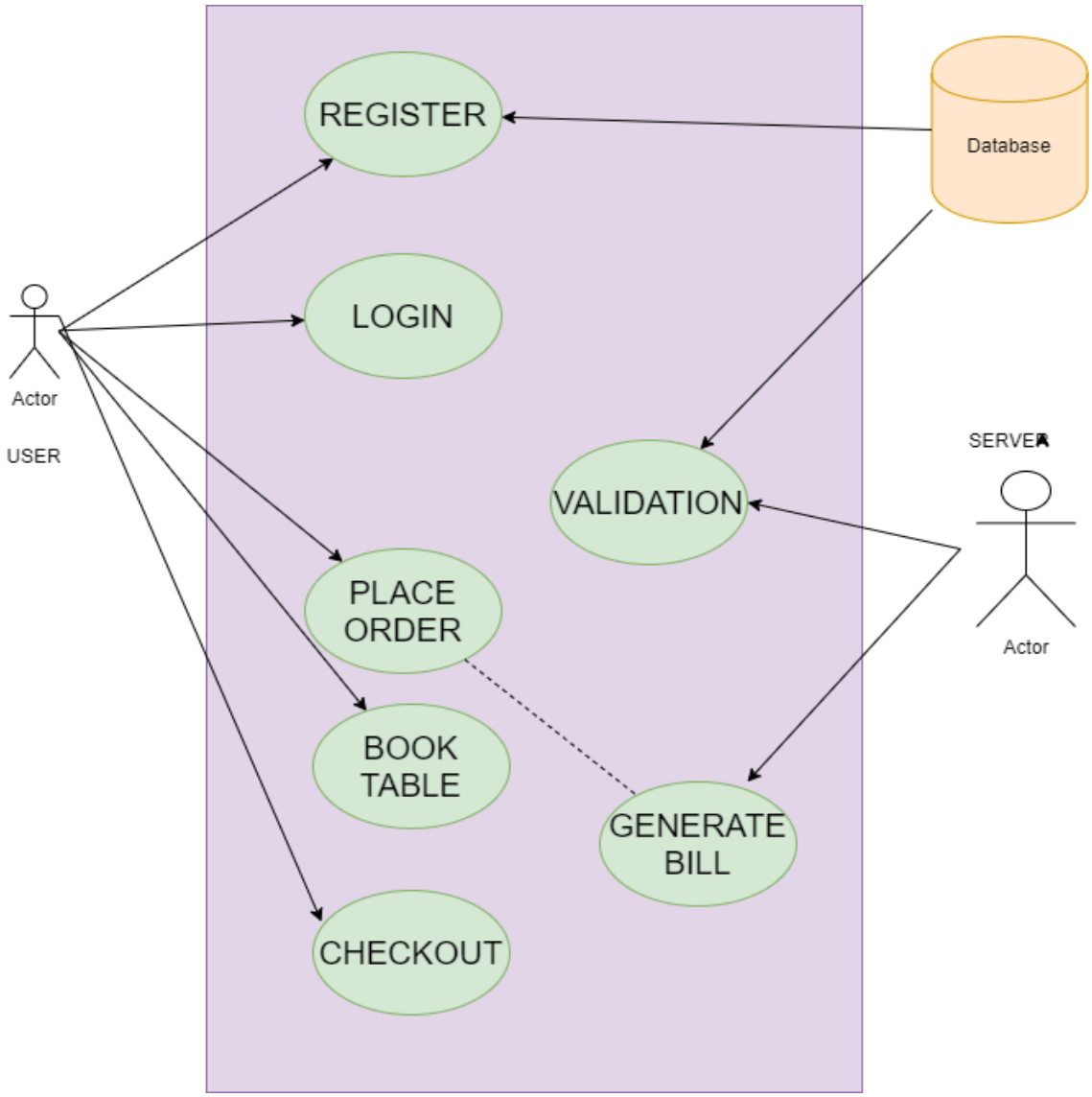

Figure 1: Use Case Diagram

2.2 Database Structure

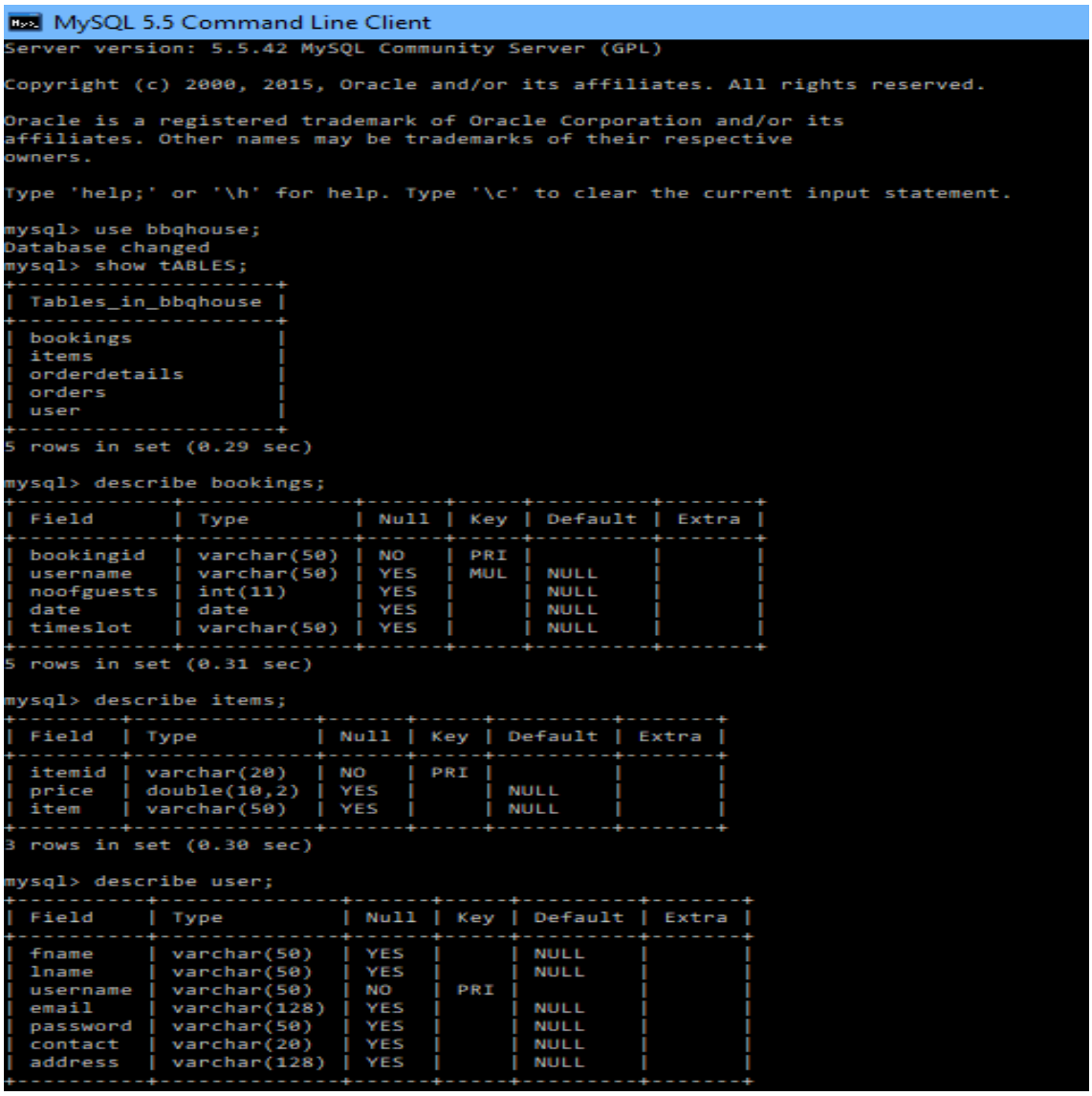

Figure 2: Database structure

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.

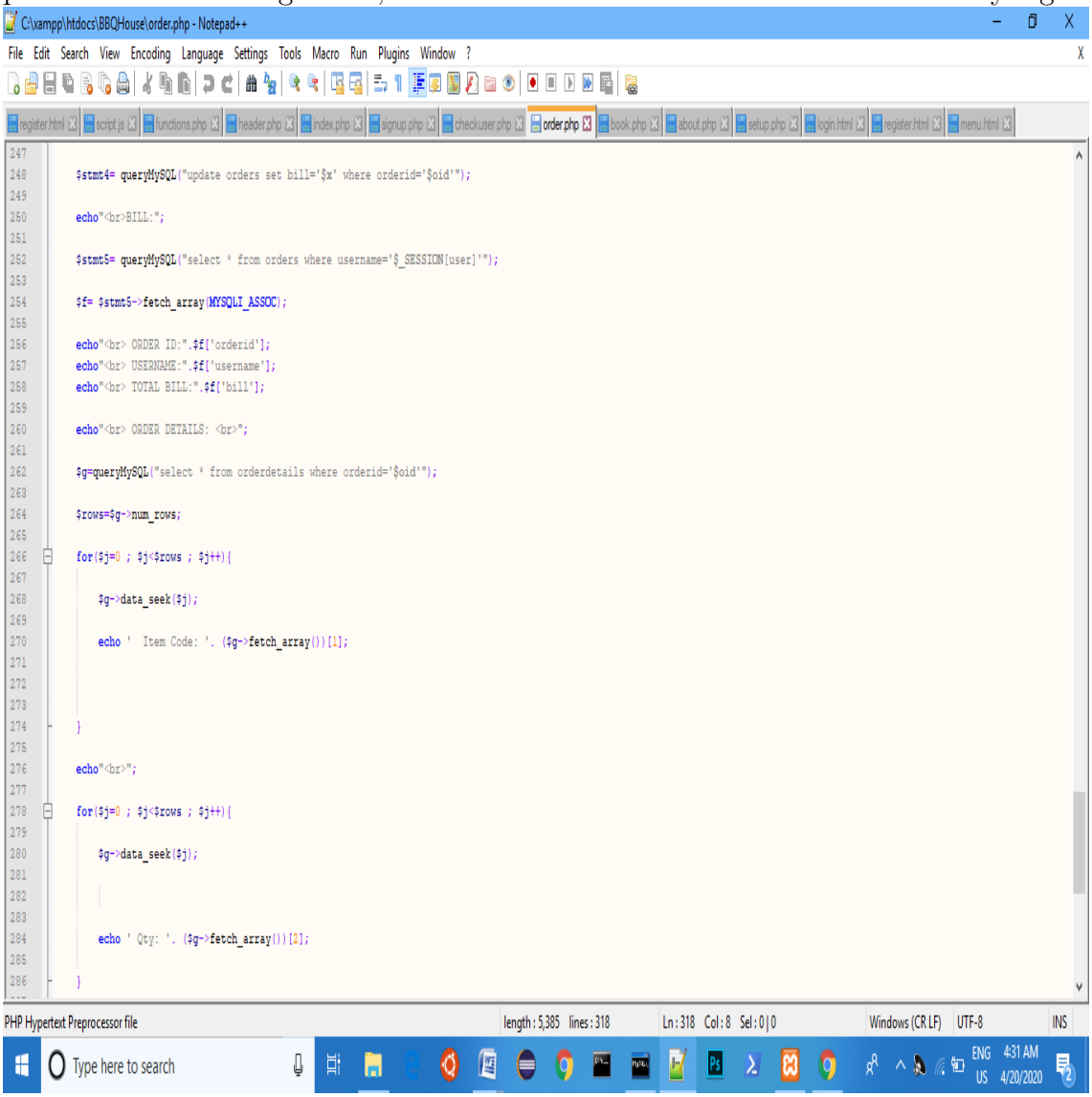

Figure 3: Code snippet

Full source code has been sent separately in a folder.

3.2 Working Screenshots

1. Index page

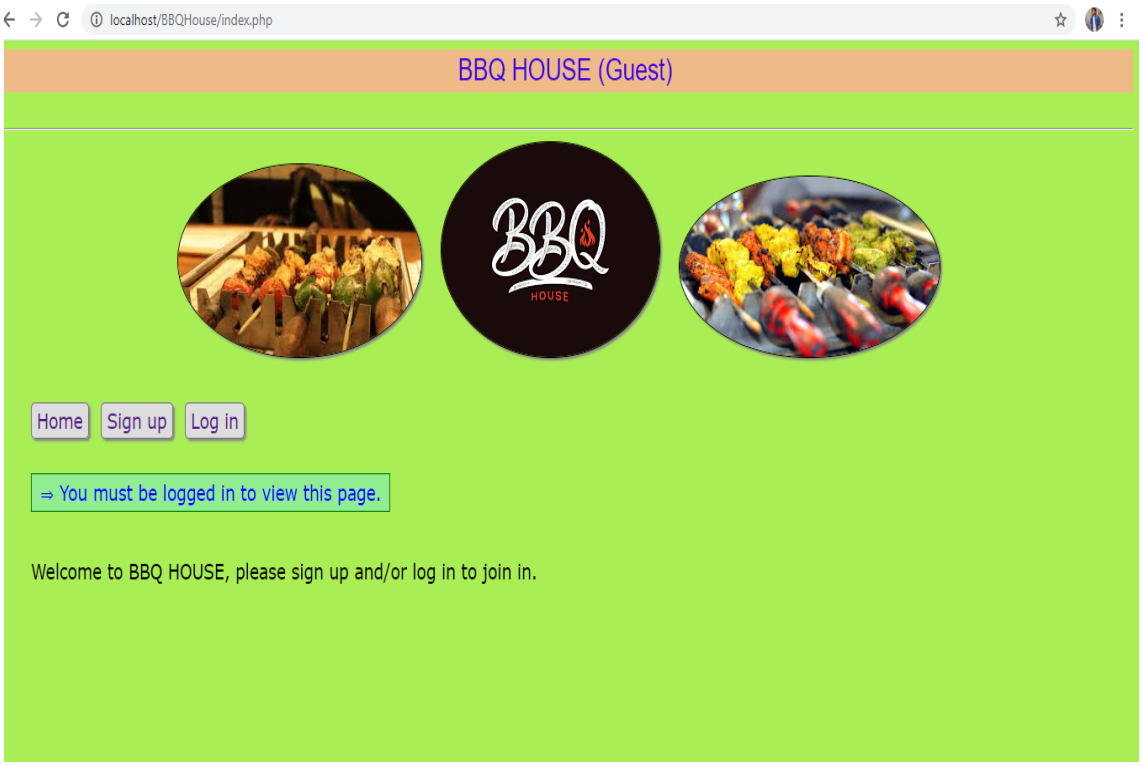

Figure 4: Index page

2. Sign up

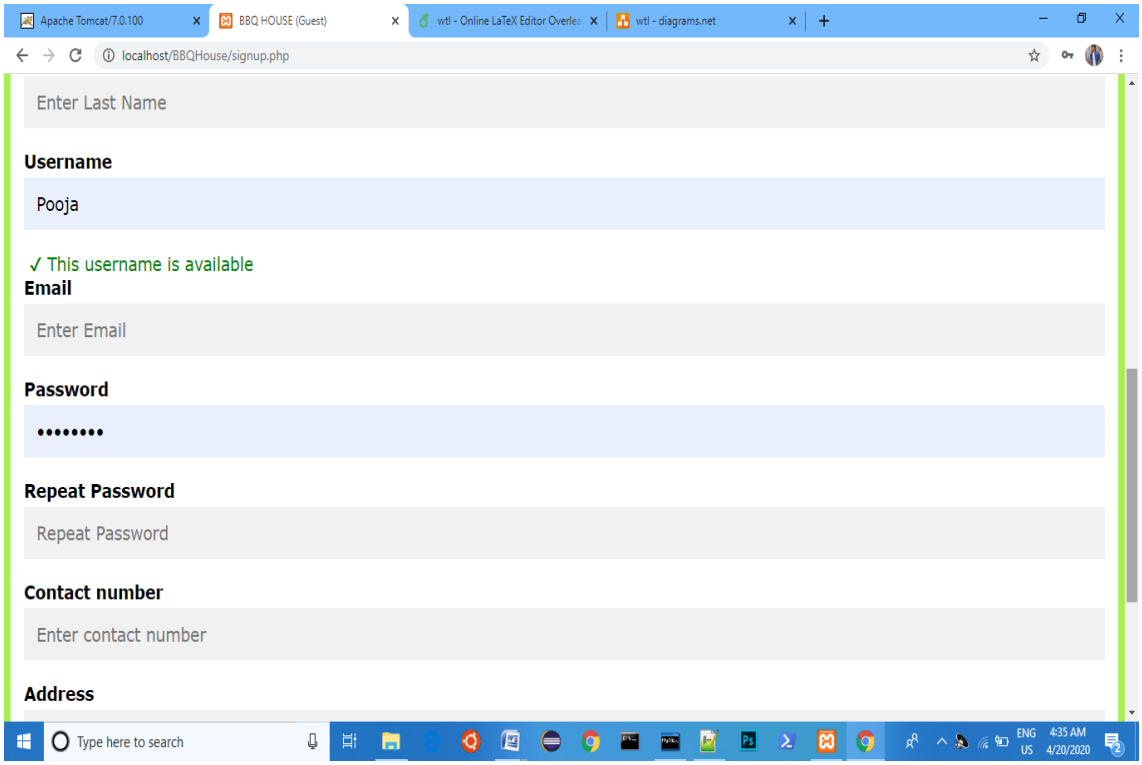

Figure 5: Sign up page

3. Login

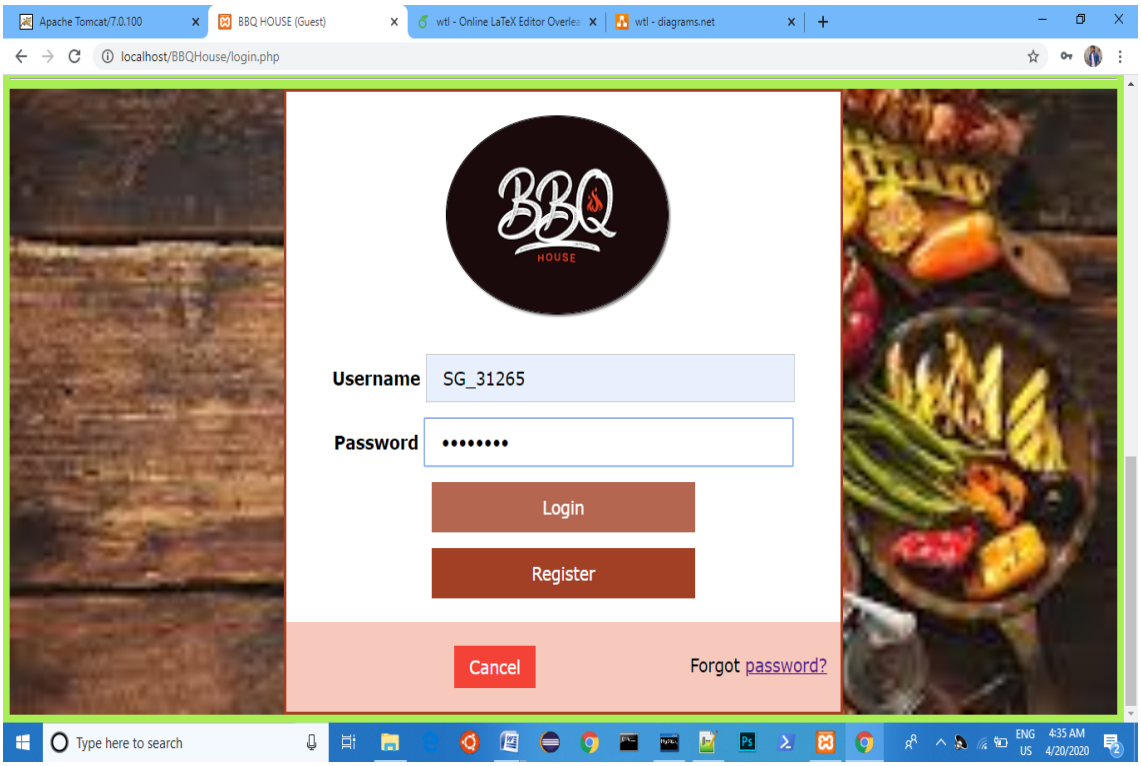

Figure 6: Login page

4. Menu

Figure 7: Menu

5. Order and Bill

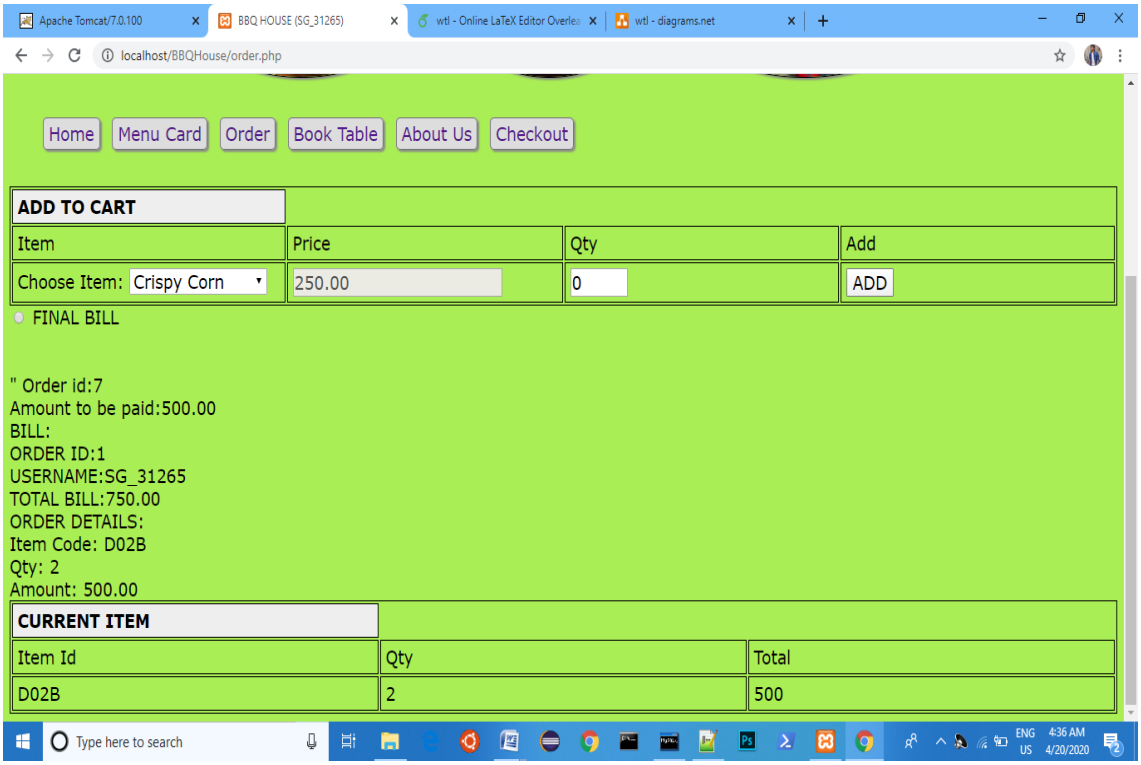

Figure 8: Order and Bill

6. Book Table

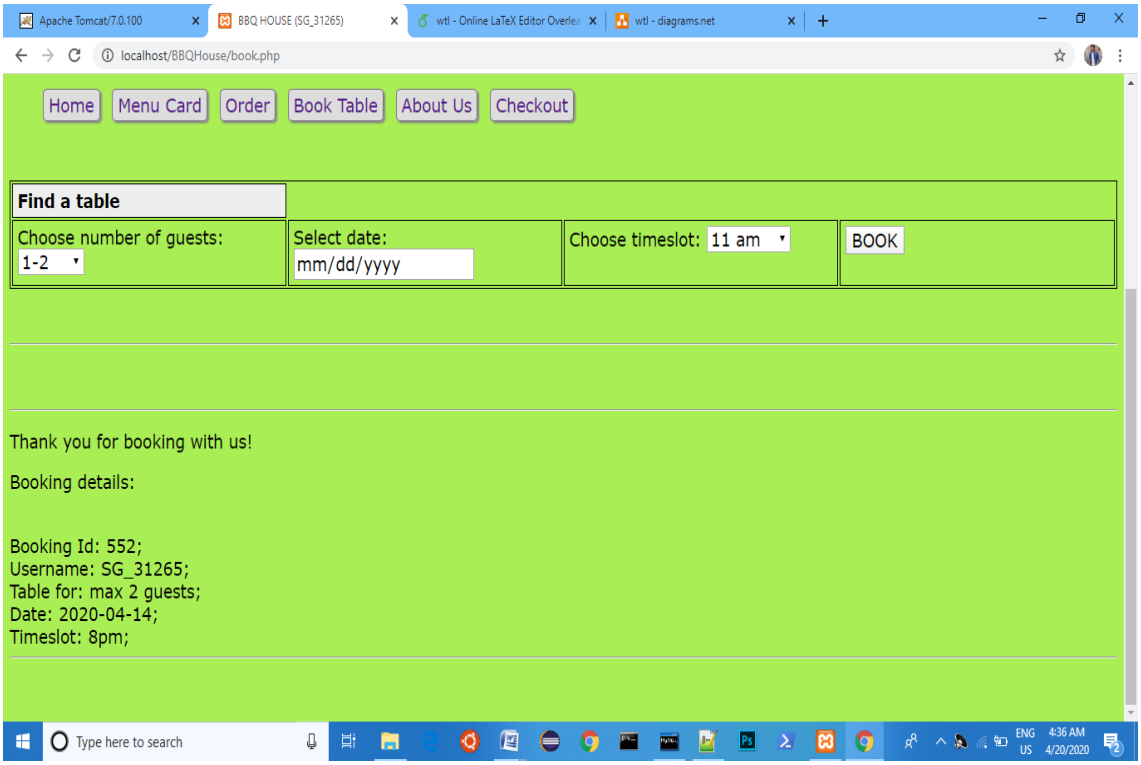

Figure 9: Table Booking

7. About

Figure 10: About

8. Check out

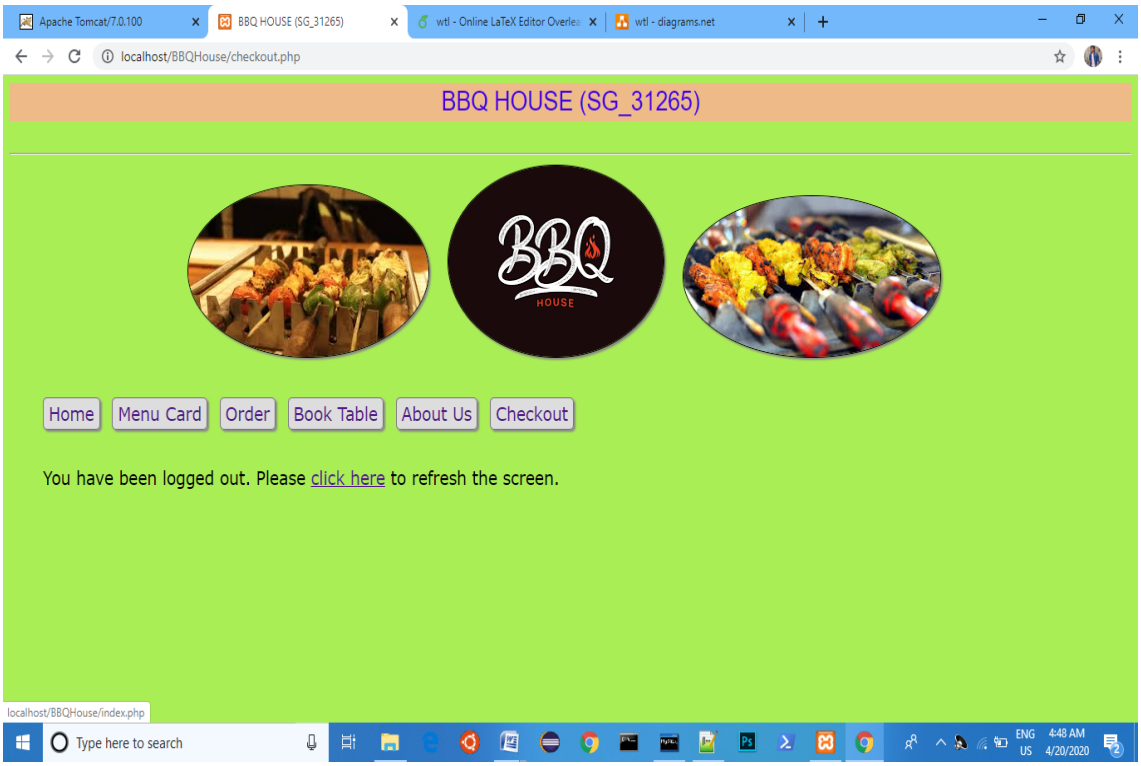

Figure 11: Checkout

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

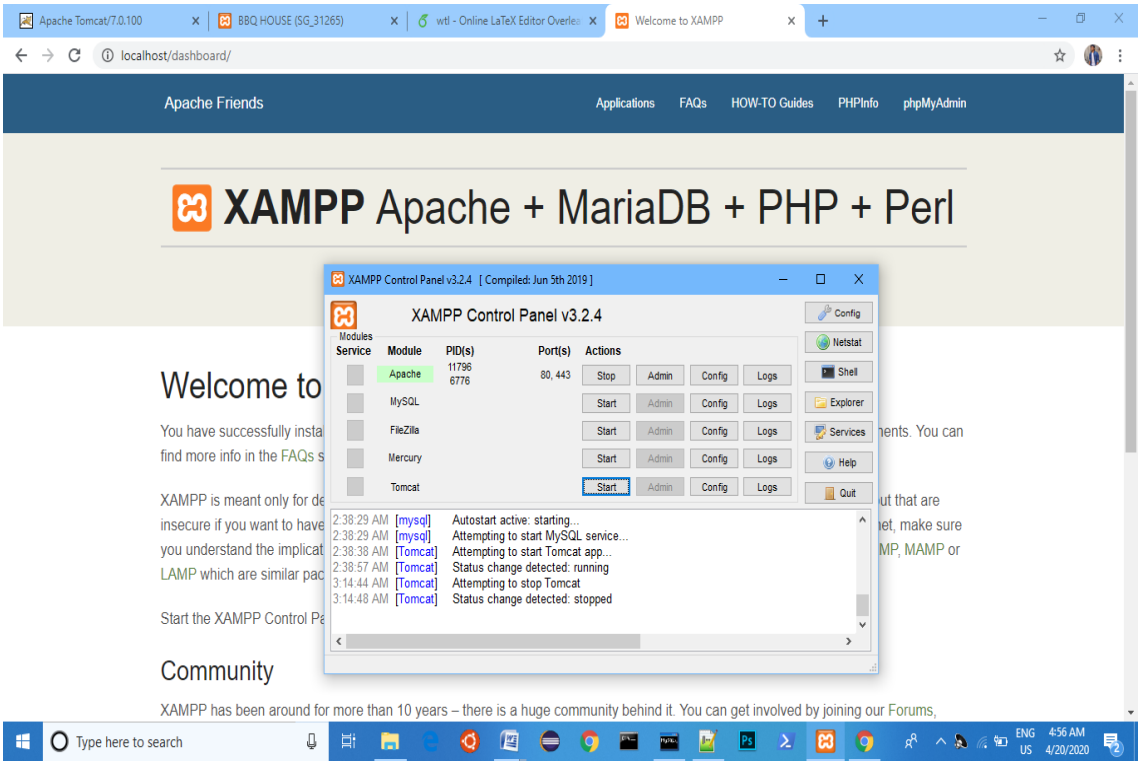

Figure 12: Deployment

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.

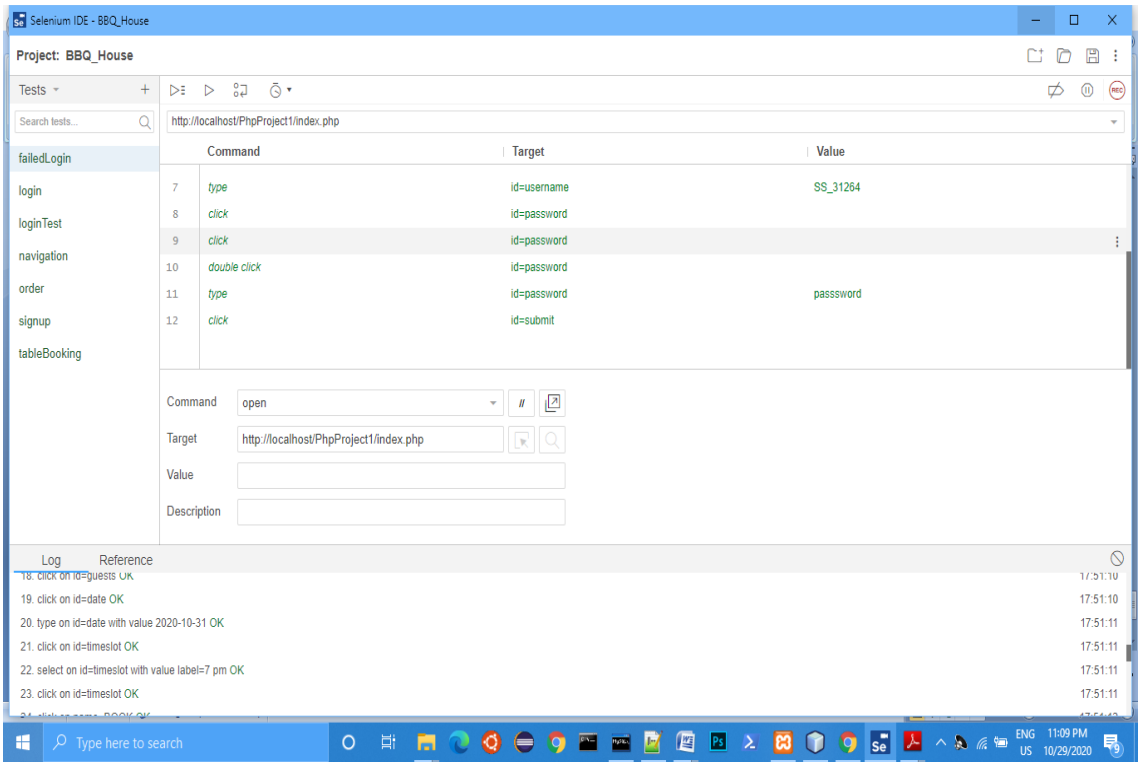

Figure 13: Selenium IDE

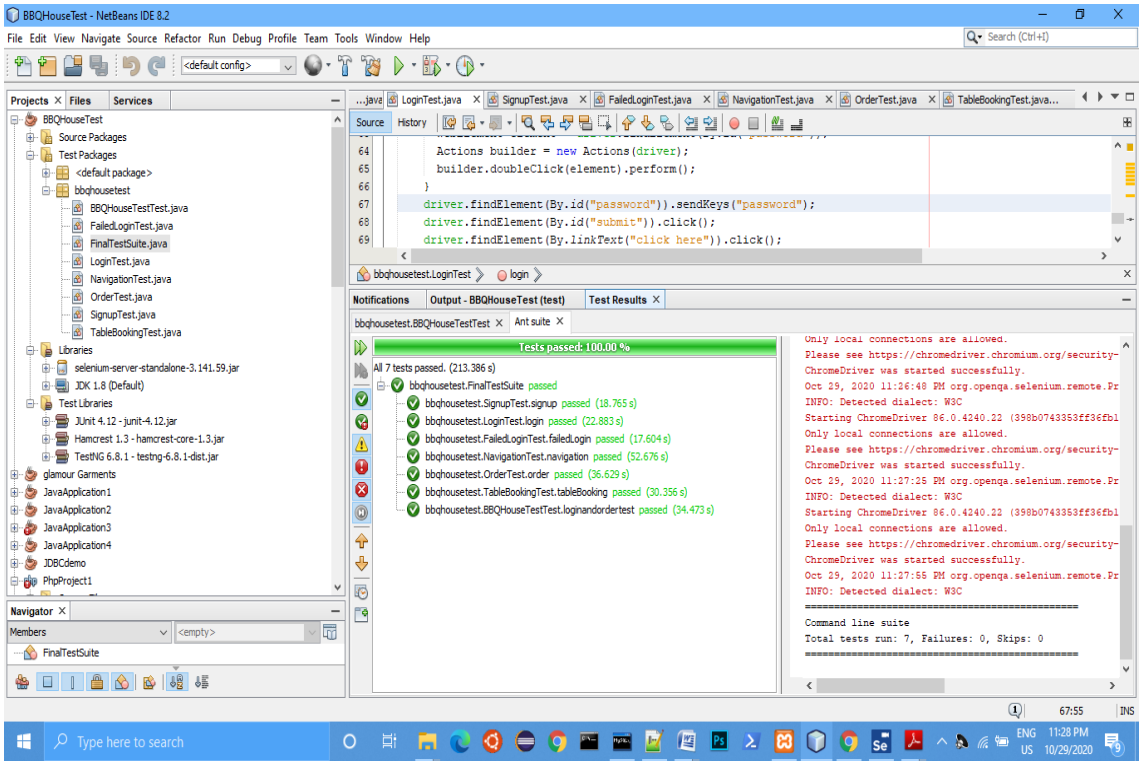

Figure 14: Automated testing using Selenium and TestNG Report

5.2 Regression Testing

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

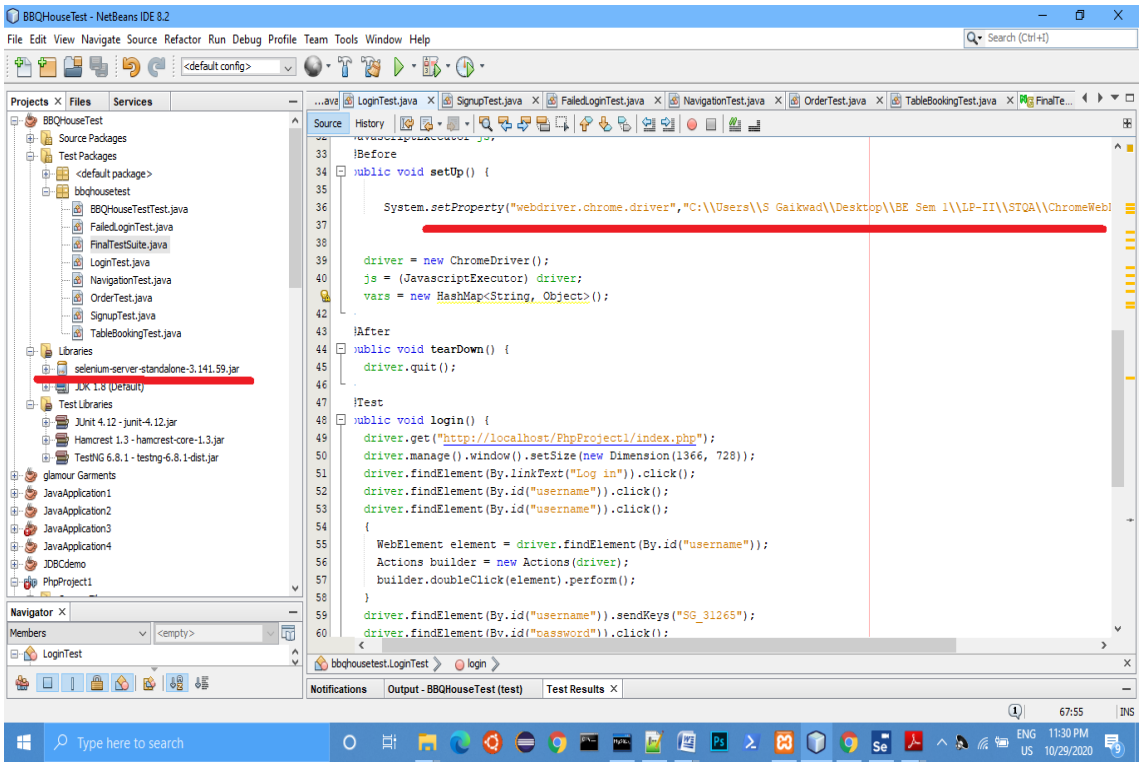

Figure 15: Web Drivers

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"

[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.