

## 1. Introduction

### 1.1. Purpose

- The main objective of the pizza ordering system is to manage the details of pizza, order, payments, customers and status. The purpose of project is to reduce the manual work for managing the payments, customer, and online order.

### 1.2. Scope

- Online Pizza Ordering System will be a web based application. Its main aim is to simplify and improve the efficiency of the ordering process for both customer and pizza shop owners, minimize manual data entry and ensure data accuracy and security during order placement process. Customer will also be able to view product menu and their ingredients and be able to have visual confirmation that the order was place correctly.

### 1.3. Definition, Acronyms, Abbreviations

#### 1.3.1 Definition

- The Online Pizza Ordering System can be defined as a simple and convenient way for customers to purchase Pizza and drinks online, without having to go to the restaurant.

#### 1.3.2 Acronyms

- PHP: Personal Home Page
- XAMPP: Cross platform Apache MySQL PHP Perl

#### 1.3.3 Abbreviations

- OS (Operating System): Windows 10

# Online Pizza Ordering System

## 1.4. Technologies to be used

- **For Development**
  - **Hardware (Minimum Requirement)**
    - Processor: Pentium 4 or better
    - RAM: 512 MB or more
    - Disk space: 750 MB of free disk space
  - **Software (Minimum Requirement)**
    - Operating System : Microsoft Windows Vista SP1/Windows 7 Professional or better version
    - Tool: Net Beans IDE 8.2.
    - Server: XAMPP
  - **Hardware (Recommended Requirement)**
    - Processor: Intel Core i5 or equivalent
    - Memory: 2 GB (32-bit), 4 GB (64-bit)
    - Disk space: 1.5 GB of free disk space
  - **Software (Recommended Requirement)**
    - Microsoft Windows 7 Professional/Windows 8/Windows 8.2 or better version
    - Tool: Net Beans IDE 8.2
    - Server: XAMPP
- **For Deployment**
  - **Hardware**
    - CPU: 1.8 GHz Intel Core i3
    - RAM: 1 GB
  - **Software**
    - Front-End Tool: -Browser

## 2. System Analysis

### 2.1. Identification of Need

- The Existing system was suffering from a series of drawback. Since Whole system was to be maintained manual using pen and papers. The process of keeping, maintaining and searching the information was very tedious and time consuming. To overcome the problem faced in the manual system we provide this atomic system. Using this system customer as well as admin can easily maintain the ordered details.

### 2.2. Functionalities

#### 2.2.1. Usual functionalities.

- Online registration for employee and customer
- View item menu.
- Manage cart by user.
- Order can be placed.
- Manage food items
- Manage Customer
- View various reports
- Order confirmation for employee

#### 2.2.2. Distinct functionalities

- Delivery tracking status
- Order cancelation by customer (limited time)

# Online Pizza Ordering System

## 2.3. User Characteristics

### 2.3.1. Customer Characteristics

- Login
- View Item Menu.
- Manage cart:
  - Add item into the cart.
  - Cancel cart item.
- Do Payment.
- Request for refund.
- Update Profile.

### 2.3.2. Admin Characteristics

- Login
- View order.
- Manage Food items:
  - Add food items.
  - Update food items.
  - Block Food items.
- Manage Customer:
  - View Customers.
  - Block Customers.
- Manage Delivery boy:
  - View Delivery boy details.
  - Block Delivery boy.
  - View Delivery boy report.
- Customer details report.

### 2.3.3 Delivery boy Characteristics

- Login.
- Delivery order options
- Order report details.
- Report of particular order details.

# Online Pizza Ordering System

## 2.4. Software development process

- Spiral

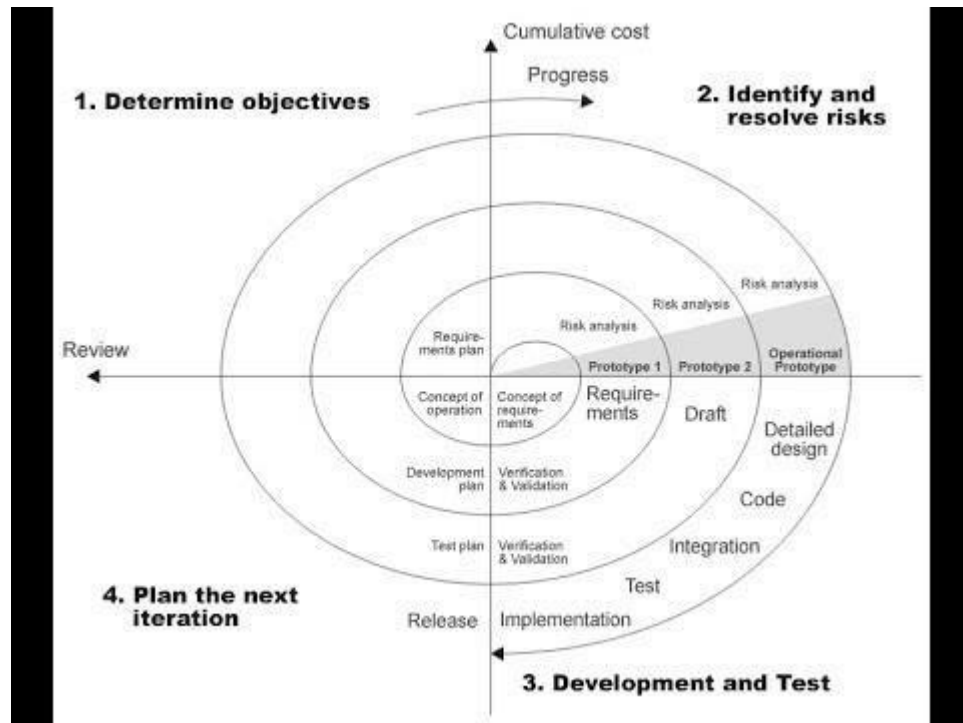


Figure 1. Spiralmodel

- If customer want to add new feature in the system then we will first be gathered requirement from the customer, then we design the feature means determine that how it will work and what action it will perform. Then we will implement it code and integrate the code into the main system then give that system to customer for verification and validation then if customer is satisfied then we will maintain the system at time interval.

## Online Pizza Ordering System

### 3. Conceptual Diagram

#### 3.1. Use case diagram

##### 3.1.1. Customer use case diagram

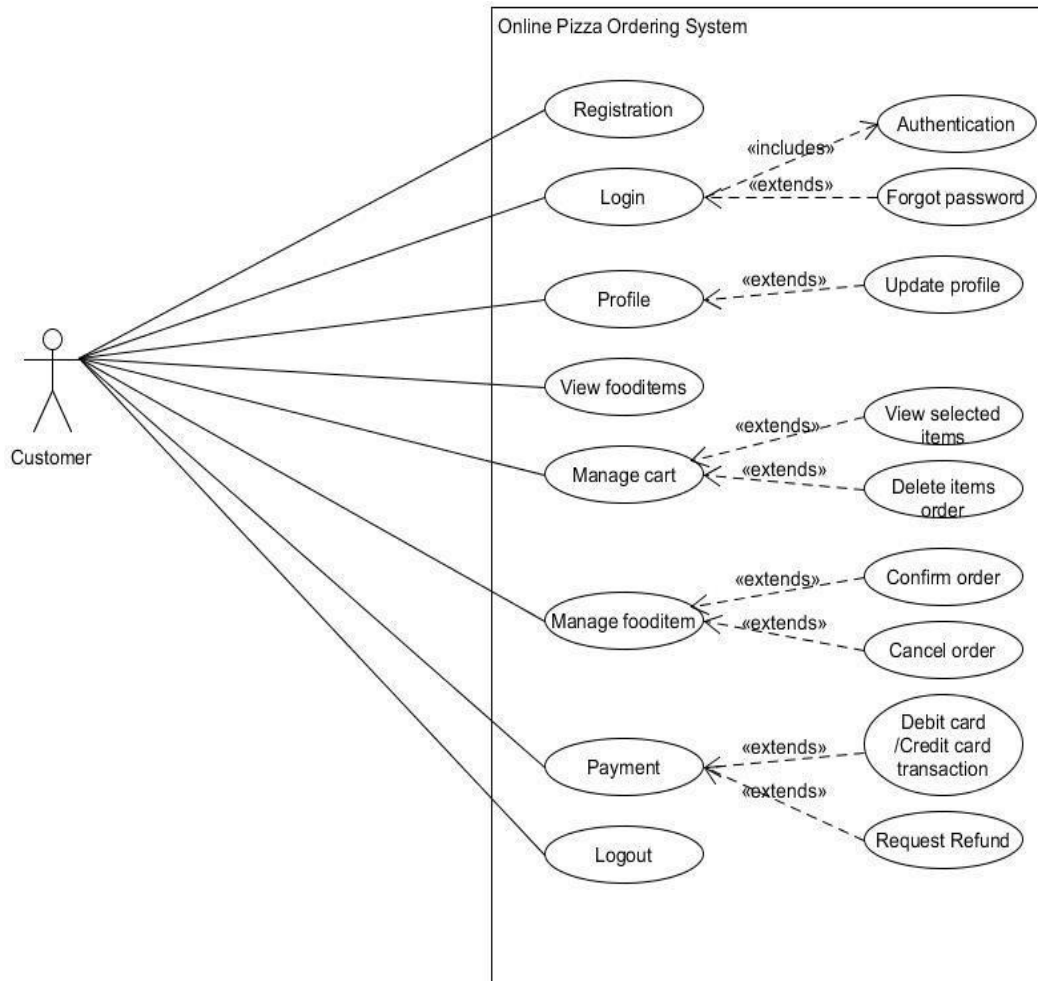


Figure 2. Customer use case diagram

# Online Pizza Ordering System

## 3.1.2. Admin use case diagram

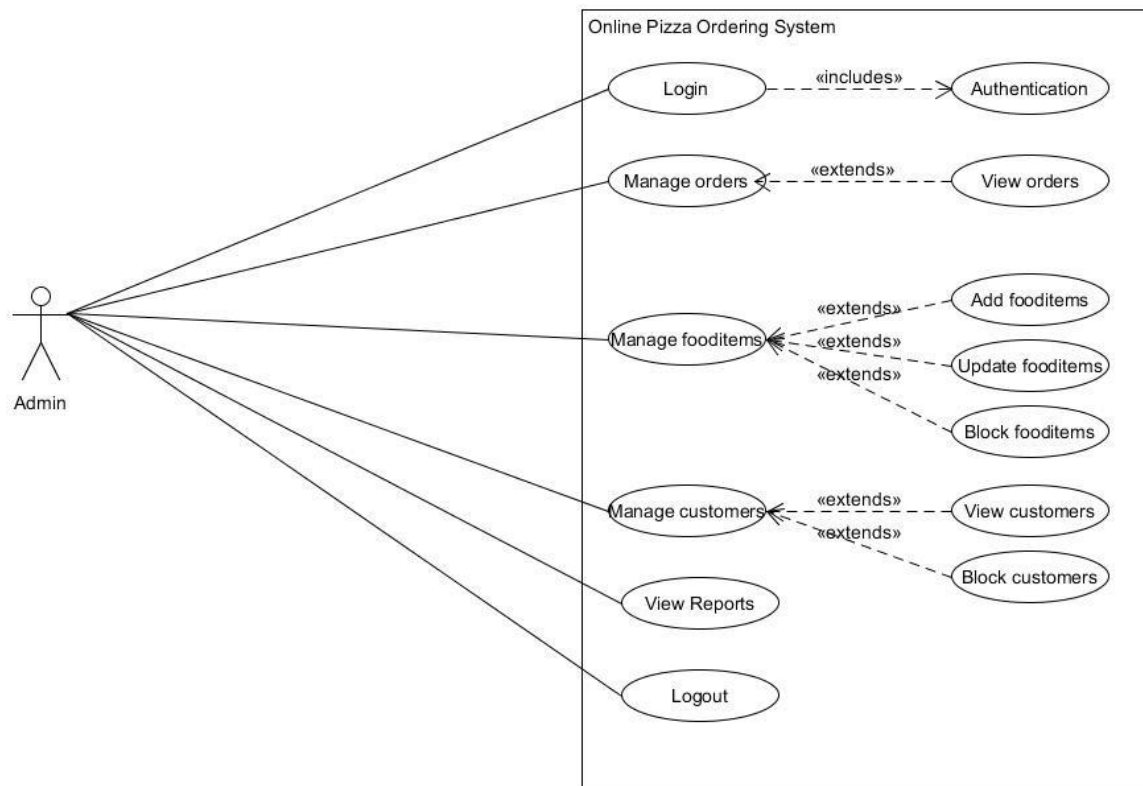


Figure 3. Admin use case diagram

# Online Pizza Ordering System

## 3.1.3. Delivery boy use case diagram

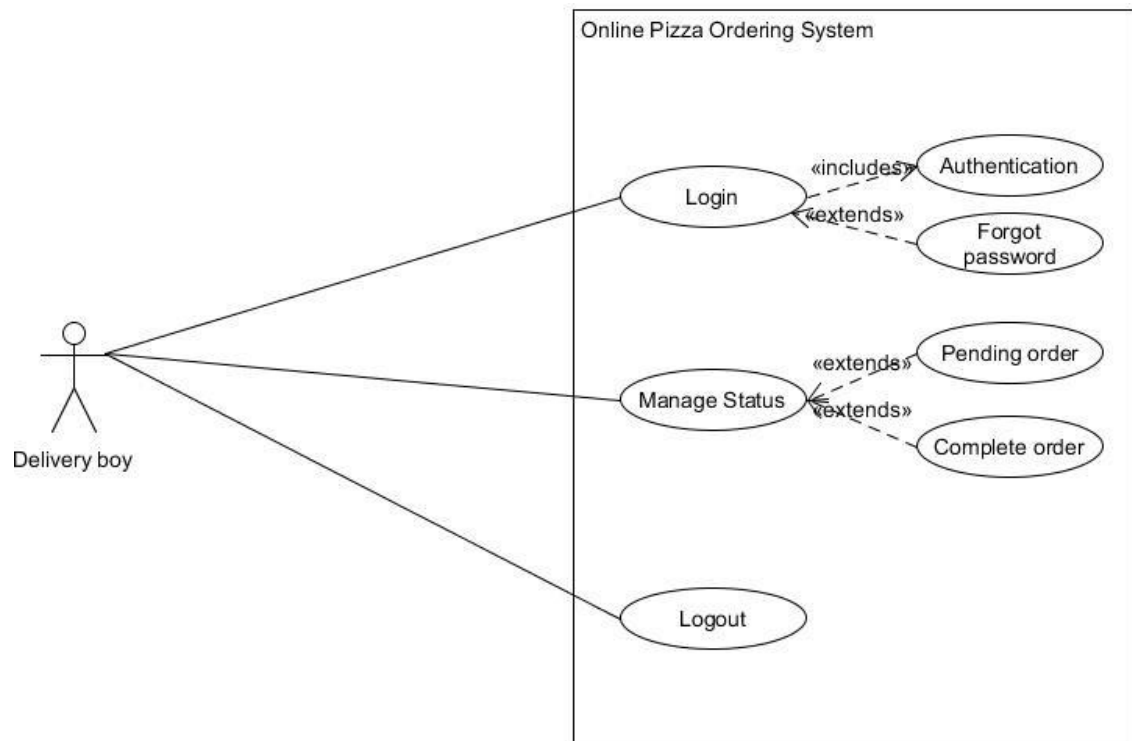


Figure 4. Delivery boy use case diagram



# Online Pizza Ordering System

## 3.2. Activity diagram

### 3.2.1. Registration activity diagram

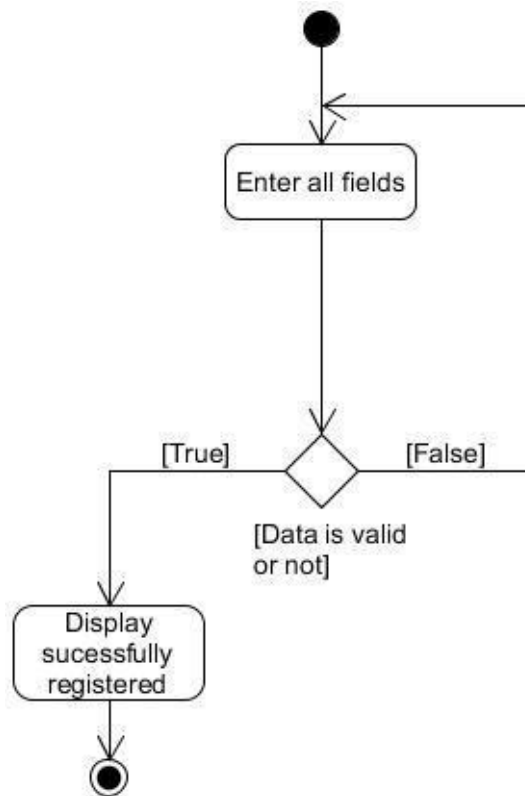


Figure 5. Registration activity diagram

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## Online Pizza Ordering System

### 3.2.2. Login activity diagram

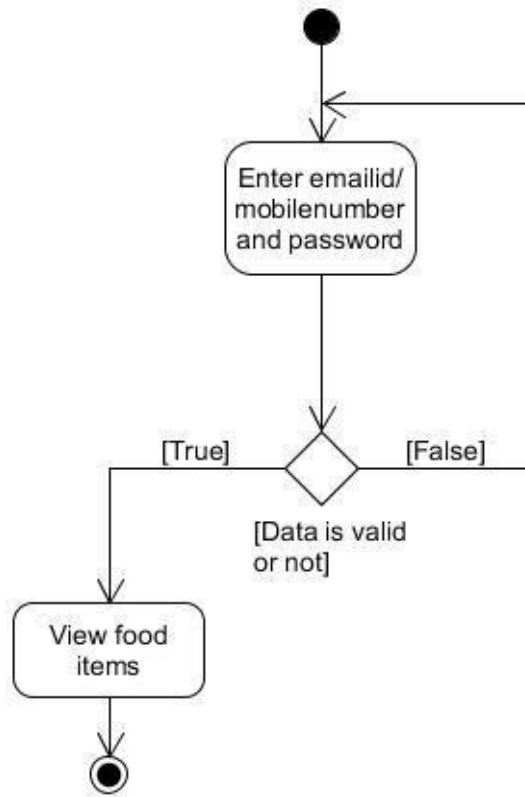


Figure 6. Login activity diagram

## Online Pizza Ordering System

### 3.2.3. Profile update activity diagram

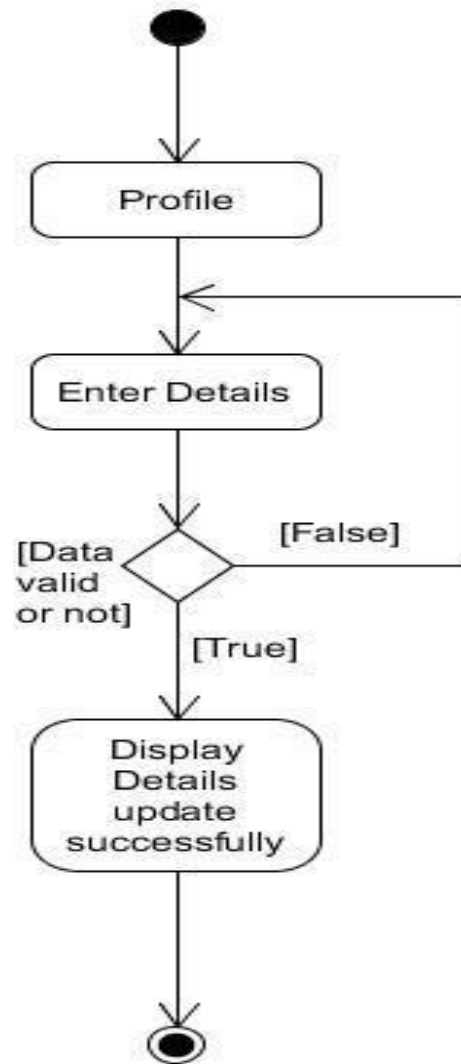


Figure 7. Profile updating activity diagram

## Online Pizza Ordering System

### 3.2.4. Add to cart activity diagram

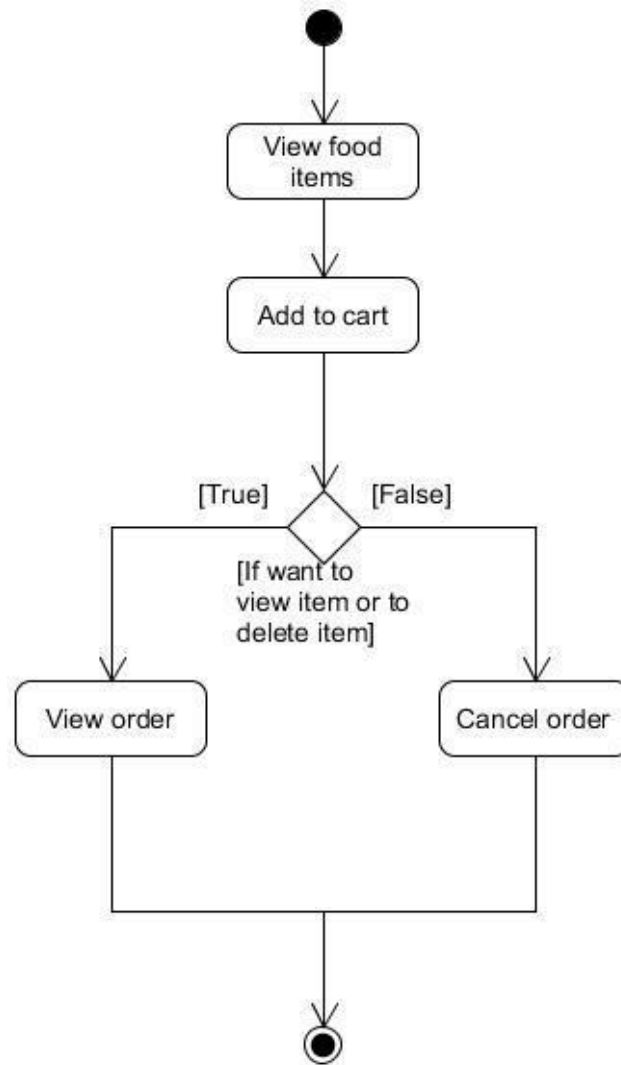


Figure 8. Add to cart activity diagram

# Online Pizza Ordering System

## 3.2.5. Customer orders activity diagram

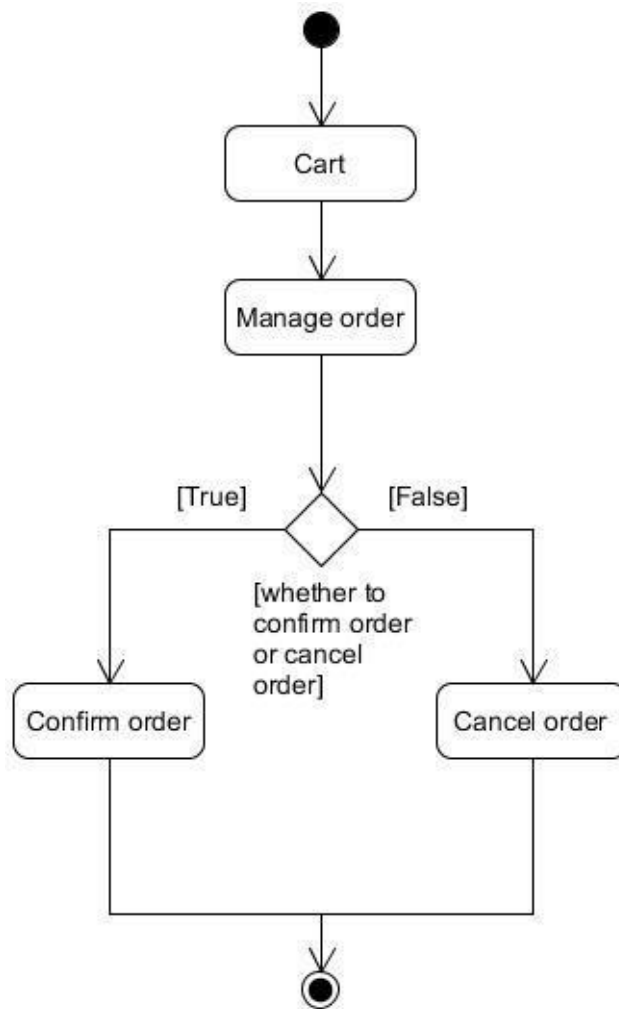


Figure 9. Customer order activity diagram

# Online Pizza Ordering System

## 3.2.6. Addfooditem activity diagram

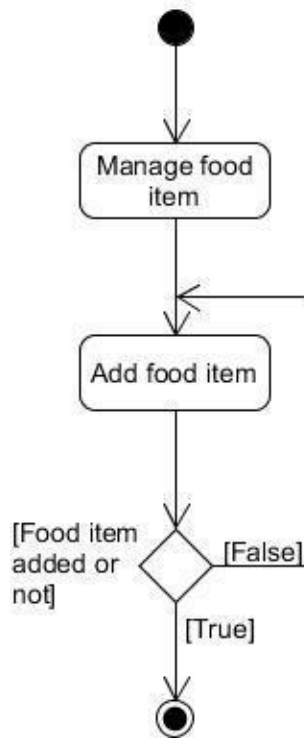


Figure 10. Add food item activity diagram

# Online Pizza Ordering System

## 3.2.7. Update food item activity diagram

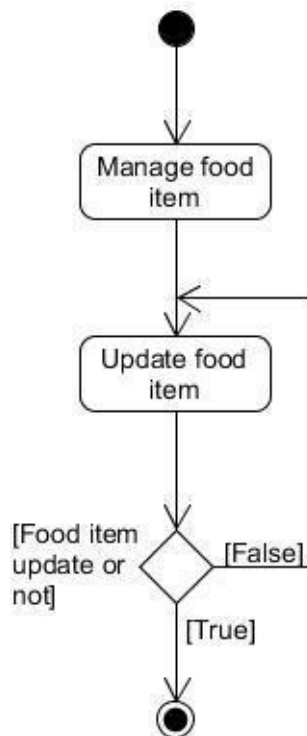


Figure 11. Update food item activity diagram

# Online Pizza Ordering System

## 3.2.8. Delete food item activity diagram

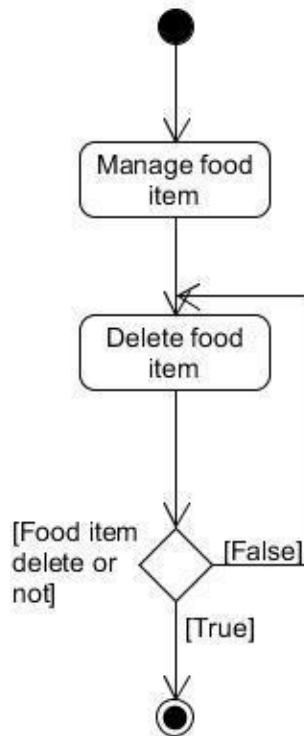
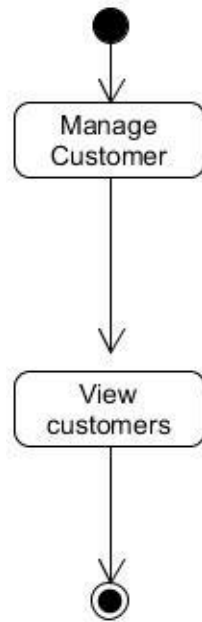


Figure 12. Delete food item activity diagram



# Online Pizza Ordering System

## 3.2.9. View customers activity diagram



**Figure 13. View customers activity diagram**

# Online Pizza Ordering System

## 3.2.10. Block customers activity diagram

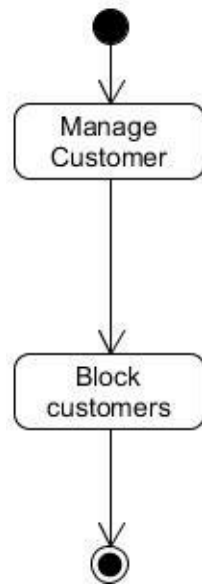


Figure 14. Block customers activity diagram

# Online Pizza Ordering System

## 3.2.11. Delivery boy order status activity diagram

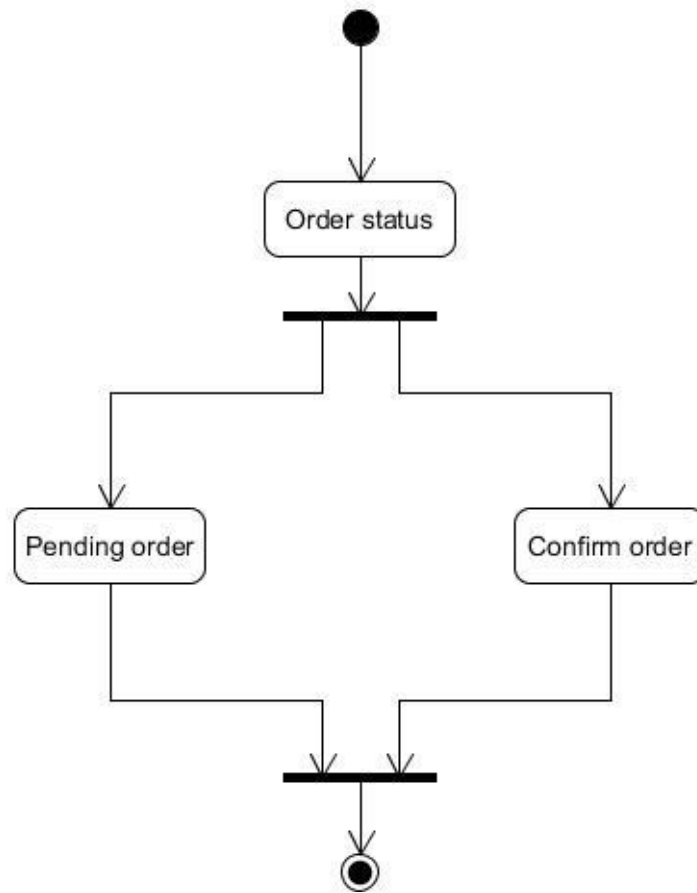


Figure 15. Delivery boy order status activity diagram

## 4. System Design

### 4.1. Data Dictionary, Integrity constraints

#### 4.1.1. Customer master

No	Field	Datatype	constraints	Description
1	Customer_id	Int	Primary key	Store id of customer
2	Customer_name	varchar(30)	Notnull	Store name of customer
3	Customer_phonenum	varchar(10)	Notnull	Store contact number of customer
4	Customer_email	varchar(50)	Notnull	Store email address of customer
5	Customer_gender	varchar(1)	Notnull	Store gender of customer
6	Customer_city	varchar(15)	Notnull	Store city of customer
7	Customer_address	varchar(100)	Notnull	Store address of customer
8	Customer_password	varchar(20)	Notnull	Store password of customer
9	Customer_status	int(1)	Notnull	Store status account delete or not

Table 1 Customer\_master

#### 4.1.2. Delivery\_boy\_master

No	Field	Datatype	Constraint	Description
1	Delivery_boy_id	Int	Primary key	Store id of Delivery boy
2	Delivery_boy_name	varchar(30)	Notnull	Store name of Delivery boy
3	Delivery_boy_age	Int	Notnull	Store age of Delivery boy
4	Delivery_boy_Phonenum	varchar(10)	Notnull	Store contact of Delivery boy
5	Delivery_boy_gender	varchar(1)	Notnull	Store gender of Delivery boy
6	Delivery_boy_address	varchar(100)	Notnull	Store address of Delivery boy
7	Delivery_boy_status	int(1)	Notnull	Store status of Delivery boy

Table 2 Delivery\_boy\_master

# Online Pizza Ordering System

## 4.1.3. Category

No	Field	Datatype	Constraint	Description
1	Category_id	Int	Primary key	Store id of category of pizza
2	Category name	varchar(20)	Notnull	Store name of category of pizza
3	Category status	Int	Notnull	Store status of category

Table 3 Category

## 4.1.4. Toppings\_master

No	Field	Datatype	Constraint	Description
1	Topping_id	Int	Primary key	Store id of topping
2	Topping_name	varchar(15)	Notnull	Store name of topping
3	Topping_price	varchar(10)	Notnull	Store price of topping
4	Topping_status	int(1)	Notnull	Store status of topping

Table 4 Topping\_master

## 4.1.5. Drink\_master

No	Field	Datatype	Constraint	Description
1	Drink_id	Int	Primary key	Store id for drink
2	Drink_name	varchar(20)	Notnull	Store name of drink
3	Drink_category	varchar(4)	Notnull	Store category of drink
4	Drink_price	decimal(3,2)	Notnull	Store price of drink
5	Drink_description	varchar(30)	Notnull	Store description of drink
6	Drink_status	int(1)	Notnull	Store status of drink

Table 5 Drink\_master

## 4.1.6. Food\_master

No	Field	Datatype	Constraint	Description
1	Food_id	int	Primary key	Store id of food item
2	Category_id	int	Foreign key	Store id of category of food item
3	Food_name	varchar(25)	Notnull	Store name of food item
4	Food_size	varchar(1)	Notnull	Store size of food item
5	Food_description	varchar(50)	Notnull	Store description of food item
6	Food_price	decimal(4,2)	Notnull	Store price of food item
7	Food_status	int(1)	Notnull	Store status of food item

Table 6 Food\_master

# Online Pizza Ordering System

## 4.1.7. Customer\_order

No	Fields	Datatype	Constraint	Description
1	Customer_order_id	int	Primary key	Store id of order
2	Customer_id	int	Foreign key	Store id of customer
3	Delivery_boy_id	int	Foreign key	Store id of Delivery boy
4	Drink_id	int	Foreign key	Store id of drink
5	Food_id	int	Foreign key	Store id of food item
6	Topping_id	int	Foreign key	Store id of topping
7	Item_quantity	int	Notnull	Store quantity of fooditem
8	Total_price_sum	decimal(4,2)	Notnull	Store total price of order
9	Order_status	int	Notnull	Store status of order

Table 7 Customer\_order

## 4.1.8. Bill\_master

No	Fields	Datatype	Constraint	Description
1	Bill_id	int	Primary key	Store id of bill
2	Customer_order_id	int	Foreign key	Store id of order
3	Order_date	date	Notnull	Store date of purchase
4	Order_time	time	Notnull	Store time of purchase
5	Payment_type	varchar(10)	Notnull	Store type of payment
6	Total_amount	decimal(5,2)	Notnull	Store total amount of order
7	Order_address	varchar(50)	Notnull	Store address of customer
8	Bill_Status	int	Notnull	Store status of bill

Table 8 Bill\_master

## 4.1.9. Review\_master

No	Fields	Datatype	Constraint	Description
1	Review_id	int	Primary key	Store id of review
2	Food_id	int	Foreign key	Store id of fooditem
3	Drink_id	int	Foreign key	Store id of Drink
4	Ratings	varchar(5)	Notnull	Store rating of fooditem
5	Review_comment	varchar(50)	Notnull	Store comment of customer
6	Review_Status	int	Notnull	Store status of bill

Table 9 Review\_master

## Online Pizza Ordering System

### 4.1.9. Add\_to\_cart

No	Fields	Datatype	Constraint	Description
1	Cart_id	int	Primary key	Store id of cartitems
2	Customer_id	int	Foreign key	Store id of Customer
3	Product_name	varchar(20)	Foreign key	Store name of product
4	Product_photo	varchar(200)	Notnull	Store photoname of product
5	Product_size	varchar(10)	Notnull	Store size of product
6	Quantity	int	Notnull	Store quantity of product
7	toppings	Varchar(30)	Null	Store name of toppings
8	Product_prise	Decimal(7,2)	Notnull	Store price of products
9	Total_price	Decimal(7,2)	Notnull	Store total price of products

Table 10 Add\_to\_cart

# Online Pizza Ordering System

## 4.2 User interface design

### 4.2.1. Vistor page

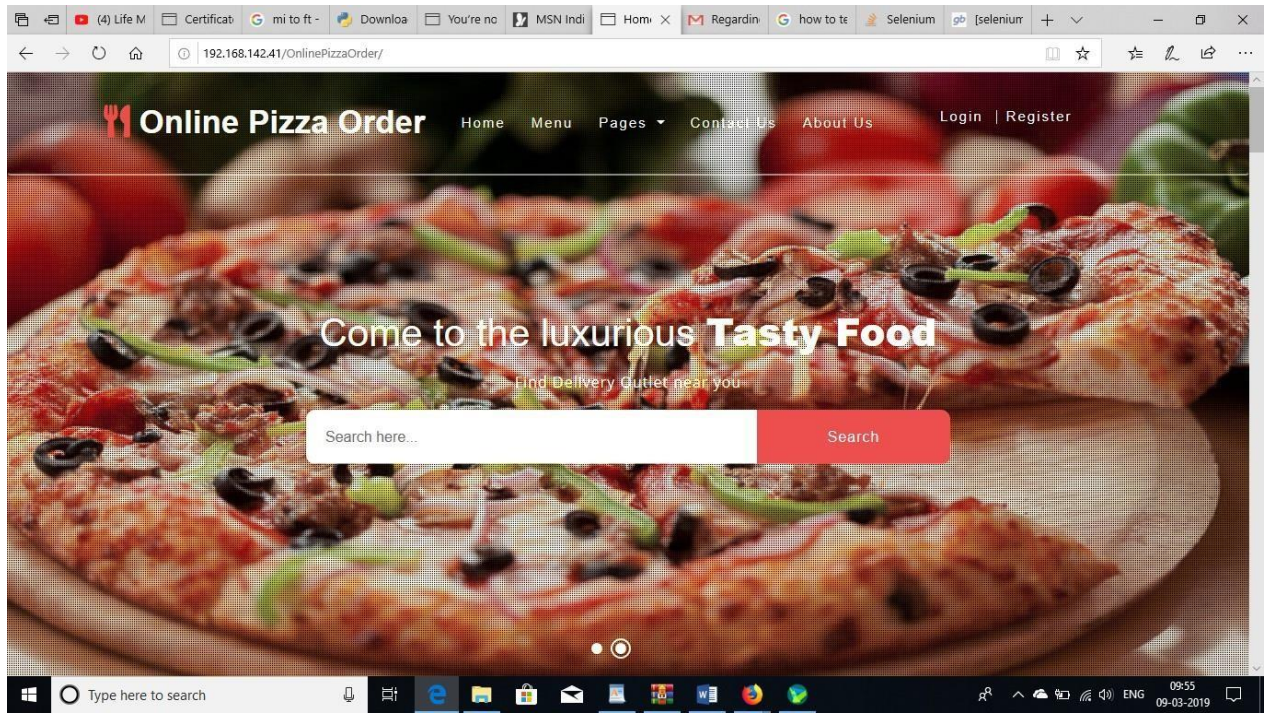


Figure 16. Visitor page



# Online Pizza Ordering System

## 4.2.2. Visitor menu

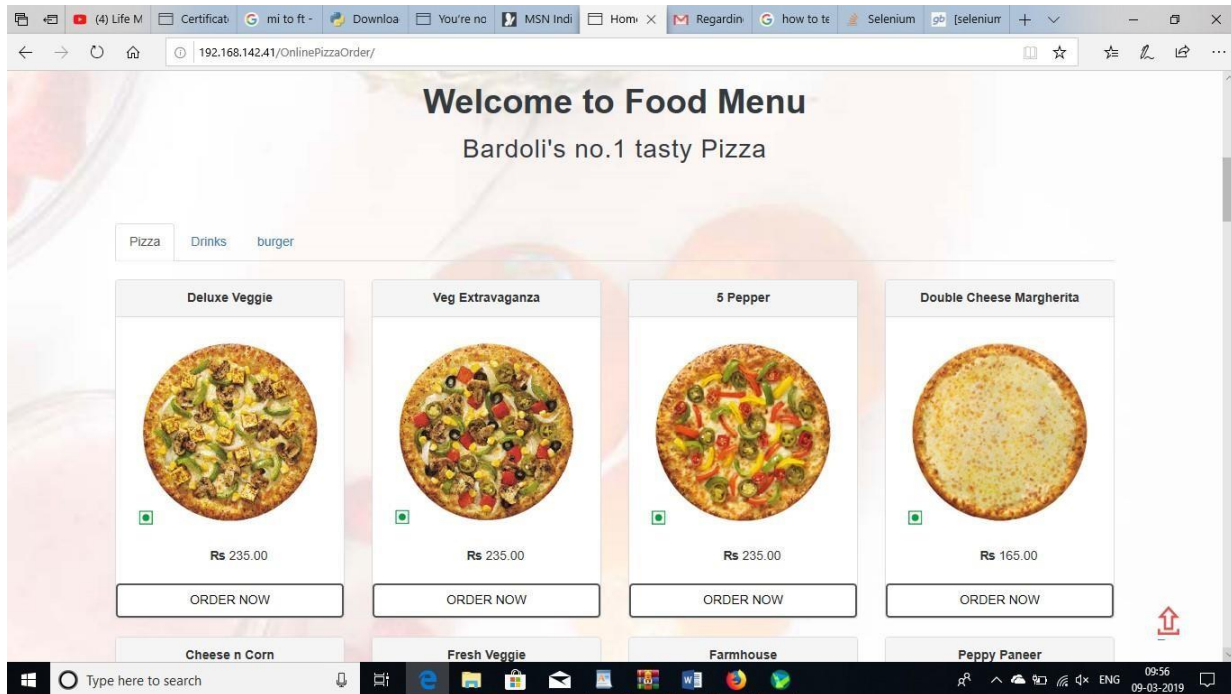


Figure 17.Visitor menu

## 4.2.3. Login page

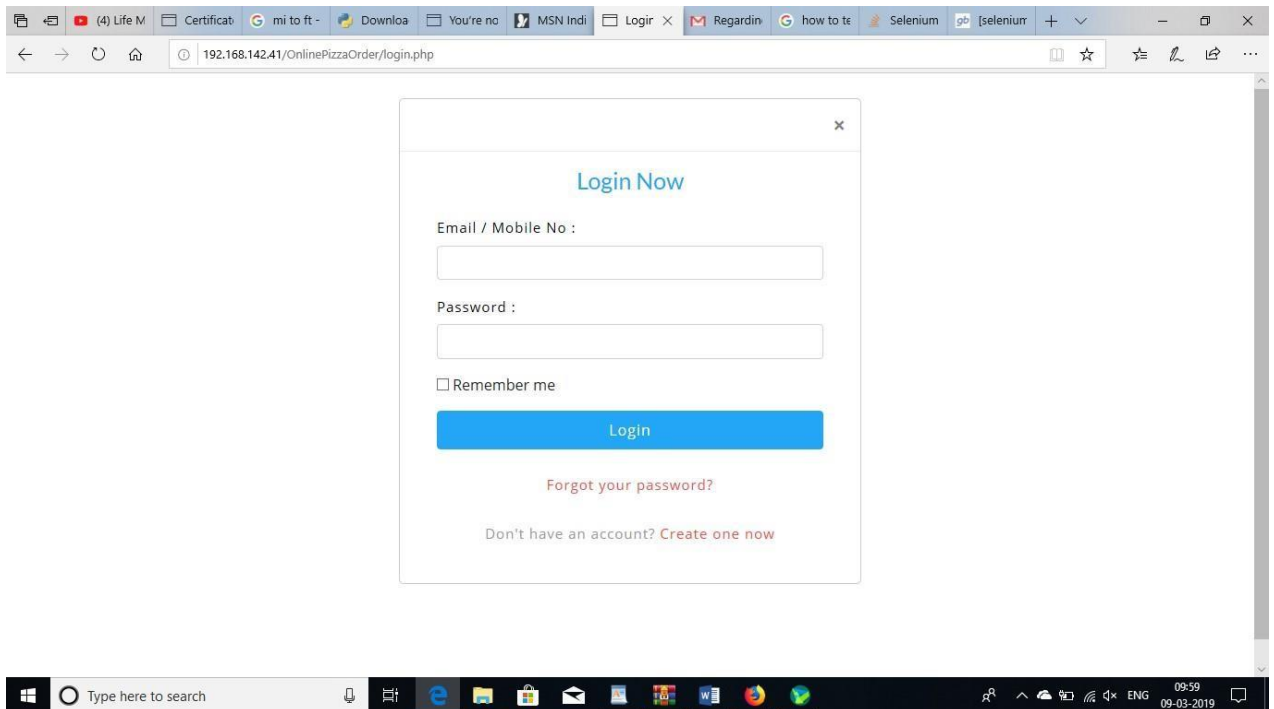
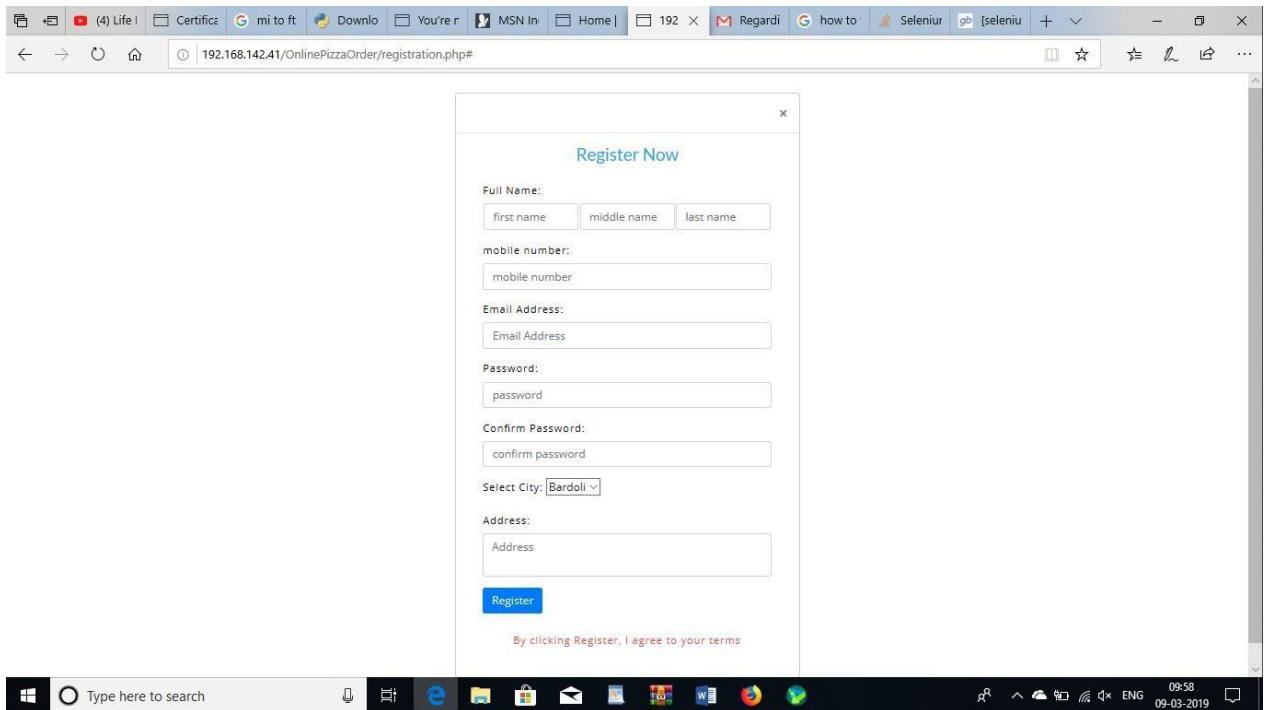


Figure 18. Login page

# Online Pizza Ordering System

## 4.2.4. Registration page



The screenshot shows a web browser window with the address bar displaying `192.168.142.41/OnlinePizzaOrder/registration.php#`. The page features a "Register Now" modal form with the following fields:

- Full Name: (first name, middle name, last name)
- mobile number: (mobile number)
- Email Address: (Email Address)
- Password: (password)
- Confirm Password: (confirm password)
- Select City: (Bardoli)
- Address: (Address)

A blue "Register" button is located at the bottom of the form. Below the button, a small red text line reads: "By clicking Register, I agree to your terms". The Windows taskbar at the bottom shows the search bar and various application icons.

Figure 19. Registration page

## 4.2.5. Customer side menu

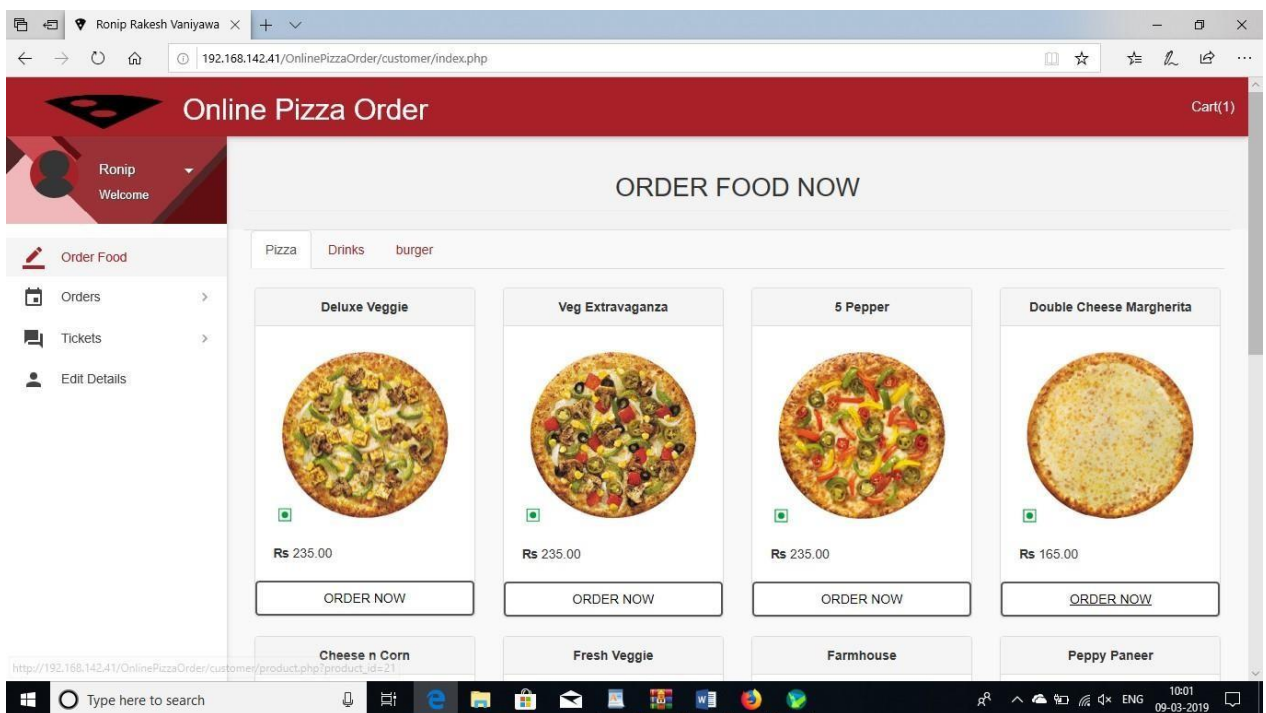


Figure 20. Customer side menu

# Online Pizza Ordering System

## 4.2.6. Customer product details

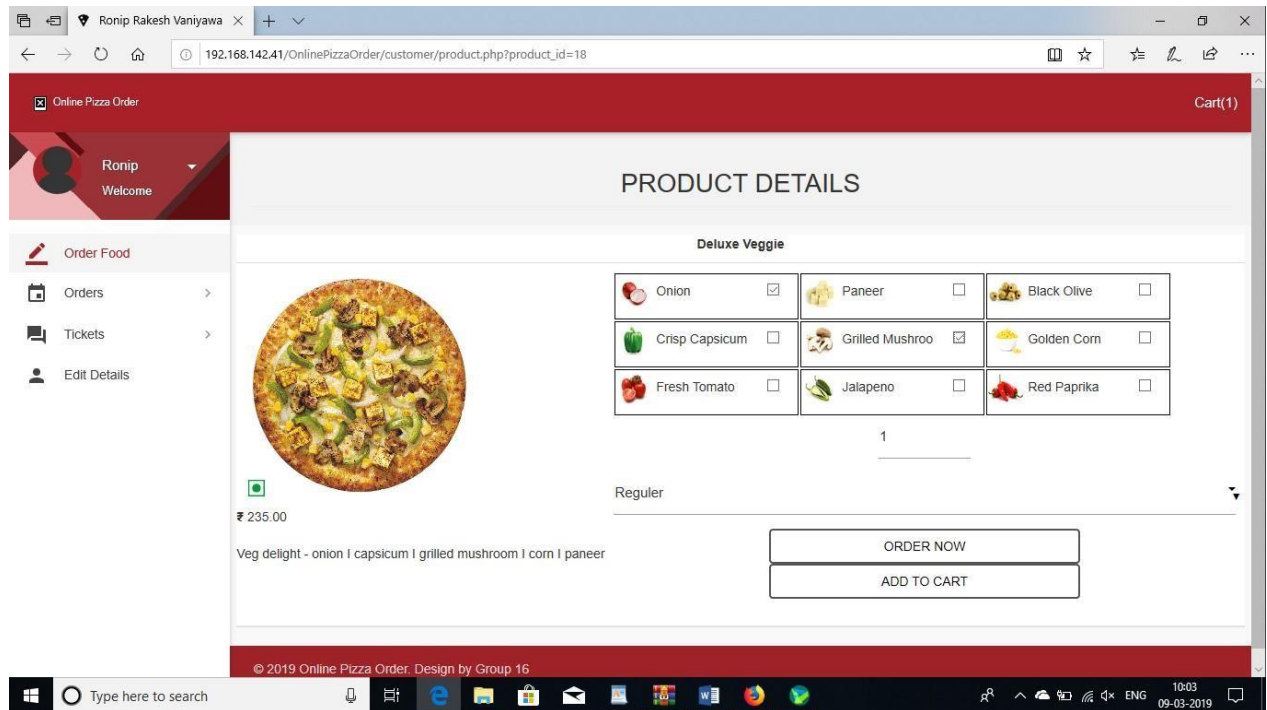


Figure 21. Customer product detail

## 4.2.7. Add to cart

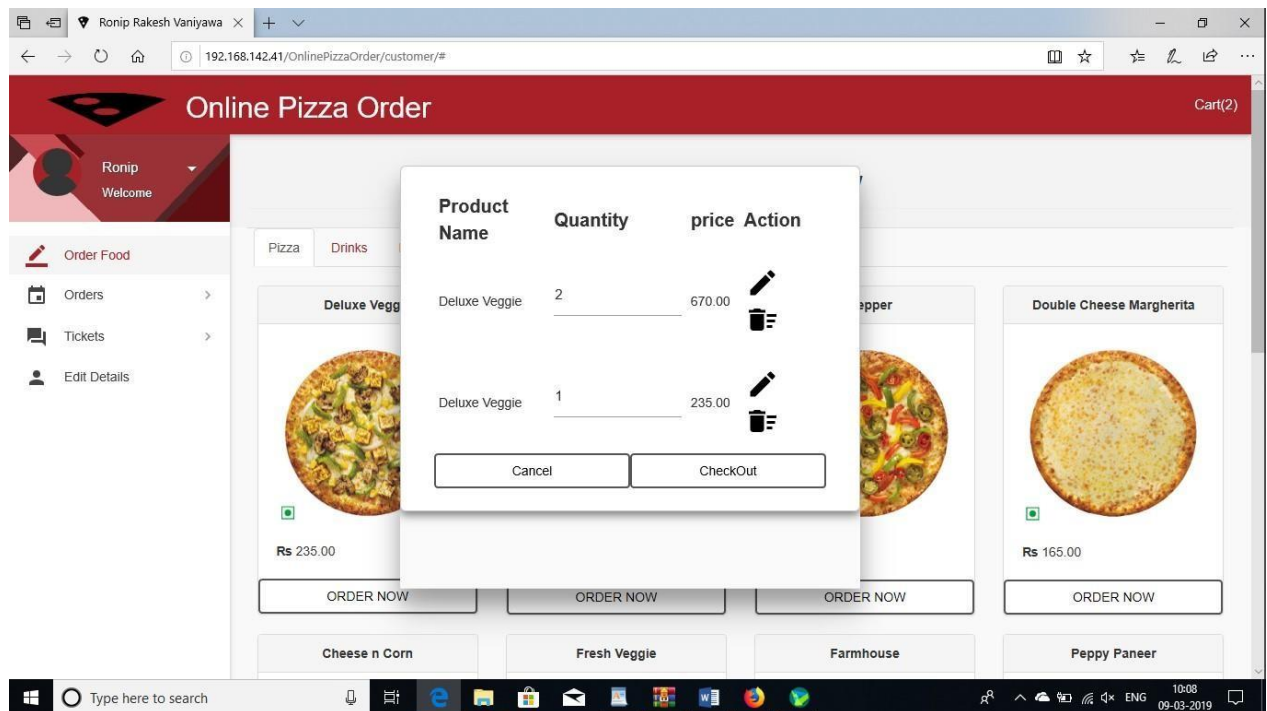


Figure 22. Add to cart

# Online Pizza Ordering System

## 4.2.8. Customer bill generation

The screenshot shows a web browser window with the URL `192.168.142.41/OnlinePizzaOrder/customer/total_amount.php?btn=order`. The page has a red header with a user profile icon and the name "Ronip Welcome". A sidebar on the left contains links: "Order Food", "Orders", "Tickets", and "Edit Details". The main content area is titled "Total Amount" and contains a table with the following data:

No	Product Name and Size	Price(per product)	Quantity	Total Price
1	Deluxe Veggie-Reguler	₹235	1	₹235
2	Toppings :			
	1 Onion	₹50.00		
Total Amount		-	-	₹285

Below the table are two buttons: "Cancel" and "Confirm". At the bottom of the page, there is a footer that reads "© 2019 Online Pizza Order. Design by Group 16".

Figure 23. Customer bill generation

## 4.2.9. Admin Menu

The screenshot shows a web browser window with the URL `192.168.142.41/OnlinePizzaOrder/admin/index.php`. The page has a red header with the text "Online Pizza Order" and links for "Menu", "Maintenance", and "Logout". The main content area is titled "MENU" and contains a grid of pizza options. The first row includes "Deluxe Veggie" (Rs 235.00), "Veg Extravaganza" (Rs 235.00), "5 Pepper" (Rs 235.00), and "Double Cheese Margherita" (Rs 165.00). The second row includes "Cheese n Corn", "Fresh Veggie", "Farmhouse", and "Peppy Paneer". Each pizza option is accompanied by a small image of the pizza.

Figure 24. Admin menu

# Online Pizza Ordering System

## 4.2.10. Admin add product

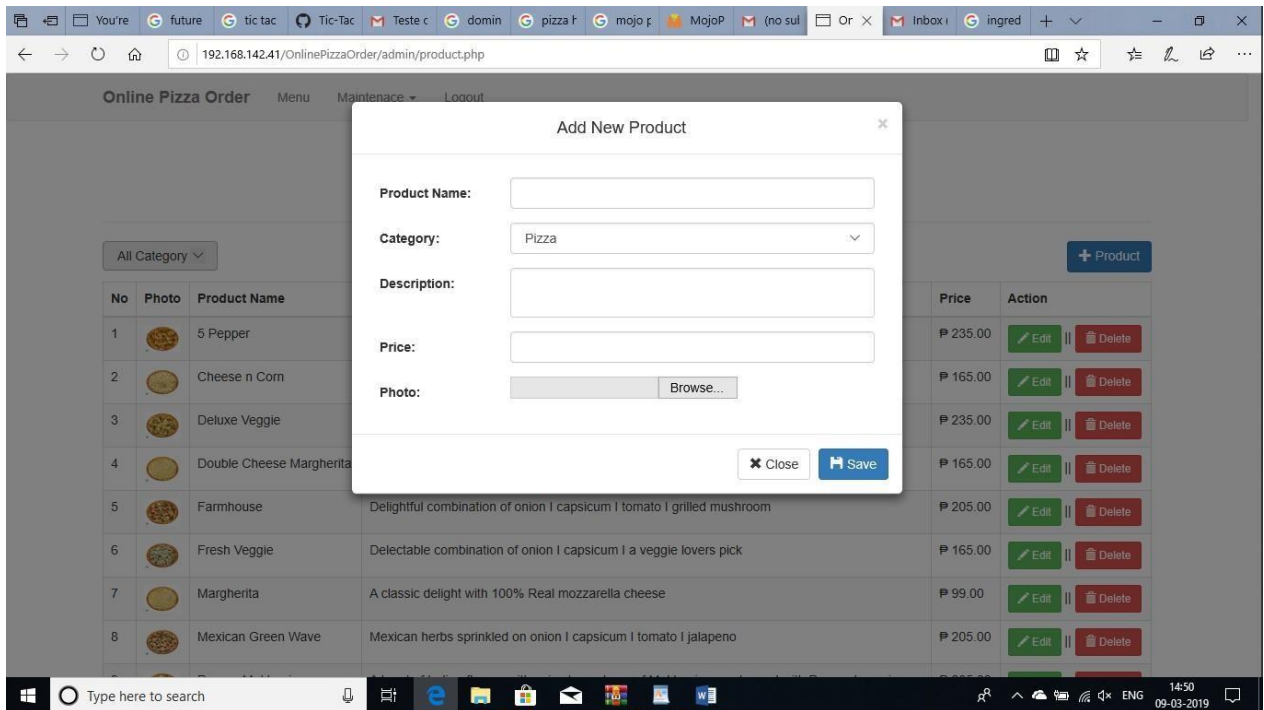


Figure 25. Admin add product

## 4.2.11. Admin add toppings

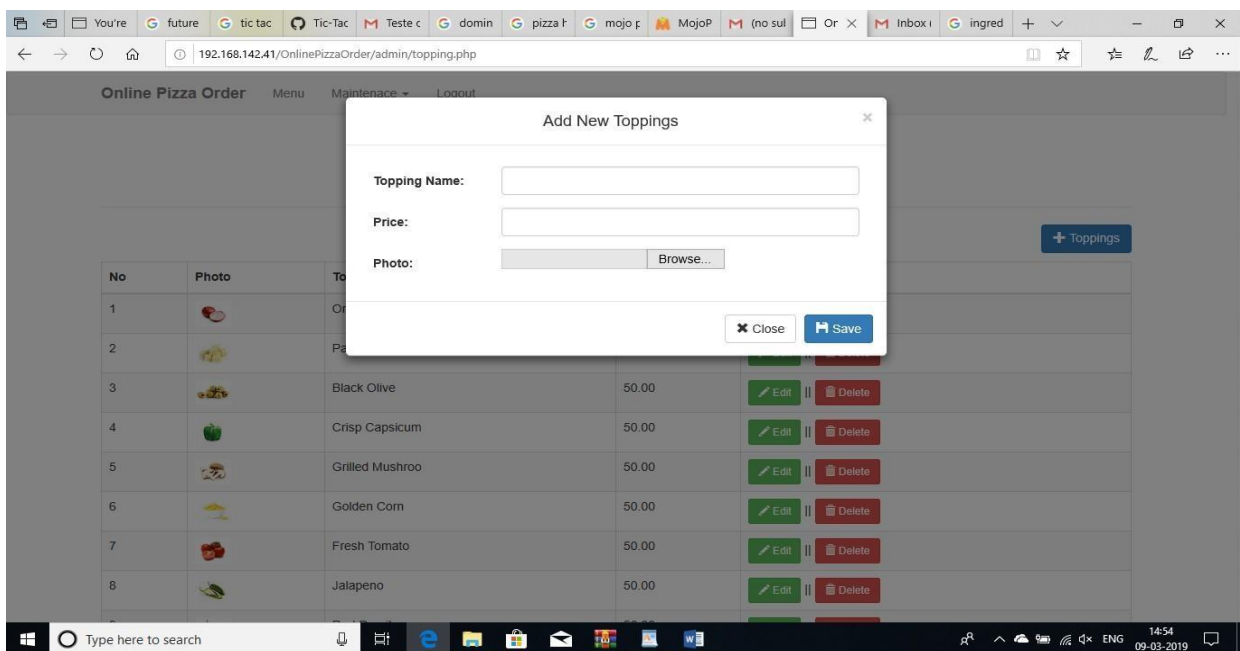


Figure 26. Admin add topping

# 5. Testing

### a. Test Cases

#### 1. Registration test case

Sr.no	Description	Input	Expected Result	Actual Result	Test Results
1	Null entry in required field.	Null input in all fields.	Error message will be Fields are empty.	Error message will be Field are empty.	Pass
2	Enter invalid email id	Parth@@gmail.com	Error message invalid email format	Error message Invalid email format	Pass
3	Enter password & confirm password not match	Password='*****'confirm password='*****'	Error message password and confirm password do not match.	Error message password and confirm password do not match.	Pass



4	Enter mobile number	89*****41	Error message invalid mobile no. Enter 10 digit number only.	Error message invalid mobile no. Enter 10 digit number only.	Pass
5	select City	Null .	Error message no city has not been selected.	Error message no city has not been selected.	Pass
6	Enter address	395009,surat,adajan.	Error message no city has not been selected.	Error message no city has not been selected.	Pass

# Online Pizza Ordering System

Table 8 Registration test case

## 2. Login test case

Sr no.	Description	Input	Expected Results	Actual Results	Test Results
1	Enter empty details	Email=null password=null	Error message	Error message	Pass
2	Wrong entry of details	Email='*****'	Error message mail and password is invalid	Username and password is invalid	Pass
3	Enter valid username and password	Email='*****@gmail.com' password='*****'	Navigate to homepage	Navigate to homepage	Pass

Table 9 Login test case



## Online Pizza Ordering System

### 3. Forgot password test case

Sr no.	Description	Input	Expected Results	Actual Results	Test Results
1	Enter invalid or not exist username	username='r*****@gmail.com'	Error message username doed not exist	Error message username does not exist	Pass
2	Enter valid username	username='P*****@gmail.com'	Successfully send new password to registered email	Successfully new password has been sent	Pass

Table 10 Forgot password test case

### 4. Customer profile test case

Sr no.	Description	Input	Expected Results	Actual Results	Test Results
1	User click on Profile	profile	Option :1 see profile 2 Update profile	Option :1see profile 2update profile	Pass
2	Click on profile to see	See profile	Details of user	Details of user	Pass
3	Update profile	Update profile	Change details of user .	Change details of users	Pass

Table 11 Customer Profile test case

# Online Pizza Ordering System

## 5. Manage food item test case

Sr no.	Description	Input	Expected Results	Actual Results	Test Results
1	Enter empty details	Null	Error message please enter all details	Error message please enter all details	Pass
2	Add food name, size, price, category, description.	name='pizza'size='m'price='250'category='cheese burst'	Added succesfully	Added succesfully	Pass
3	Update food name, size, price, category, description.	name='pizza',size='L'price='250'category='cheeseburst'.updatesize	Updated succesfully	Updated succesfully	Pass
4	Delete food name, size, price, category, description.	Delete id='1'	Deleted succesfully	Deleted succesfully	Pass

Table 12 Manage food item test case

# Online Pizza Ordering System

## b. Testing Reports

### 1.Login testcase

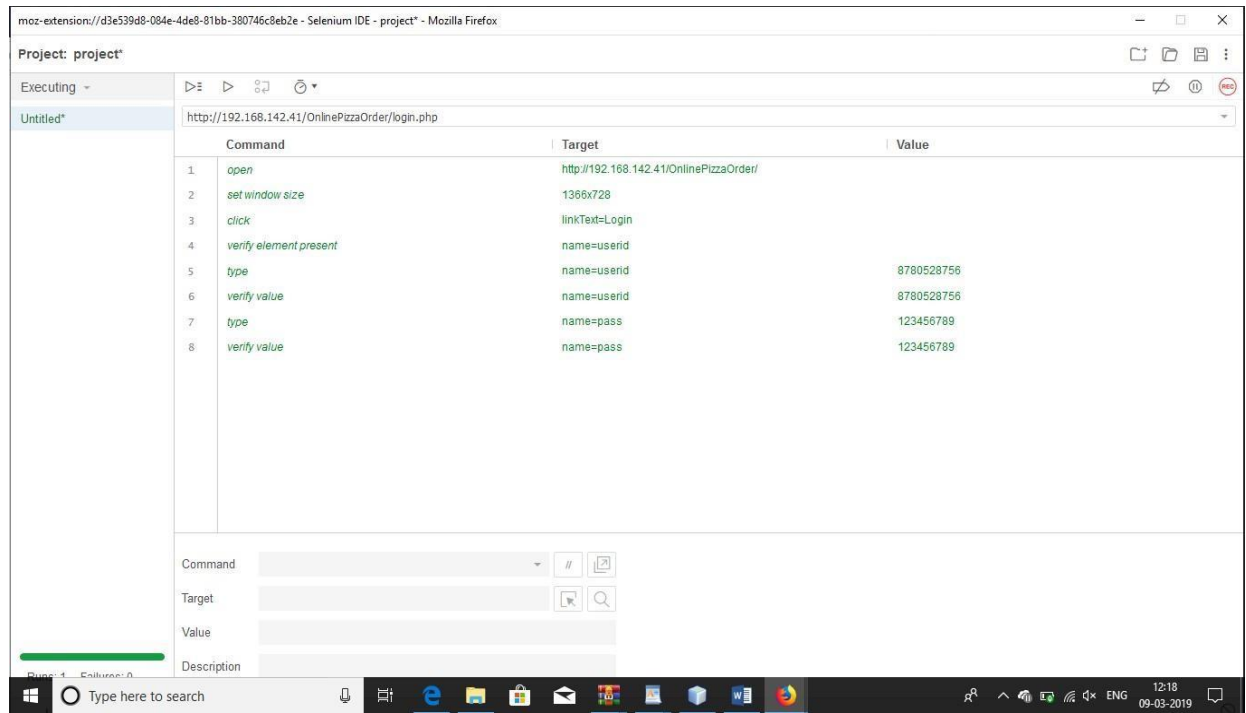
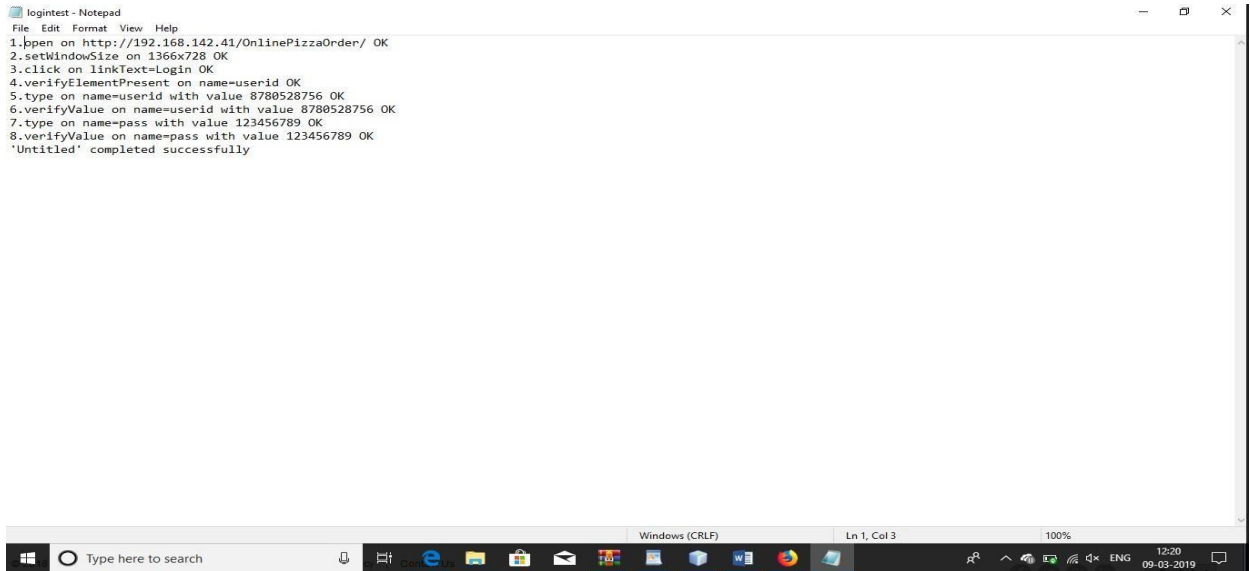


Figure 27. Login testcase

# Online Pizza Ordering System

## 2.Login testcase log

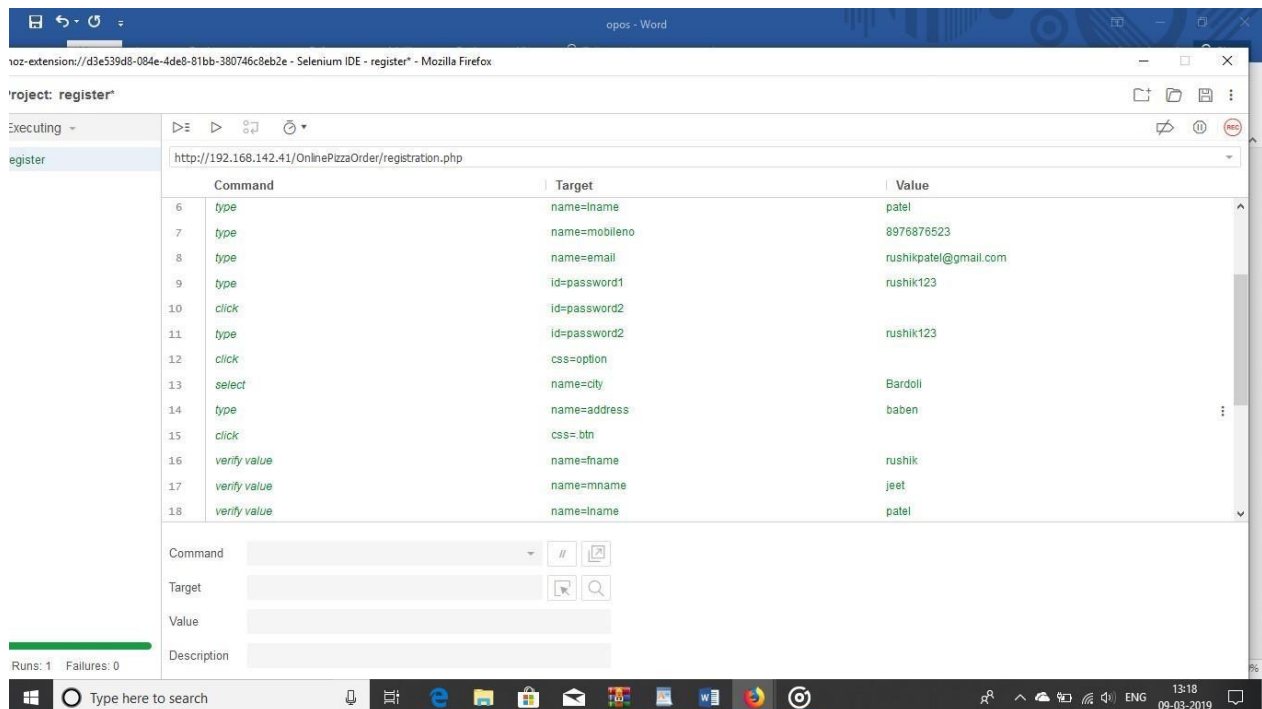


The screenshot shows a Notepad window titled 'logintest - Notepad'. The text inside contains a list of Selenium commands and their results for a login test. The commands include opening a URL, setting window size, clicking the login link, and verifying the user ID and password fields. The test is marked as 'completed successfully'.

```
logintest - Notepad
File Edit Format View Help
1.open on http://192.168.142.41/OnlinePizzaOrder/ OK
2.setWindowSize on 1366x728 OK
3.click on linkText=Login OK
4.verifyElementPresent on name=userid OK
5.type on name=userid with value 8780528756 OK
6.verifyValue on name=userid with value 8780528756 OK
7.type on name=pass with value 123456789 OK
8.verifyValue on name=pass with value 123456789 OK
'Untitled' completed successfully
```

Figure 28. Login testcase logs

## 3.Register testcase



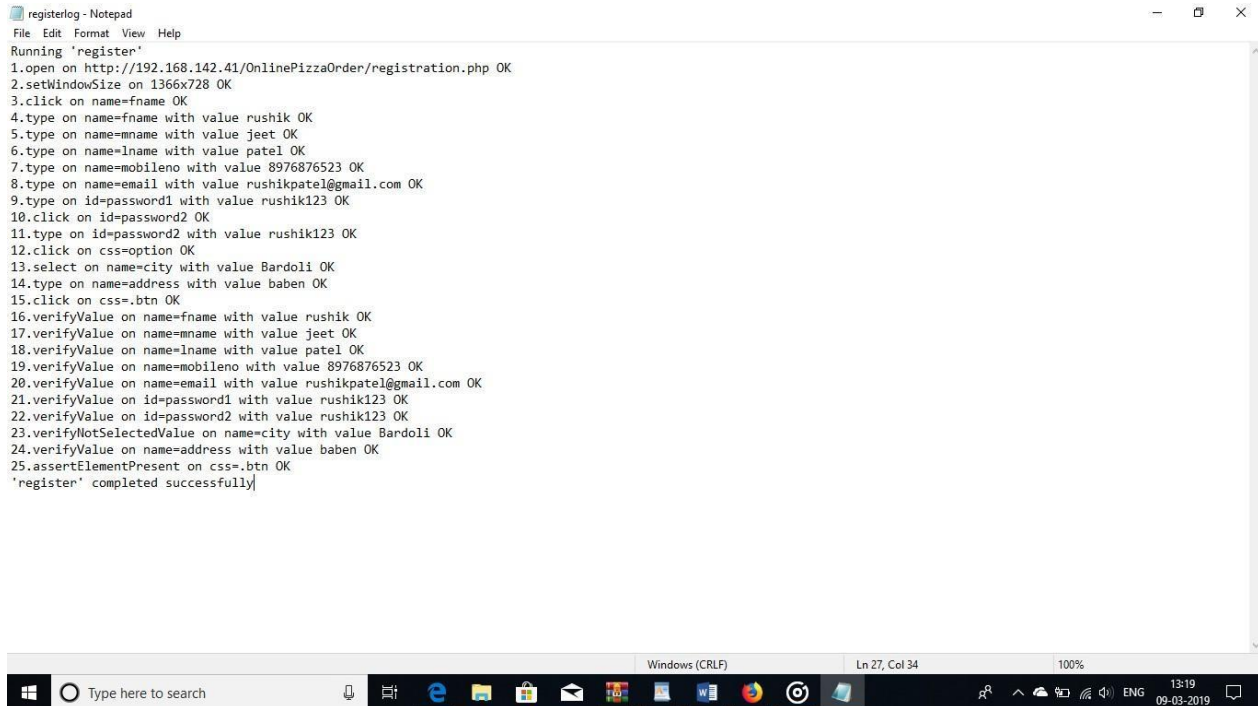
The screenshot shows the Selenium IDE interface with a project named 'register'. The test case is titled 'register' and is currently executing. The URL is 'http://192.168.142.41/OnlinePizzaOrder/registration.php'. The test steps are listed in a table below.

Command	Target	Value
type	name=name	patel
type	name=mobileno	8976876523
type	name=email	rushikpatel@gmail.com
type	id=password1	rushik123
click	id=password2	
type	id=password2	rushik123
click	css=option	
select	name=city	Bardoli
type	name=address	babbar
click	css=btn	
verify value	name=name	rushik
verify value	name=mname	jeet
verify value	name=name	patel

Figure 29. Register testcase

# Online Pizza Ordering System

## 4.Register testcase log

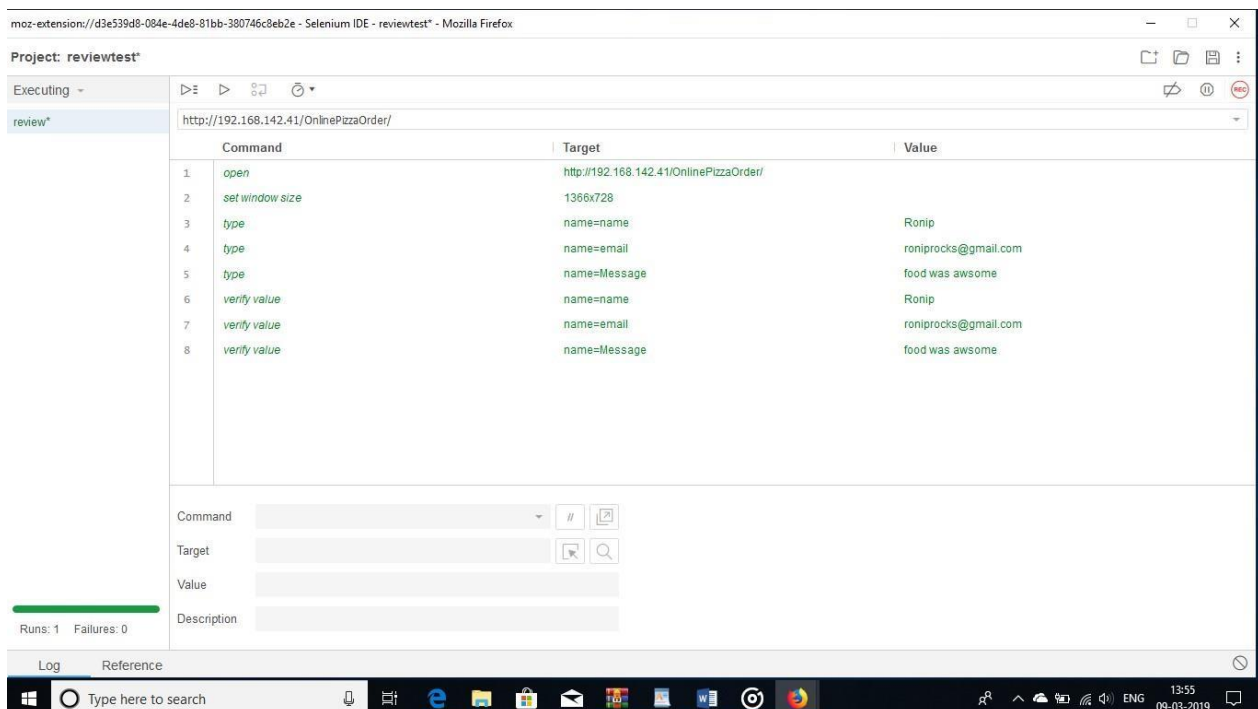


The screenshot shows a Notepad window titled 'registerlog - Notepad'. The text inside is a Selenium test log for a registration process. The log starts with 'Running 'register'' and lists 25 steps, each followed by 'OK'. The steps include opening the browser, setting window size, clicking on the first name field, typing 'rushik' for first name, 'jeet' for middle name, 'patel' for last name, typing '8976876523' for mobile number, typing 'rushikpatel@gmail.com' for email, typing 'rushik123' for password, clicking on the confirm button, selecting 'Bardoli' for city, typing 'bablen' for address, clicking on the submit button, and finally verifying all entered values and asserting the submit button is present. The log ends with ''register' completed successfully'.

```
File Edit Format View Help
Running 'register'
1.open on http://192.168.142.41/OnlinePizzaOrder/registration.php OK
2.setWindowSize on 1366x728 OK
3.click on name=fname OK
4.type on name=fname with value rushik OK
5.type on name=mname with value jeet OK
6.type on name=lname with value patel OK
7.type on name=mobileno with value 8976876523 OK
8.type on name=email with value rushikpatel@gmail.com OK
9.type on id=password1 with value rushik123 OK
10.click on id=password2 OK
11.type on id=password2 with value rushik123 OK
12.click on css=option OK
13.select on name=city with value Bardoli OK
14.type on name=address with value bablen OK
15.click on css=.btn OK
16.verifyValue on name=fname with value rushik OK
17.verifyValue on name=mname with value jeet OK
18.verifyValue on name=lname with value patel OK
19.verifyValue on name=mobileno with value 8976876523 OK
20.verifyValue on name=email with value rushikpatel@gmail.com OK
21.verifyValue on id=password1 with value rushik123 OK
22.verifyValue on id=password2 with value rushik123 OK
23.verifyNotSelectedValue on name=city with value Bardoli OK
24.verifyValue on name=address with value bablen OK
25.assertElementPresent on css=.btn OK
'register' completed successfully
```

Figure 30. Register testcase log

## 5.Review testcase



The screenshot shows the Selenium IDE interface in Mozilla Firefox. The project is named 'reviewtest\*'. The test case 'review\*' is selected, and the URL is 'http://192.168.142.41/OnlinePizzaOrder/'. The test case is being executed, and the results are shown in a table.

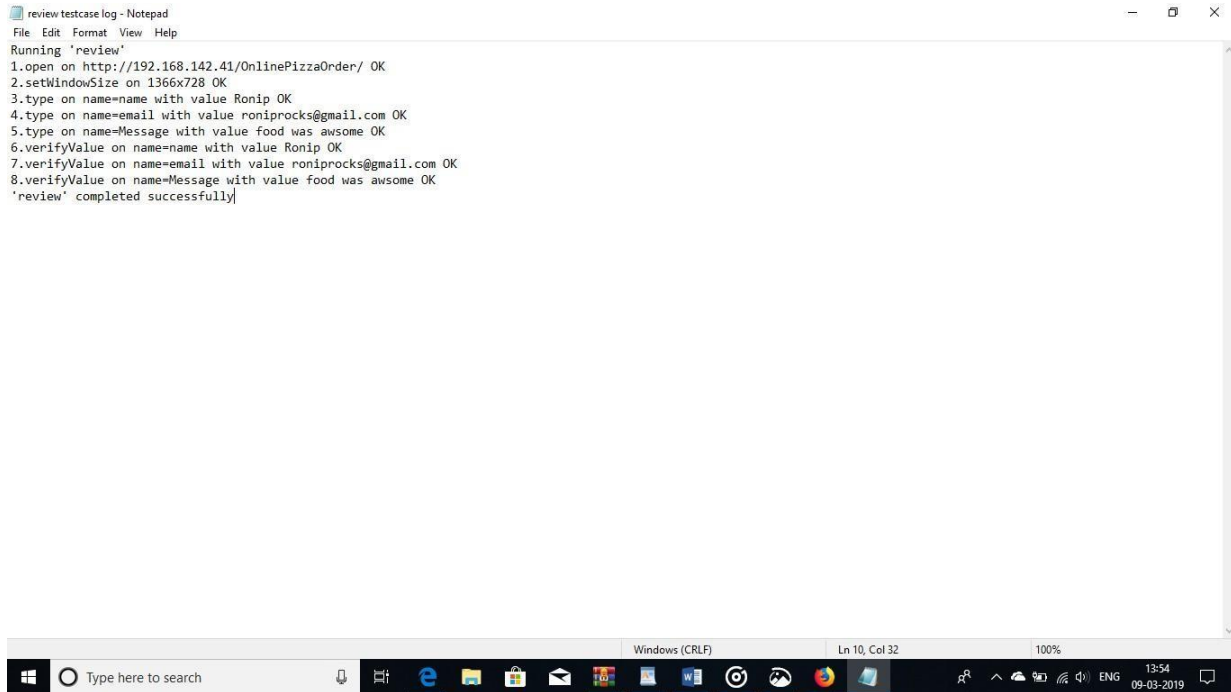
Command	Target	Value
1. open	http://192.168.142.41/OnlinePizzaOrder/	
2. set window size	1366x728	
3. type	name=name	Ronip
4. type	name=email	ronipricks@gmail.com
5. type	name=Message	food was awesome
6. verify value	name=name	Ronip
7. verify value	name=email	ronipricks@gmail.com
8. verify value	name=Message	food was awesome

At the bottom, there is a status bar showing 'Runs: 1 Failures: 0'.

Figure 31. Review testcase

# Online Pizza Ordering System

## 6. Review testcase log



```
review testcase log - Notepad
File Edit Format View Help
Running 'review'
1.open on http://192.168.142.41/OnlinePizzaOrder/ OK
2.setWindowSize on 1366x728 OK
3.type on name=name with value Ronip OK
4.type on name=email with value roniprocks@gmail.com OK
5.type on name=Message with value food was awesome OK
6.verifyValue on name=name with value Ronip OK
7.verifyValue on name=email with value roniprocks@gmail.com OK
8.verifyValue on name=Message with value food was awesome OK
'review' completed successfully
```

Figure 32. Review testcase log

### **6. Future scope and further enhancement of the Project**

- Mobile application for Online Pizza Ordering system.
- To build Delivery module for this system.

### **7. Learning during Project Work, i.e. “Experience of Journey during Project Duration”**

- To establish coordination between project partners.
- New way of coding we learn.
- Learn testing technique in project
- To solve problem, arise in coding by discussion and by applying new technique.

## 6. References

### 8.1 Web References

- <https://pizzaonline.dominos.co.in/?>
- <https://online.pizzahut.co.in/home>
- <https://mojopizza.in/category>

### 8.2 Book References

- Roger S. Pressman, Software Engineering, McGraw-Hill
- Yogesh Singh and Ruchika Malhotra, Object Oriented Software Engineering
- Kendall & Kendall, System Analysis and Design, PHI- Ninth Edition



