

THE SUPERIOR COLLEGE LAHORE



Faculty of Computer Science & IT

Final Year Project PROJECT REPORT

Bawarchi Khana

Project ID: [FYP-BSCS-F18-030]

Project Team

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Project Report

Bawarchi Khana

Change Record

Author(s)	Version	Date	Notes	Supervisor's Signature
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			<Changes Based on Feedback From Faculty>	
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			<Changes Based on Feedback from Supervisor>	

APPROVAL

PROJECT SUPERVISOR

Comments: _____

Name: _____

Date: _____

Signature: _____

PROJECT MANAGER

Comments: _____

Date: _____

Signature: _____

HEAD OF THE DEPARTMENT

Comments: _____

Date: _____

Signature: _____

Dedication

This work is dedicated to our supervisor (Mr. Umair Zafar), family, teachers and friends who always supported us in our educational career.

Acknowledgements

We are really thankful to MR. Umair Zafar who has gave us the golden opportunity to do this wonderful project under his supervision. During the documentation of Bawarchi Khana we have done a lot of research and have learnt many concepts regarding FYP. We would like to express our great appreciation to All Teachers, Family and Friends.

Executive Summary

In this project we are going to make a website about delivering the healthy, hygienic and fresh home cooked food. Bawarchi Khana is a unique and expansive food delivery service. There are many restaurants who claims to give healthy hygienic food but they are very expensive. So they are out of the budget of normal people or student who came to big cities for study or job. These people can't manage the expensive food from such restaurants. We propose a venture that involves only delivering food made and provided by others. Our business aims to fill that portion of the market that has so far been neglected. And the small restaurants deliver unhealthy food which causes them health problem. So we are looking to give solution to that problem. We have planned to cook fresh hygienic food with low price as compared to the big restaurants but our quality of food is same as the big restaurants. We will provide the best food for everyone. We would like to expand the service to delivering items from door by door. Through our website customer will deliver the food to your door step. Most of the companies deliver the food which is not healthy, but we will make sure the food we deliver is fresh and healthy. There are already some people who working on such a thing but most of the people are not happy by their services due to late and unhealthy food. We as a team, lives in hostel we know the value of healthy food.

While food delivery is not an innovative idea in itself, our plan addresses delivery in a new way. There is no direct competition for a business of this sort because our services include such a wide range of delivery options. We would only have substitute competition in the form of restaurants that already deliver. Not only will we corner a segment of this market, but we are proposing to launch our business at both a time and place where it has high potential.

Placing an order with Bawarchi Khana could not be more convenient. Customers visit our website and choose from a variety of recent home cooked food. We will offer links to online menus for the establishments we will travel to. The customer will place their order through us, and will receive the total cost which includes the price of food and tax from our Bawarchi as well as our own delivery charge. The customer then has the option to pay online with a credit card or choose the option to pay with cash, which we will collect at the time of delivery. Our concept for the website is in development, but we expect to receive a high volume of our orders via the internet as opposed to our delivery phone number.

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Chapter 1

Introduction

Chapter 1: Introduction

Bawarchi Khana is a website about delivering the healthy, hygienic and fresh home cooked food. Bawarchi Khana is a unique and expansive food delivery service.

The purpose of Bawarchi Khana is to solve the many hazards and problems as possible. Main purpose is to provide the platform through which people can order desi food cooked in our home kitchens. Bawarchi Khana provides the best home cooked food. Specially for hostile Student or people who come to big cities for job or for studying. We will make sure that the food we provide going to be fresh and cooked in a home kitchen. Platform is for both seller (chef) and buyers (customers). We make a plan to organize and control activities so that the project is carried out as efficiently as possible despite all the risks.

1.1. Background

It has become a tradition to make use of e-commerce websites in companies which has overcome the boundaries related to market gap and developing era. Ecommerce has resolved the issues like time consuming issue and space issue. It allows them to globalize their operations and offer a more personalized service to the customers. Many entrepreneurs are taking advantages from e-commerce websites and have become eligible in establishing new business models and making new startups.

E-commerce has greatly evolved for forty years of existence and is still evolving continuously. Such as ecommerce websites there are many websites related to food providing at web shop that are becoming helping hands for humans and Bawarchi Khana is one of them.

1.2. Motivations and Challenges

As the famous saying, to serve humanity is biggest inspiration. Now a day's life has become easier and people prefer to ready mate material instead of cooking so we are coming with homemade desi cooked food which is available for every person because we are providing desi food and it will be hygienic and cheap.

We are coming with the platform for both chefs and customers. We propose a venture that involves only homemade food which is cooked by seller customers (Chefs) and available for buyer customers. Certain restaurants and fast food locations do not offer the convenience of a

delivery service. Our business aims to fill that portion of the market that has so far been neglected. And the small restaurants deliver unhealthy food which causes them health problem. We would like to expand the service to delivering items from door by door. Through our website customer will deliver the food to your door step.

As it is also our personal review that there must be platform for women who want to work and earn but are restricted to go out from their homes for working.

Above is the motivations that inspire us to introduce Bawarchi Khana like software in Pakistan.

Now we have some challenges which we have to face. The challenges include:

- Capital
- Bawarchi Khana implementation
- Overlapping
- Unrealized Value
- Training
- Acceptance

Capital:

For startup of the business a lot of money is required for purchasing the Google APIs. Domain and servers are required to manage the website. Much cost will be required for marketing purposes as many of the ecommerce websites like Bawarchi Khana are working in the market. No doubt people will attract to homemade food but for making awareness much cost will be served.

Bawarchi Khana implementation:

To implement Bawarchi Khana is also a big challenge. We require support of stall who will make awareness to women and also make awareness about software who to use the website. Reduction in staff can lead problems for illiterate users to get login.

Overlapping:

Overlapping is responsible for major inefficiencies and wasted budgets, time and resources. When we enhancement of our software or make any upgradation, it should not be crash.

Unrealized Value:

When deliverables arrive late or are incomplete, the business loses opportunities whether to earn revenues, acquire customers or perhaps fix a problem. We as a team together will complete our project on a time, so we could earn profit.

Training:

Training is essential for implementing any new software in any era. Training provides better progress and higher user satisfaction. Training is costly and one of the challenges too.

Acceptance:

Acceptance to something newly developed software is time taking. It is very difficult to make people interested in something. So for this we will provide users with promotions or deals.

1.3. Goals and Objectives

- **Provision of Platform:**

Main goal is we are providing platform for household women who want to work and earn but are restricted. As we are providing platform for both chefs and customers.

- **Website:**

Website is free to use and available for all.

- **Satisfaction of Customer:**

One of purpose is to satisfy the customers and fulfill their needs by providing them with desirable, hygienic and fresh food.

- **Satisfaction of Chef:**

One of purpose is to satisfy the chefs with customer's order placement so passionate chefs can make earning through their passion.

- **Time saving:**

Some people do not have time to cook food in their homes and some are also living away from their home like in hostels for studies and job purposes. So we are providing them with platform from where they can make order and can save their time.

- **Reasonable price:**

Our purpose is to provide the service to our customers in a reasonable price.

- **Food Quality Assurance:**

People living away from homes are fed up from restaurant stuffs. So our purpose is to give hygienic, fresh and quality food cooked in quality assured oil.

1.4. Literature Review/Existing Solutions

There are some systems working same as Bawarchi Khana website but we are coming with some innovation that we are providing the platform to women who are passionate about cooking and baking but are unable to reach consumers directly. Cheetay tiffin is one of the competitor who has predefined menu of the week. Its naturally phenomena that the person fed up by executing the same routine same as the students or the Cheetay consumers fed up with fixed menu offered by them. HomeChef is another competitor which is working only in Karachi in fixed area facilitating with home as well as restaurants food. Dastarkhawan is another platform working as a medium between customers they provide the food picture and restaurants phone number, consumer make contact at that number to order food. They are providing platform for customers to order food from there desirable restaurants.

1.5. Gap Analysis:

Bawarchi Khana:

Bawarchi Khana is a website about delivering the healthy, hygienic and fresh home cooked food. Bawarchi Khana is a unique and expansive food delivery service. Main purpose is to provide the platform through which people can order desi food cooked in our home kitchens. Bawarchi Khana provides the best home cooked food.

1.Current State:

As we are starting a new startup the initial state of Bawarchi Khana will need to acquire changes according to customer needs.

2. Future State:

All issues which users face in initial step will be highly appreciated and will bring under consideration and steps should be taken out for their improvement.

3.Improvement Steps:

We will make some changes after testing the software. Change only require when it needed.

Fixing the bugs and improve the project as per requirement.

1.6. Proposed Solution

In this project we are going to make a website about delivering the healthy, hygienic and fresh home cooked food. We designed this platform for two types of customers, one is seller customer and other is purchaser customer. Seller customer displays his food on website and if the food is desirable for purchaser then purchaser customer will order it.

Seller customer (Chef):

- We will keep seller information confidential by encrypting data.
- After every posting food will be rated by customers.
- Price will be managed and often discounts will be offer by money which is earned by business.
- Restricted about the adds. Adds related to food can be patched.
- Update and delete features are provided.

Purchaser customer:

- We will keep seller information confidential by encrypting data.
- Purchaser address and phone no# will keep encrypted and data is not shown to other customers.
- Food will deliver to exact location.
- Rating of purchaser customers will be highly appreciated.

We will provide those people with the home cooked food without any chemical additives. So it will be better in sense of health and money because it's cheaper than others. We will give the food you want us to cook for you so don't need to eat repeated food in the mess. Our food will be 100% purely cooked with healthy ingredients. To enable customers to order meals that are uploaded by woman on website. The customers have a visual confirmation that the order was placed correctly. Customers can read out food ingredients before ordering. Our food will be served in sealed boxing so it will stay fresh until you open the box.

1.7. Project Plan

Bawarchi Khana website plan includes proper documentation, frontend coding, backend coding and testing. For example, we first plan our work, and then gather the requirements, design the project's interface, develop it test it and implement it. The second technique we are using in our project to plan our workings is Gantt chart. With the help of this tool, we set timelines so that we can complete our work within time efficiently. Our WBS and Gantt chart defines 6 components of our project, i.e. Project planning, requirement analysis, designing phase, development, testing and integration/implementation phase and our Gantt chart defines the time period in which all work will be done step by step and will be managed equally by all team members.

1.7.1. Work Breakdown Structure

1. Initiation

- 1.1 training
- 1.2 pre project plan
- 1.3 review project by team

2. Taking requirement

- 2.1 Gather requirement
- 2.2 Requirement analysis
- 2.3 Verification
- 2.4 Validation

3. Analysis and design documentation

- 3.1 Analysis document
- 3.2 Risk management
- 3.3 System architect design

4. Software product

- 4.1 Prototyping
- 4.2 Front-end design
- 4.3 Back-end design
- 4.4 Database integration

5 Software testing

5.1 Unit testing

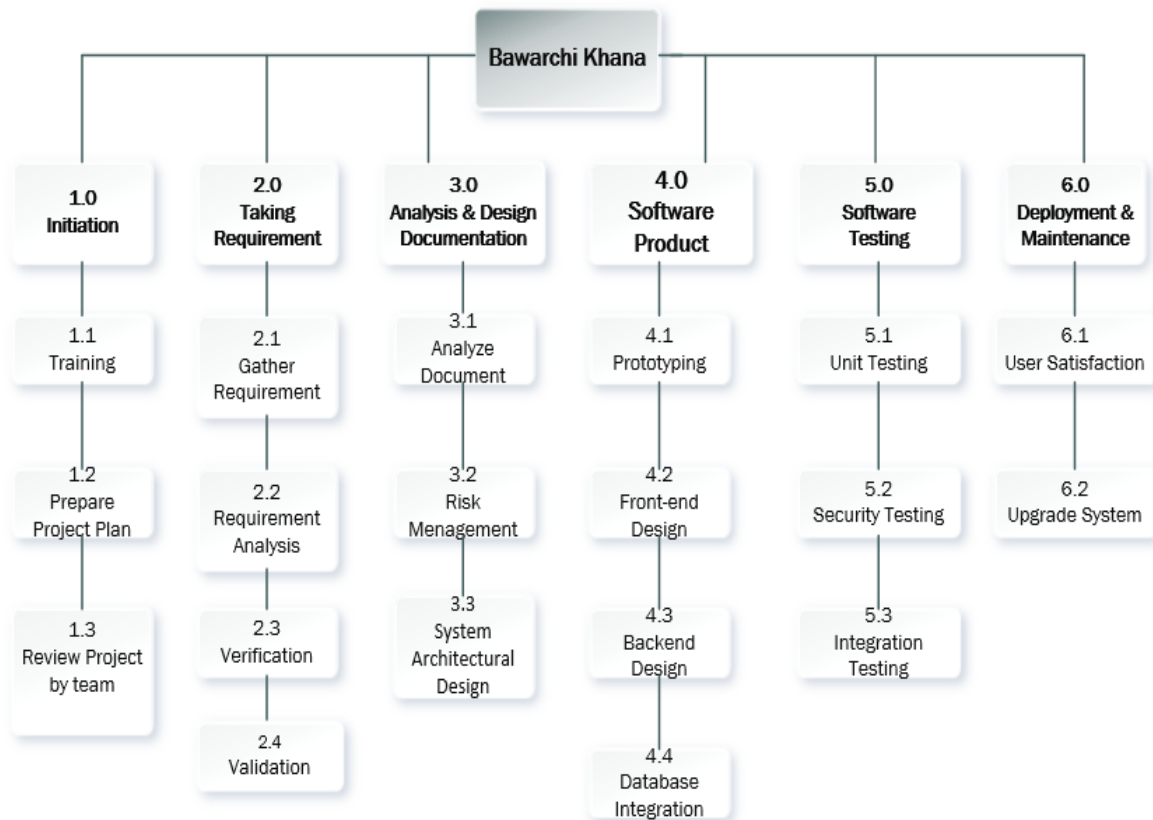
5.2 Security testing

5.3 Integration testing

6. Deployment and maintenance

6.1 User satisfaction

6.2 Upgrade system



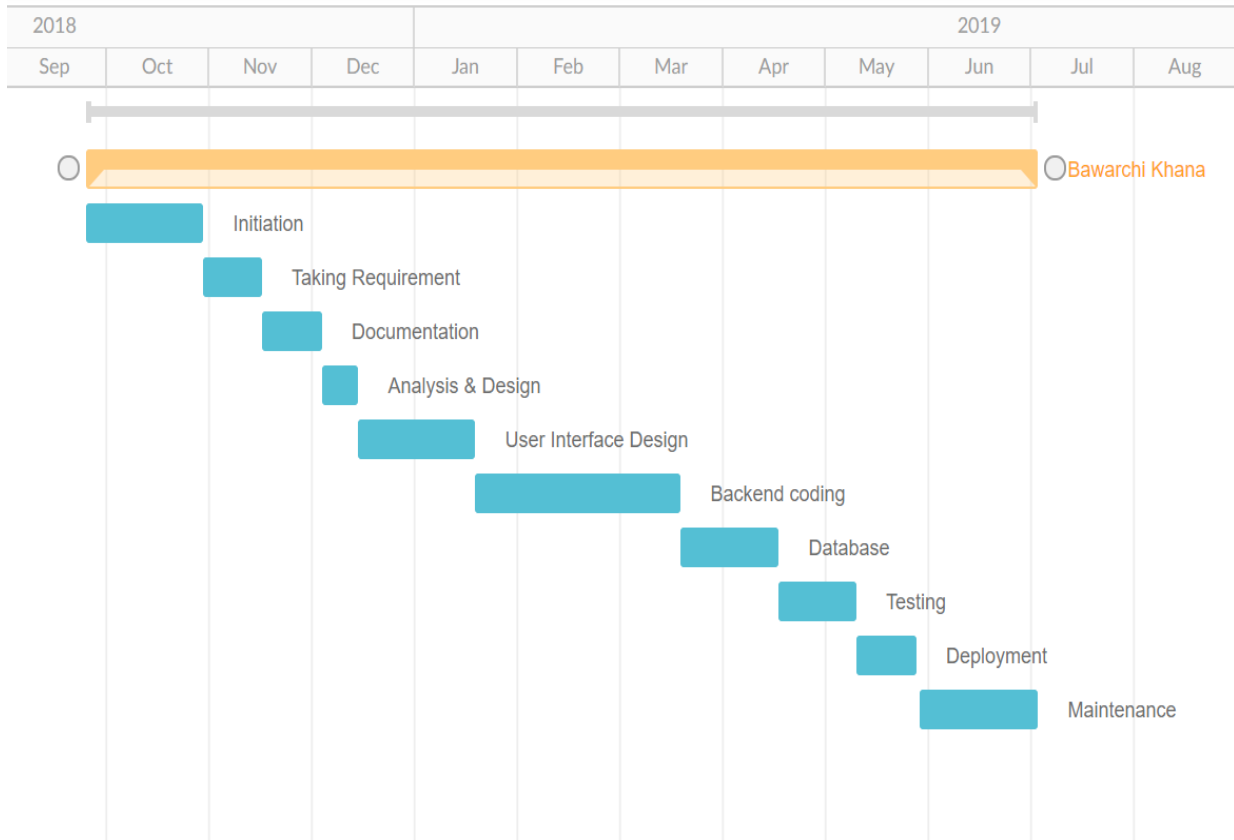
1.7.2. Roles & Responsibility Matrix

The purpose of roles & responsibility matrix is to identify who will do what.

WBS #	WBS Deliverable	Activity #	Activity Complete to the Deliverable	Duration (# of Days)	Responsible Team Member(s) & Role(s)
1	Initiation	001	Documentation	30	Monis,Umair,Zaeem
2	Taking Requirement	002	Documentation	15	Zaeem
3	Documentation	003	Documentation	15	Umair
4	Analysis & design	004	Documentation	10	Monis
5	User interface Design	005	PHP coding	30	Zaeem
6	Backend coding	006	PHP coding	50	Monis
7	Database	007	PHP coding	25	Umair
8	Testing	008		20	Monis, Zaeem
9	Deployment	009	Documentation (User Manual)	15	Zaeem, Umair
10	Maintenance	010		30	Umair, Monis

1.7.3. Gantt Chart

Task name	Start date	End date	Duration (day)	Progress	Estimation (hours)	Cost	Assigned
<input type="checkbox"/> Total estimate	25/09/2018	02/07/2019	241		2800	0	
<input type="checkbox"/> Bawarchi Khana	<input type="circle" value="i"/> 25/09/2018	02/07/2019	241	0%	2800	0	
Initiation	<input type="circle" value="i"/> 25/09/2018	29/10/2018	30	0%	720	0	<input type="circle" value="Z"/> <input type="circle" value="M"/> <input type="circle" value="U"/>
Taking Requirement	<input type="circle" value="i"/> 30/10/2018	15/11/2018	15	0%	0	0	<input type="circle" value="Z"/> Z...
Documentation	<input type="circle" value="i"/> 16/11/2018	03/12/2018	15	0%	120	0	<input type="circle" value="U"/> U...
Analysis & Design	<input type="circle" value="i"/> 04/12/2018	14/12/2018	10	0%	80	0	<input type="circle" value="M"/> M...
User Interface Design	<input type="circle" value="i"/> 15/12/2018	18/01/2019	30	0%	240	0	<input type="circle" value="Z"/> Z...
Backend coding	<input type="circle" value="i"/> 19/01/2019	18/03/2019	50	0%	400	0	<input type="circle" value="M"/> M...
Database	<input type="circle" value="i"/> 19/03/2019	16/04/2019	25	0%	200	0	<input type="circle" value="U"/> U...
Testing	<input type="circle" value="i"/> 17/04/2019	09/05/2019	20	0%	320	0	<input type="circle" value="Z"/> <input type="circle" value="M"/>
Deployment	<input type="circle" value="i"/> 10/05/2019	27/05/2019	15	0%	240	0	<input type="circle" value="Z"/> <input type="circle" value="U"/>
Maintenance	<input type="circle" value="i"/> 29/05/2019	02/07/2019	30	0%	480	0	<input type="circle" value="M"/> <input type="circle" value="U"/>



1.8. Report Outline

The title page:

- **Title:** Bawarchi Khana
- **Author:**
 - ✓ Umair Azhar
 - ✓ Monis Amin
 - ✓ Zaeem Ahmed
- **Course:** Final Year Project

Abstract:

- **Brief description:**

In this report, we have briefly described about the project and its features. We describe all the functionalities of customers and chefs. all work is shown out with the help of WBS and Gant Chart.

- **Method:** This report is generated using research based techniques.

Table of contents:

- Introduction
 - Background
 - Motivations and challenges
 - Goals and objectives
 - Literature review/existing solutions
 - Gap Analysis
 - Proposed solution
 - Project plan
 - WBS
 - Roles and responsibility matrix
 - Gantt chart
 - Report outline

Introduction:

In this chapter, we have briefly discuss about motivation and challenges, goals, objectives, project solution and project plan by making WBS and Gantt Chart.

- **Objective:**

Main goal is we are providing platform for household women who want to work and earn but are restricted. As we are providing platform for both chefs and customers.

Appendices:

- **References:**

- <https://scholarworks.gvsu.edu/cistechlib/219/>
- <https://orders2.me/5-things-your-online-ordering-system-needs/>
- <https://www.draw.io/>
- https://www.researchgate.net/figure/Food-Ordering-System-Architecture_fig4_299185219
- <https://www.studymode.com/essays/Srs-Of-Online-Pizza-Ordering-1389543.html>

- **Equipment:**

- Internet
- Laptops

Chapter 2

Software Requirement Specifications

Chapter 2: Software Requirement Specifications

2.1. Introduction

2.1.1. Purpose

The introduction of the Software Requirements Specification (SRS) provides an overview of the entire SRS with purpose, scope and overview of the SRS. The main aim of this document is to defining the problem statement.

Bawarchi Khana is a website about delivering the healthy, hygienic and fresh home cooked food. Bawarchi Khana is a unique and expansive food delivery service.

The purpose of Bawarchi Khana is to solve the many hazards and problems as possible. Main purpose is to provide the platform through which people can order desi food cooked in our home kitchens. Bawarchi Khana provides the best home cooked food. Specially for hostile Student or people who come to big cities for job or for studying. We will make sure that the food we provide going to be fresh and cooked in a home kitchen. Platform is for both seller (chef) and buyers (customers). We make a plan to organize and control activities so that the project is carried out as efficiently as possible despite all the risks.

2.1.2. Document Conventions

Main Section:

1. Font: Calibri (Body)
2. Face: Bold
3. Size: 20

Sub Section:

1. Font: Calibri (Body)
2. Face: Bold
3. Size: 16

Other Text:

1. Font: Calibri (Body)
2. Face: Normal
3. Size: 12

2.1.3. Intended Audience and Reading Suggestions

Bawarchi Khana project documentation is carried out under the supervision of Mr. Umair Zafar.

Developers are Umair, Monis and Zaeem.

Intended audience will be:

- Customers
- Chefs

Customers will see the provided menu by chefs, select the desired food and then submit for order.

Chefs will collect orders from carts which are selected by customers.

2.1.4. Product Scope

In this project we are going to make a website about delivering the healthy, hygienic and fresh home cooked food. We designed this platform for two types of customers, one is seller customer and other is purchaser customer. Seller customer displays his food on website and if the food is desirable for purchaser then purchaser customer will order it.

Seller customer(Chef):

- We will keep seller information in database.
- User dashboard is provided to the chef.
- Price will be managed and often discounts will be offer by money which is earned by business.
- Restricted about the adds. Adds related to food can be patched.
- Update and delete features are provided.

Purchaser customer:

- We will keep seller information in database.
- Purchaser address and phone no# will keep encrypted and data is not shown to other customers.
- Food will deliver to exact location.
- Dashboard is provided by customer.

2.1.5. References

- <https://scholarworks.gvsu.edu/cistechlib/219/>
- <https://orders2.me/5-things-your-online-ordering-system-needs/>
- <https://www.draw.io/>
- https://www.researchgate.net/figure/Food-Ordering-System-Architecture_fig4_299185219
- <https://www.studymode.com/essays/Srs-Of-Online-Pizza-Ordering-1389543.html>
- file:///C:/Users/Monis%20Malik/Downloads/Documents/DropIt_SRS.pdf
- <https://www.coursehero.com/file/p33tktp/15-Intended-Audience-and-Reading-Suggestions-Software-requirement-specification/>
- <https://www.smartsheet.com/free-gap-analysis-templates>
- <https://edoc.site/market-research-on-online-food-insdustry-pdf-free.html>
- https://creately.com/app/?tempID=ijb9wlak2&login_type=demo#

2.2. Overall Description**2.2.1. Product Perspective**

Bawarchi Khana website is specially designed for the women who want to earn by working but are restricted to go out. We are facilitating them with platform where they can collect orders and can make money.

Product will be easily understandable and every eye can understand the functionality by visiting the web page. It will be easy to use, easy to learn, efficient to use and satisfy the user.

All data about customers and chefs will be stored in database.

Following information will be stored:

Sign up:

Users including admin, chefs and customers have to sign up and provide information like name address and phone number.

Order detail:

Customer will select the order, type of food, order bill and total number of orders.

Chef detail:

Chef will collect the data from customer and store in database

Customer detail:

Customer will provide the delivery address where the food has to be delivered.

2.2.2. Product Functions

Account registration:

For get access user should be sign up the account.

Login account:

For already signed up user get login to web page by providing user name and password.

Search order:

Food which is desired to order, customer search in search bar and can view the list of chefs who are offering the same food.

Select order:

Customer will select the order from the list offering by chefs.

Submit order:

Customer after selecting the order will submit the order.

Shopping cart:

Customers order the food and added to the cart.

Add to cart:

When customer order multiple orders then added to cart.

Delete from cart:

Customers while ordering the order if he want to delete the order then delete from cart.

Order delivery:

Order after the completion process, ready to deliver.

Manage accounts:

Admin can update and manage the accounts.

Update accounts:

User having accounts can update their information.

Payment:

Payment against order should be paid after submitting the order.

Logout:

User should be logout from website after ordering desired food.

2.2.3. User Classes and Characteristics

System will support three type of users. Customers have access to customer functions and chefs have access to chef functionalities and admin manage all.

Customer users

- Customer will login for access.
- Search for order
- Select desired order
- Choose food
- Add order (add to cart)
- Delete order (if wrong food is added to cart)
- Submit order

Chef users

- Customer will login for access.
- Provide food menu
- Collect order
- Deliver order

- Update menu
- Delete menu

Admin users

- Login for access
- Manage account
- Provide promotions
- Control issues

2.2.4. Operating Environment

Operating environments are mentioned below:

- Software can be operated on windows, PC, laptop, tablets and mobiles.
- This software is easily executable on window 7,8,8.1 and window 10.
- Ram should be greater than 512 Mb.
- Processor will be at least dual core or above.
- Graphics should support the images of food.
- Website coding will be in PHP.

2.2.5. Design and Implementation Constraints

- Valid authentications will be used.
- Follow all the copyright and cyber laws.
- Design should be completed in the defined time.
- IEEE standards should be followed.
- Ram should be greater than 512 Mb and processor will be at least dual core or above.
- Default language will be English.

2.2.6. User Documentation

- User manual will be given with software.
- Testing report will also be attached with user manual.

- We will provide with web page named “Help”.
- **Contact us** page is provided for complaints.

2.2.7. Assumptions and Dependencies

- Bawarchi Khana website is totally free. It is available to consumers and is accessible through internet.
- Web browser must support the website (i.e. Chrome, Internet explorer)
- To assume that every user has internet connection.
- To assume that Chef should stay online(available) for collecting orders

2.3. External Interface Requirements

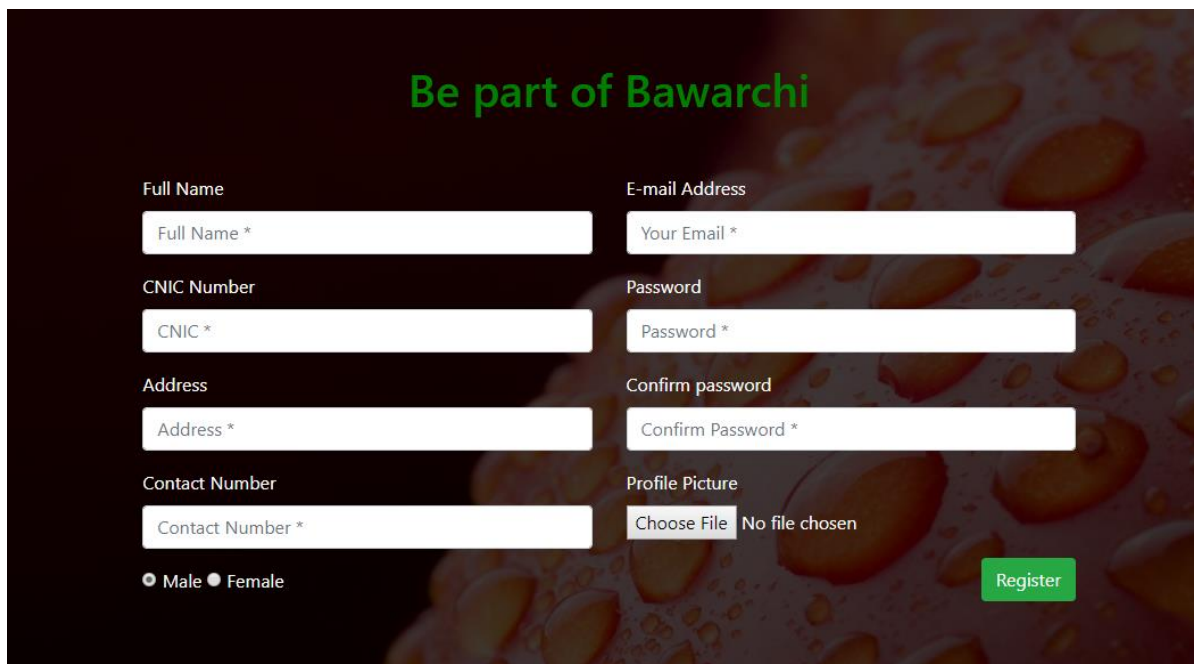
It includes hardware, software and database elements with which a system or component must interact. This information provides us how the system communicates with external components.

2.3.1. User Interfaces

Bawarchi Khana will give access to users when users are connected to internet.

Users functionalities:

- Users must have to sign up account.

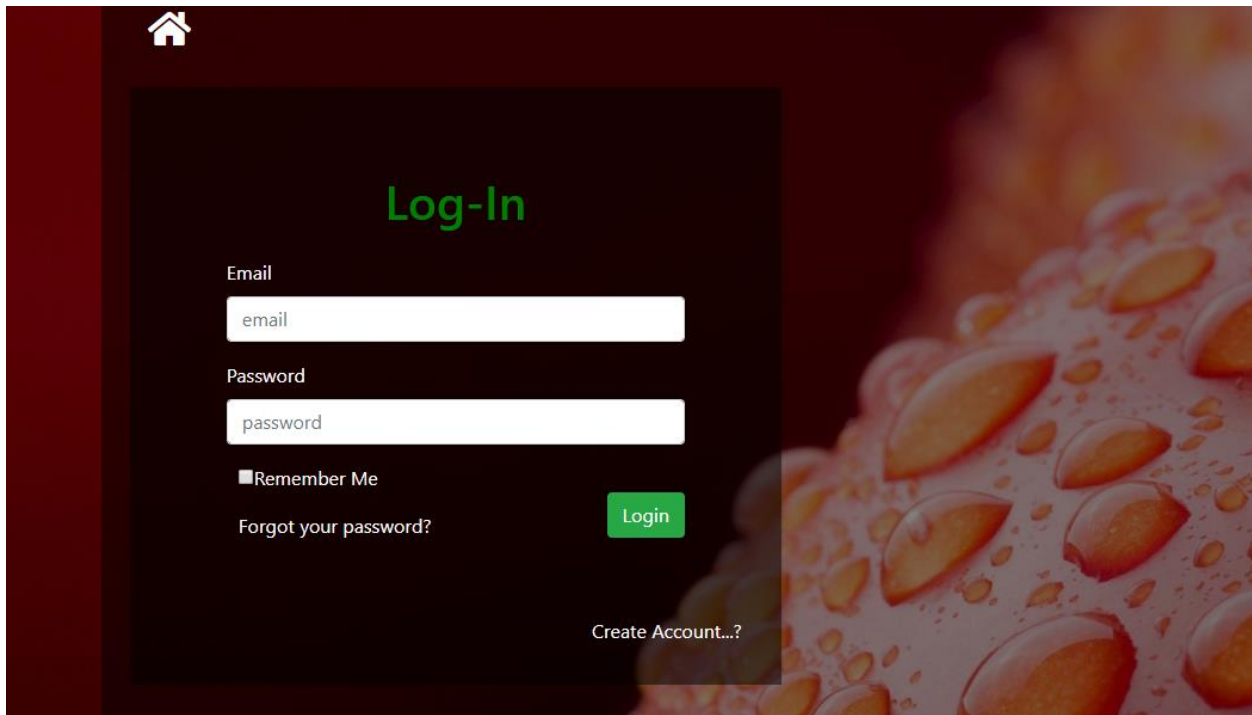


The image shows a registration form titled "Be part of Bawarchi" on a dark background with a food image. The form is divided into two columns of input fields:

- Left Column:**
 - Full Name: Input field with placeholder "Full Name *"
 - CNIC Number: Input field with placeholder "CNIC *"
 - Address: Input field with placeholder "Address *"
 - Contact Number: Input field with placeholder "Contact Number *"
 - Gender: Radio buttons for "Male" and "Female"
- Right Column:**
 - E-mail Address: Input field with placeholder "Your Email *"
 - Password: Input field with placeholder "Password *"
 - Confirm password: Input field with placeholder "Confirm Password *"
 - Profile Picture: "Choose File" button and "No file chosen" text

A green "Register" button is located at the bottom right of the form.

- Users must have to login for getting access to website.



2.3.2. Hardware Interfaces

Hardware interface includes the following:

- Workstation
- Web server

Workstation

The hardware that holds everything that a user needs to perform their jobs i.e. Bawarchi Khana website.

- **PC (Personal computer):**

It consists of CPU, monitor, keyboard and mouse. It is not a portable device. Web pages are browsed through internet. Ram should be greater than 512 Mb and processor will be at least dual core or above.

- **Handheld devices:**

Handheld devices include mobile phone, tablets and many other smart devices. Devices with the minimum quad-core processor and 1 GB RAM can operate the software.

- **Laptops:**

It is a portable device. It can also be used as a desktop machine. Laptop PC with the minimum i3 processor and 2 GB RAM is used to implement software.

2.3.3. Software Interfaces

Our software contains the following:

- **Operating System:** Windows 7, 8, 10
- **Database** MySQL
- **Development tools:**
 - PHP
 - Dreamviewer
 - HTML/CSS
 - Bootstrap
 - Java script
 - JQuery

2.3.4. Communications Interfaces

- **Web browser:** Google Chrome.
- **Electronic forms:** Web form in PHP.
- **Network server communications protocols:** HTTPS, FTP and TCP/IP for communication over the internet.
- **Communication standards:** HTTPS, TCP/IP and FTP communication standards should be implemented.
- **Communication security:** HTTPS communication security will be based on Transport Layer Security.
- **Encryption issues:** HTTPS communication security based on Transport Layer Security (TLS) may not achieve over public internet networks.

2.4. System Features

- User firstly make account (sign up) providing the required information.
- Customer can search for food to order.

- Customer can add or delete the order.

2.4.1. Customer Sign Up Form

2.4.1.1. Description and Priority

Description: Customer sign up form needs to fulfil its required information.

- Full name
- Email
- Password
- Confirm Password
- Contact Number

Priority: High

2.4.1.2. Stimulus/Response Sequences

Customer after providing the required information is proceeded to home page. Next time when user use the website it's not necessary to sign up again to get access. Customer is directly shifted to home page through login.

2.4.1.3. Functional Requirements

REQ-SF1-1: Customer should fill the registration form to get registered into the system.

REQ-SF1-2: Customer should be logged in.

2.4.2. Chef Sign Up Form

2.4.2.1. Description and Priority

Description: Chef sign up form needs to fulfil its required information.

- Full name
- CNIC Number
- Address
- Contact Number
- Gender
- Email Address

- Password
- Confirm Password
- Profile Picture

Priority: High

2.4.2.2. Stimulus/Response Sequences

Chef after providing the required information is proceeded to home page. Next time when user use the website it's not necessary to sign up again to get access. Chef is directly shifted to home page through login.

2.4.2.3. Functional Requirements

REQ-SF2-1: Chef should fill the registration form to get registered into the system.

REQ-SF2-2: Chef should be logged in.

2.4.3. Admin Sign Up Form

2.4.3.1. Description and Priority

Description: Admin sign up form needs to fulfil its required information.

- First name
- Last name
- Password
- Confirm Password
- Your Email
- Your Phone

Priority: Medium

2.4.3.2. Stimulus/Response Sequences

Admin needs to sign up just once at the initial time startup. Admin after providing the required information is proceeded to home page. Next time when user use the website it's not necessary to sign up again to get access.

2.4.3.3. Functional Requirements

REQ-SF3-1: Admin should fill the form once at the initial time.

REQ-SF3-2: Admin should be logged in.

2.4.4. USER Login Form

2.4.4.1. Description and Priority

Description: Login form is only available for users who have already registered to our software. Fulfil Login form requirements is necessary to get access to make order or collect order.

- Email
- Password

Priority: High

2.4.4.2. Stimulus/Response Sequences

After registration user can click the login link to login into the system by entering valid username and password. This should allow the user to navigate to home screen or admin panel based on its account nature and access rights. If in case the user forgets its password it can recover its account by using forget password function available on the login screen.

2.4.4.3. Functional Requirements

REQ-SF4-1: User must be already registered in the system (i.e. admin, customer and chef).

REQ-SF4-2: User must be navigated to admin panel if he/she enters admin account detail.

REQ-SF4-3: User must be navigated to page for customer, if it enters its customer information.

REQ-SF4-4: User must be navigated to page for chefs, if it enters chef information.

REQ-SF4-5: All users must enter valid information to access website.

REQ-SF4-6: If the user forgets its password, the user can recover its password through forget password function.

2.4.5. Search order

2.4.5.1. Description and Priority

Description: Customer can search for food which are offered by the chefs and are available at website and customer can order

- Search for food

- Add to shopping cart
- Delete from cart

Priority: Medium

2.4.5.2. Stimulus/Response Sequences

Customer comes to website and search for foods provided by all the chefs who are online and customer can view food of all chefs and can order the desired food. After choosing the food the order is added to cart and if customer wants to make more orders than added to shopping card and if customer want to delete order than can delete order.

2.4.5.3. Functional Requirements

REQ-SF5-1: User must have a valid logged in account to make searching for food.

REQ-SF5-2: If desired food is available on website then make order.

REQ-SF5-3: If customer want to change food then can change food.

REQ-SF5-4: If user select the wrong food for order than can delete the order.

REQ-SF5-5: If customer select multiple items than are added to shopping cart.

2.4.7. Submit Order

2.4.7.1. Description and Priority

Description: Customer can search for food which are offered by the chefs and are available at website and customer can order. After choosing the desired food for ordering. The chosen food is submitted for ordering.

Priority: Medium

2.4.7.2. Stimulus/Response Sequences

After choosing the food the order is added to cart and if customer wants to make more orders than added to shopping cart and if customer want to delete order than can delete order. After final chosen the order is submitted to chef.

2.4.7.3. Functional Requirements

REQ-SF7-1: User must have a valid logged in account to make order submission of food.

REQ-SF7-2: If desired food is available on website then submit order.

REQ-SF7-3: If customer select multiple items than are added to shopping cart and are submitted.

2.4.8. Bill Payment

2.4.8.1. Description and Priority

Description: Customer have to pay against the orders whether the customer is making single order or multiple orders. Orders are added to shopping cart for bill. Bill is paid by two methods by Jazz cash or by cash.

- By Jazz cash
- By Cash

Priority: High

2.4.8.2. Stimulus/Response Sequences

Orders which are added to shopping cart are delivered to customers after paying bill against orders. Payment method is required to choose if the customer want to pay cash or make transaction by card.

2.4.8.3. Functional Requirements

REQ-SF8-1: User must have a valid logged in account to make payment against order.

REQ-SF8-2: When order is submitted total bill will be displayed to customer.

REQ-SF8-3: Customer can pay bill by Easypesa by providing the account number whose information is kept encrypted.

REQ-SF8-4: Customer can pay bill by cash at delivery time.

2.4.9. Food Menu

2.4.9.1. Description and Priority

Description: All chefs provide food menus from their portal. They upload the images of currently prepared food with price and the image will be deleted or marked as sold if food is finished.

Priority: High

2.4.9.2. Stimulus/Response Sequences

Chef will place all the prepared foods on website page. Images of all the prepared foods are uploaded one after other and food will be ready to order by customers. Food menus are provided to collect orders by chefs.

2.4.9.3. Functional Requirements

REQ-SF9-1: Chef upload the images of prepared foods.

REQ-SF9-2: Chef will also mention the price of the food which is uploaded.

REQ-SF9-3: Provide the menu of food for customer.

REQ-SF9-4: Chef will also provide the location so that the customer can order to nearby chefs.

2.4.10. Deliver Order

2.4.10.1. Description and Priority

Description: The order which is submitted by customers and chef has collected the order and now order is ready to deliver. Chef have to deliver the order by customer choice.

Chef can make delivery by customer choice by delivering food through uber, cream services.

Priority: High

2.4.10.2. Stimulus/Response Sequences

Chef have to deliver the order by customer choice. Chef has mentioned the time to make its delivery satisfactory. Chef can make delivery by customer choice by delivering food through uber, cream services. All ratings of food are depended on the food quality, delivery criteria and response time.

2.4.10.3. Functional Requirements

REQ-SF10-1: Chef deliver the collected food from cart which is ordered by customer.

REQ-SF10-2: Chef deliver the food by chosen methodology.

REQ-SF10-3: If chef choose the method of delivery by uber or cream service, chef will book the service and deliver food.

2.4.11. Manage Account

2.4.11.1. Description and Priority

Description: Admin will control all the issues regarding accounts. Admin will give promotions and deals for both customers and chefs. Ratings and feedback which are given by customers are

reviewed by admin and bring under consideration and actions will be taken out on bad comments or feedback.

Priority: High

2.4.11.2. Stimulus/Response Sequences

If user has to face issue in food delivery or food quality process, a comments box is available for customer in which he/she will give feedback and immediately action will be taken upon complaints. Upon these ratings we will rank the chefs.

2.4.11.3. Functional Requirements

REQ-SF11-1: Admin will give promotions.

REQ-SF11-2: Admin will control the issues regarding accounts.

REQ-SF11-3: Admin will manage the ratings and will rank the chefs.

2.4.12. Logout

2.4.11.1. Description and Priority

Description: All users should have to logged out after using the website for security.

- Logout

Priority: Medium

2.4.12.2. Stimulus/Response Sequences

When logging out, the sessions will be destroyed and access will be denied.

2.4.12.3. Functional Requirements

REQ-SF12-1: User must be login to the website (i.e. admin, customer and chef).

REQ-SF12-2: Access must be denied.

REQ-SF12-3: All sessions will be destroyed when logging out.

2.5. Other Nonfunctional Requirements

2.5.1. Performance Requirements

Performance measure is examining your system under various problems or circumstance. So for our system's performance measurement it should perform these requirements.

- Bawarchi Khana has the capability to support all active customers and chefs.

- Bawarchi Khana has the capability to support all foods uploaded by chefs and all orders ordered by customers.
- Performance main aim is to normalize the data.
- Normalization means that information is to be stored only once in database. Storing information several times leads to wastage of storage space which increases the available space of storage.

2.5.2. Safety Requirements

- If a damage occurs to a wide portion of the database due to any failure the recovery method restores a past copy of the database.
- Backup storage of data is available on cloud from where in case of loss data can be backed up.
- Customer level access is that in which customer cannot get access to chef's pages or cannot visit chefs portal side.
- Chefs level access is that in which chef as seller cannot get access to customer pages or cannot visit customer portal side.

2.5.3. Security Requirements

- Data must be kept confidential by encrypting the information of chefs and customers in database.
- Wireless communication throughout the system will be encrypted using transport layer.
- Customers and chef's information like phone numbers, emails and their personal information will keep secure by encrypting data.
- Password length will be pre-defined and it is restricted to use special characters while setting passwords.
- Chef cannot be logged in into two systems at a time through one account
- System shall provide two levels of access:
 - Customer level access

- Chefs level access

Customer level access is that in which customer cannot get access to chef's pages or cannot visit chefs portal side.

Chefs level access is that in which chef as seller cannot get access to customer pages or cannot visit customer portal side.

2.5.4. Software Quality Attributes

- **Usability:**

Our website will be working over window 7,8 and window 10. And it will support different browser like google chrome and internet explorer. Our website should be responsive and work properly in each dimension like handheld devices and laptops.

- **Maintainability:**

The administrators should maintain website.

- **Reliability:**

Our website should be reliable, easy to use and response all time.

- **Availability:**

Website will be available to user to make orders when connected to internet.

- **Mean Time to Repair:**

Web page should be fault tolerant. If connection breakdown it can be recover effectively.

- **Accuracy:**

Website should be faster/light weighted and provide accuracy to all users.

- **Performance:**

Website Bawarchi Khana can easily support multiple users on same time.

- **Capacity:**

Bawarchi Khana website should be able to handle maximum users at same time in operating environment.

- **Supportability:**

Languages: HTML, CSS, JavaScript, and PHP.

Framework: bootstrap.

Database: MySQL.

- **Design Constraints:**

Website should be in such a way that it is easily available on web browsers. i.e. (Chrome, internet explorer).

2.5.5. Business Rules

Business rule is that how we apply validation and security to our website. How we save our website from intruders. Keep secure by using .com.

Validation functionalities:

- Client side validation

Client side validation includes that the data of any client (customer, chef) is kept confidential by encrypting the data.

- Back-end validation

Backend validations that all data saved in database id kept safe from hackers and intruders by using encryption.

2.6. Other Requirements

Legal requirements:

- Chef should follow the standards provided by food authority.
- Chefs are strictly restricted to use alcoholic material in making of food.
- Halal foods must be provided to customers as its essential thing for Muslims.

Chapter 3

Use Case Analysis

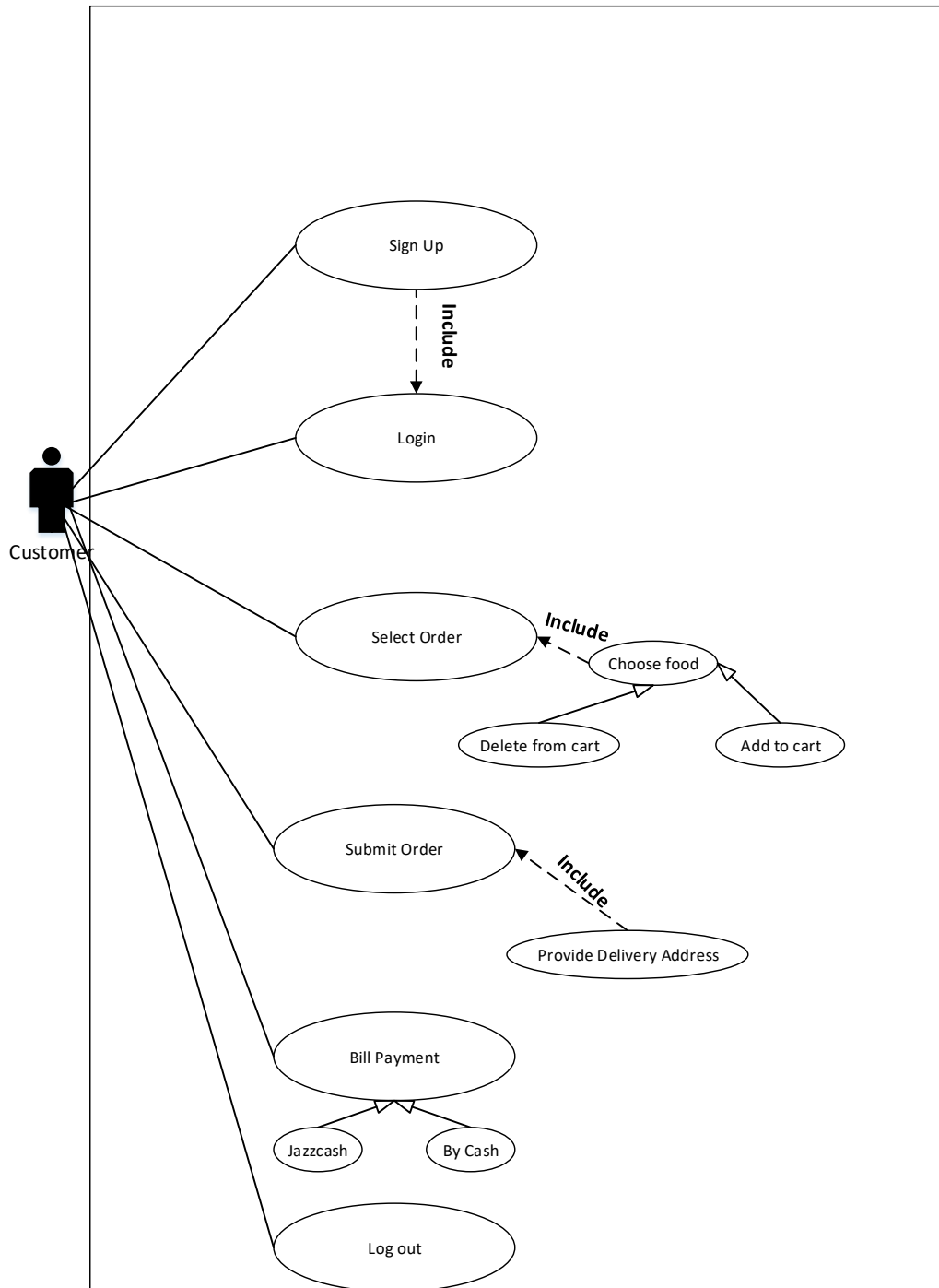
Chapter 3: System Analysis

Use cases are designed for describing about the whole scenario that how your software will interact with users. Describing actors & their purposes. How users will login, create account & make orders. And users can edit order in case of wrong order is selected or wrong information is added within the specific time mentioned by the chef. And users can delete orders in case wrong information is added or user isn't interested to order can delete order.

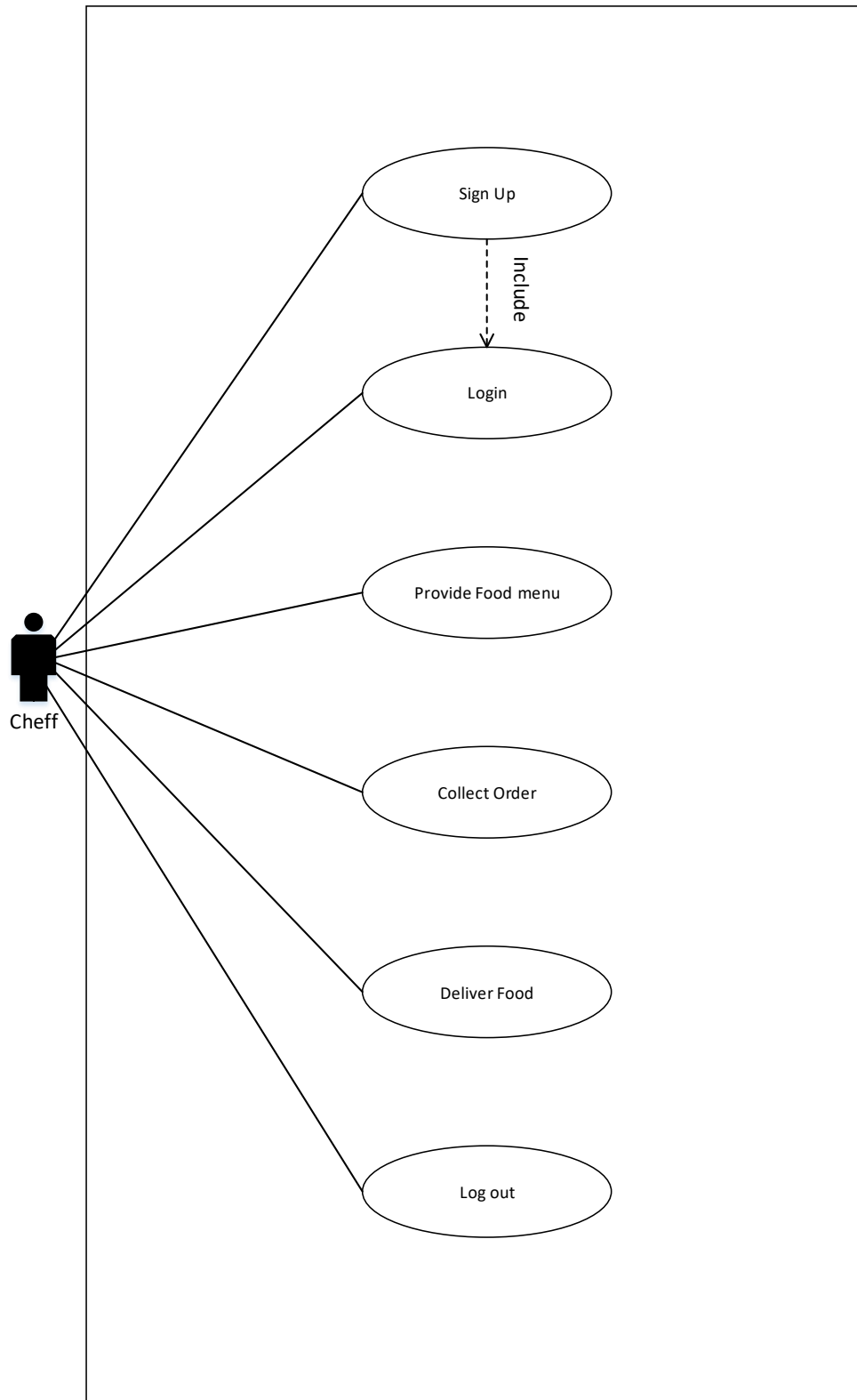
3.1. Use Case Model

Use cases model is designed for describing the software interaction with users. How users will sign up and create account, how user login and get access and user make orders. Primary user(customer) can interact that how to search order and can make order and submit order. And make payment against its order. Payment is about two methods. By cash or by ATM. Secondary consumers (chefs and admin) perform different tasks. Chefs can collect order, make it and deliver to customer. Admin manages the accounts and control issues regarding to the system.

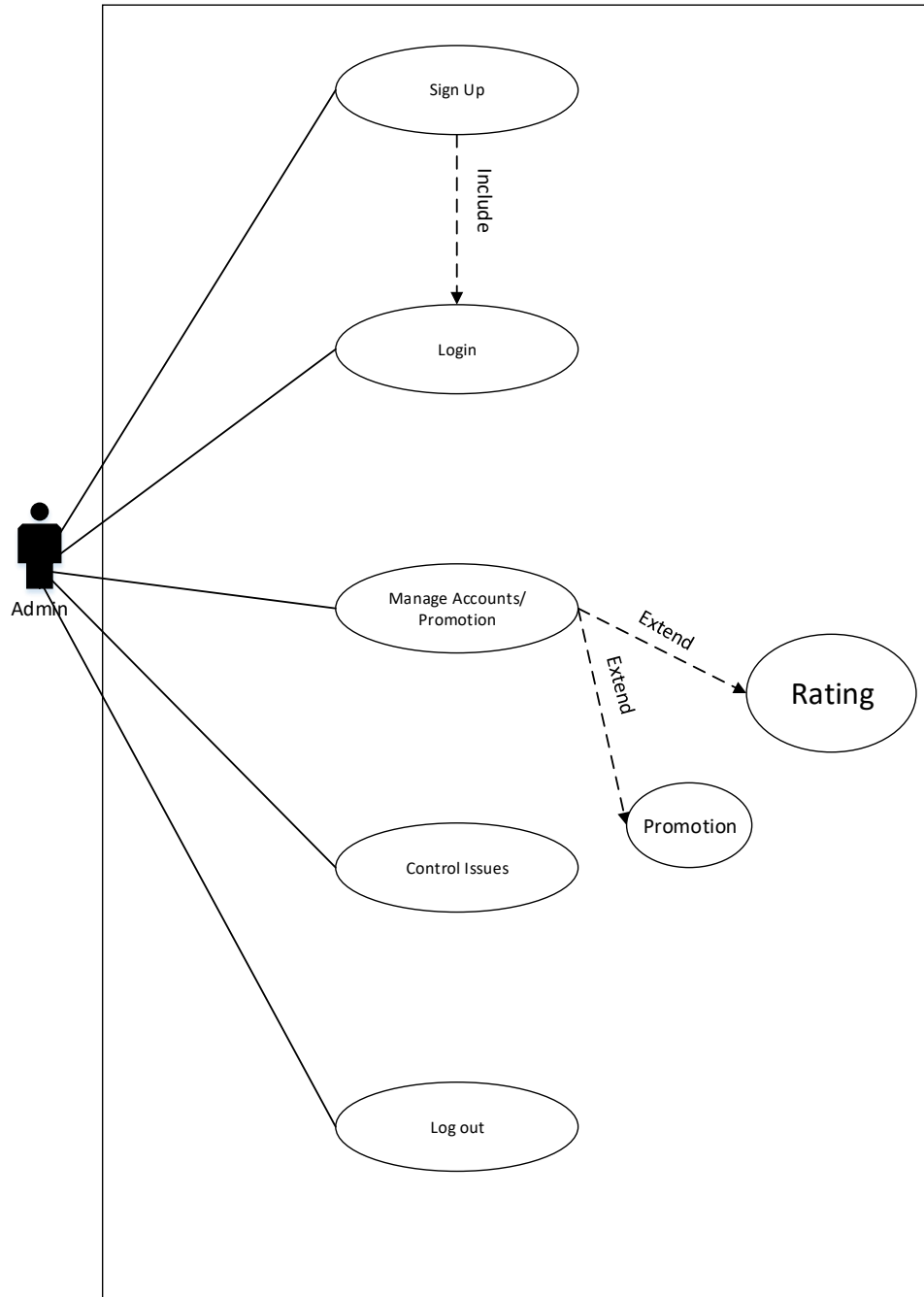
Use case for customer:



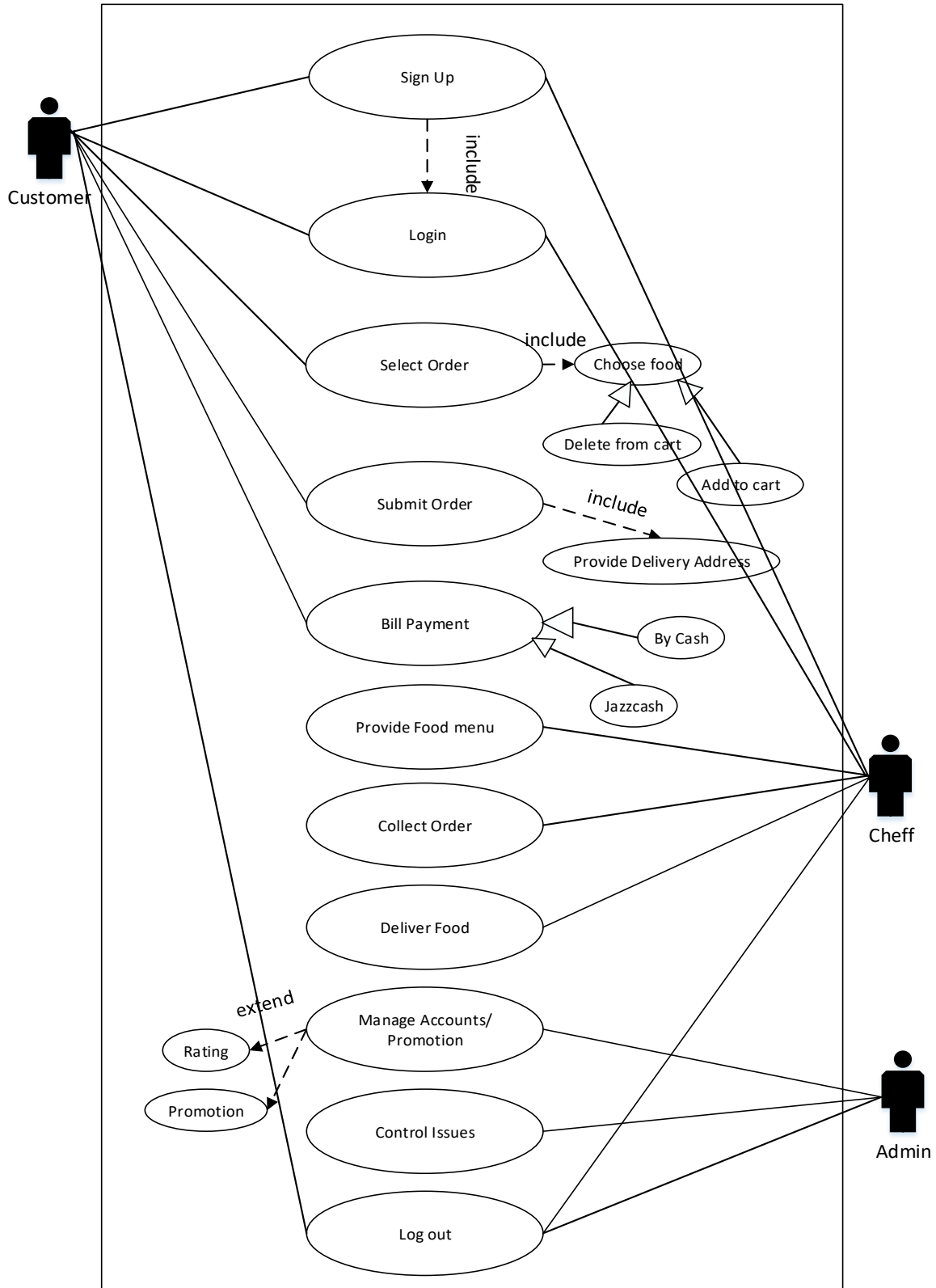
Use case for chef:



Use case for admin:



Use case:



3.2. Fully Dressed Use Cases

Use Case:	Login
Actors:	Admin, Customer, Chef
Type:	Primary and Secondary
Description:	The actor has to sign up before. Then he will enter the given username and password to get access.
Includes:	Sign up.
Extends:	Change password.
Cross Ref:	Sign up.
Use-Cases:	None

Use Case:	Sign up
Actors:	Admin, Customer, Chef
Type:	Primary and Secondary
Description:	Sign up is registering yourself to get access. Will give you a username and password to login.
Includes:	Authentication.
Extends:	None.
Cross Ref:	None.

Use Case:	Select order
Actors:	Customer, chef.
Type:	Primary and Essential
Description:	It allows chef to post what he has cooked and customer to choose what he wants to eat.
Includes:	None.
Extends:	Choose food.
Cross Ref:	
Use-Cases:	Log in is not compulsory

Use Case:	Submit Order
Actors:	Customer
Type:	Primary
Description:	We confirm that what we want to eat and we will book it.
Includes:	Provide delivery address.
Extends:	None
Cross Ref:	

Use Case:	Bill Payment
Actors:	Customer
Type:	Primary
Description:	Bill will be generated after the food is confirmed.
Includes:	None
Extends:	None
Cross Ref:	Submit order
Use-Cases:	

Use Case:	Provide food menu
Actors:	Customer, Chef
Type:	Primary and secondary
Description:	The chef will provide the food menu for the customers.
Includes:	None
Extends:	None
Cross Ref:	

Use Case:	Collect order
Actors:	Chef
Type:	Secondary
Description:	The chef will collect order from the customers.
Includes:	None
Extends:	None
Cross Ref:	Provide food menu

Use Case:	Deliver Food
Actors:	Chef
Type:	Secondary
Description:	After collecting the order the chef will deliver the food to customer.
Includes:	None
Extends:	None
Cross Ref:	Submit order
Use-Cases:	None

Use Case:	Manage accounts
Actors:	Admin
Type:	Secondary
Description:	The admin will manage all the accounts of the chef and customers.
Includes:	None
Extends:	None
Cross Ref:	login
Use-Cases:	None

Use Case:	Control Issues
Actors:	Admin
Type:	Secondary
Description:	The admin will control all the issues regarding to the chef, cooking and customers
Includes:	None
Extends:	None
Cross Ref:	Manage accounts

Use Case:	Logout
Actors:	Admin, Customer, Chef
Type:	Primary and secondary
Description:	After completing the task you can log out.
Includes:	None
Extends:	None
Cross Ref:	
Use-Cases:	User must have completed the Log In use case.

Chapter 4

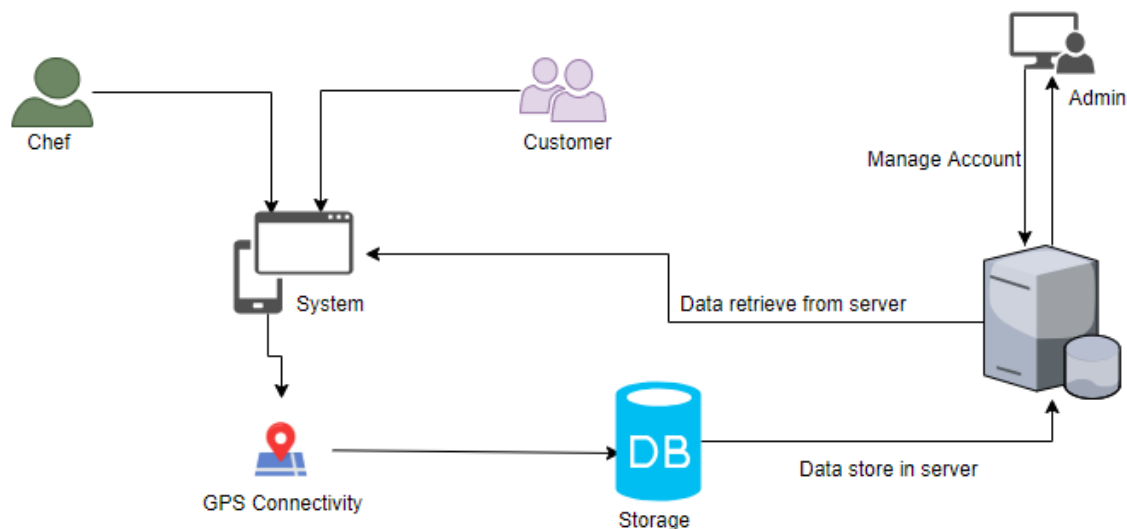
System Design

Chapter 4: System Design

We are designing the whole system conceptually, just to clear out how our system will look like. We have designed the architecture diagram how software will interact and look like in real world. We design different models like domain model and ERD model which indicates the relationships between all components and classes. Concluding from diagrams how system will work and interact with end users and administration.

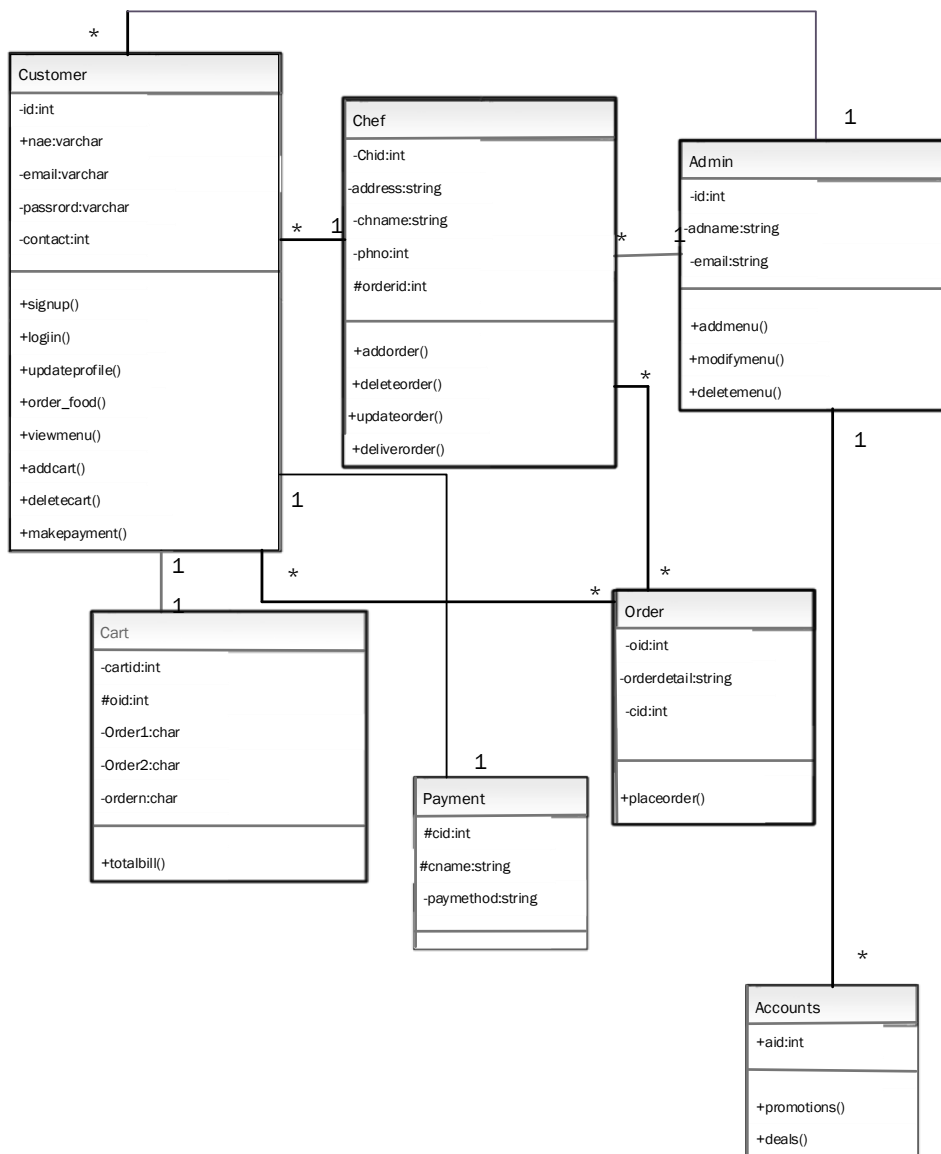
4.1. Architecture Diagram

Architecture diagram shows that Bawarchi Khana has three types of users. i.e. Admin, customer and chef. Customer and chef connect themselves through GPS connectivity to make orders and transactions of food ordering and delivering. All data is stored in database server and admin can manage all data and accounts.



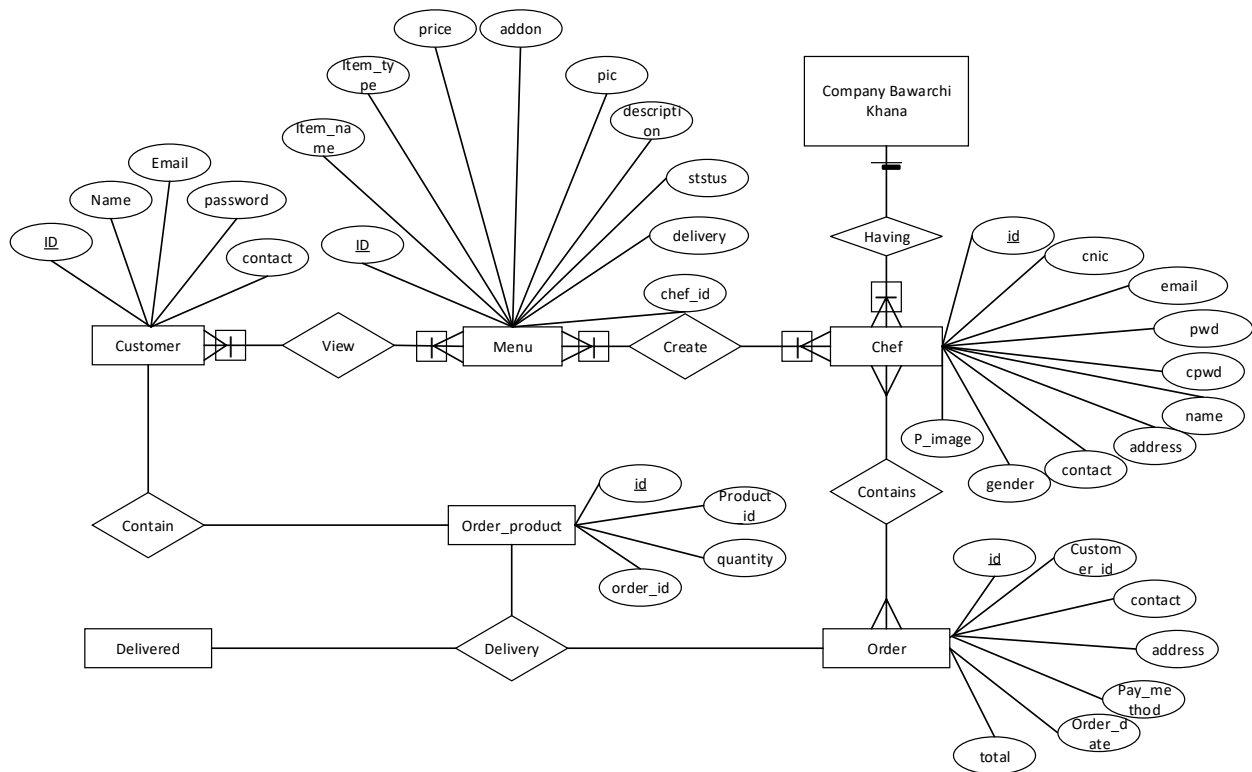
4.2. Domain Mode

Domain model shows the relationships between components and classes. Relations are marked by relationship signs as one to one, one to many or many to many. All classes contain different attributes and functions. Relationships with classes is shown as follow.



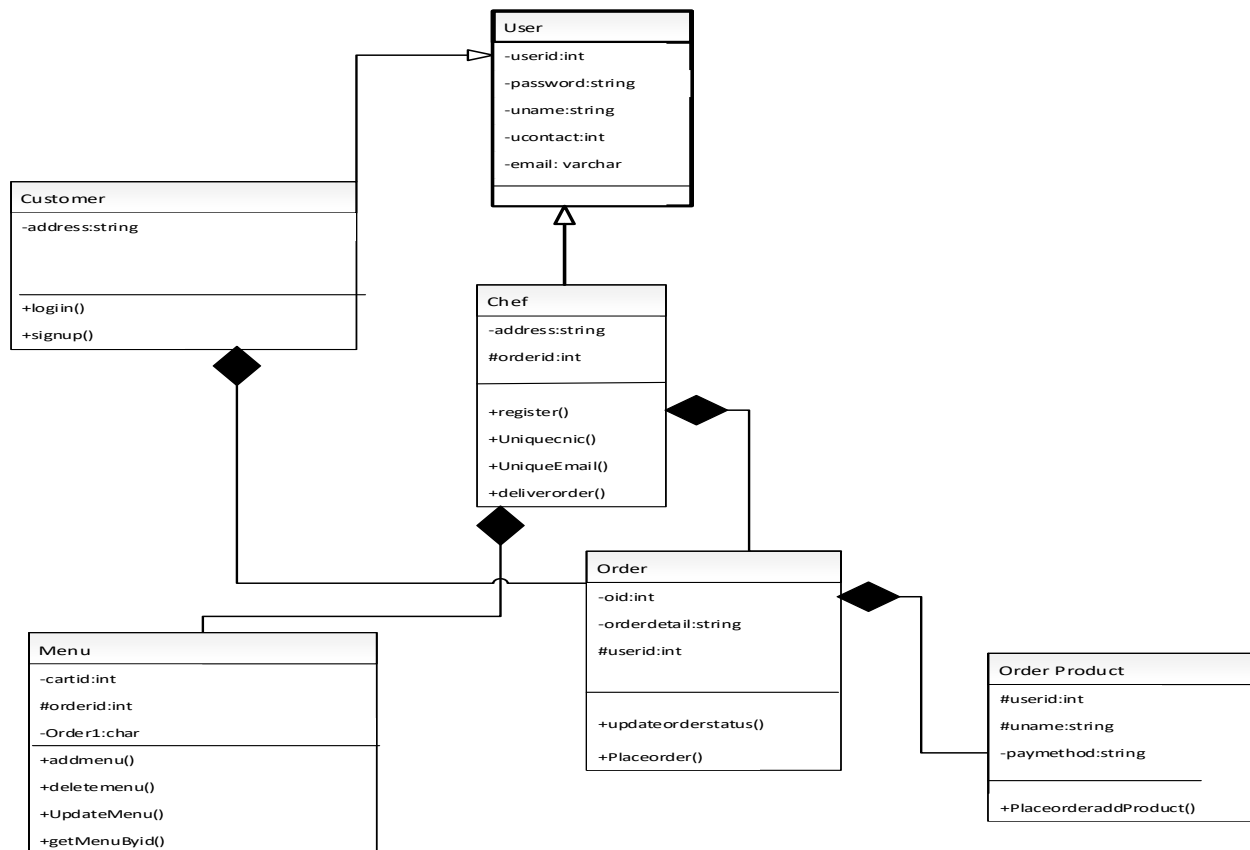
4.3. Entity Relationship Diagram with data dictionary

Entity relationship diagram shows the relationship between components and classes. Relations are marked by relationship signs as one to one, one to many or many to many. ERD explains the simple process, how customer search for order, add shopping cart and make payment. How chef collect order and deliver it. Attributes of classes are as follow in diagram.



4.4. Class Diagram

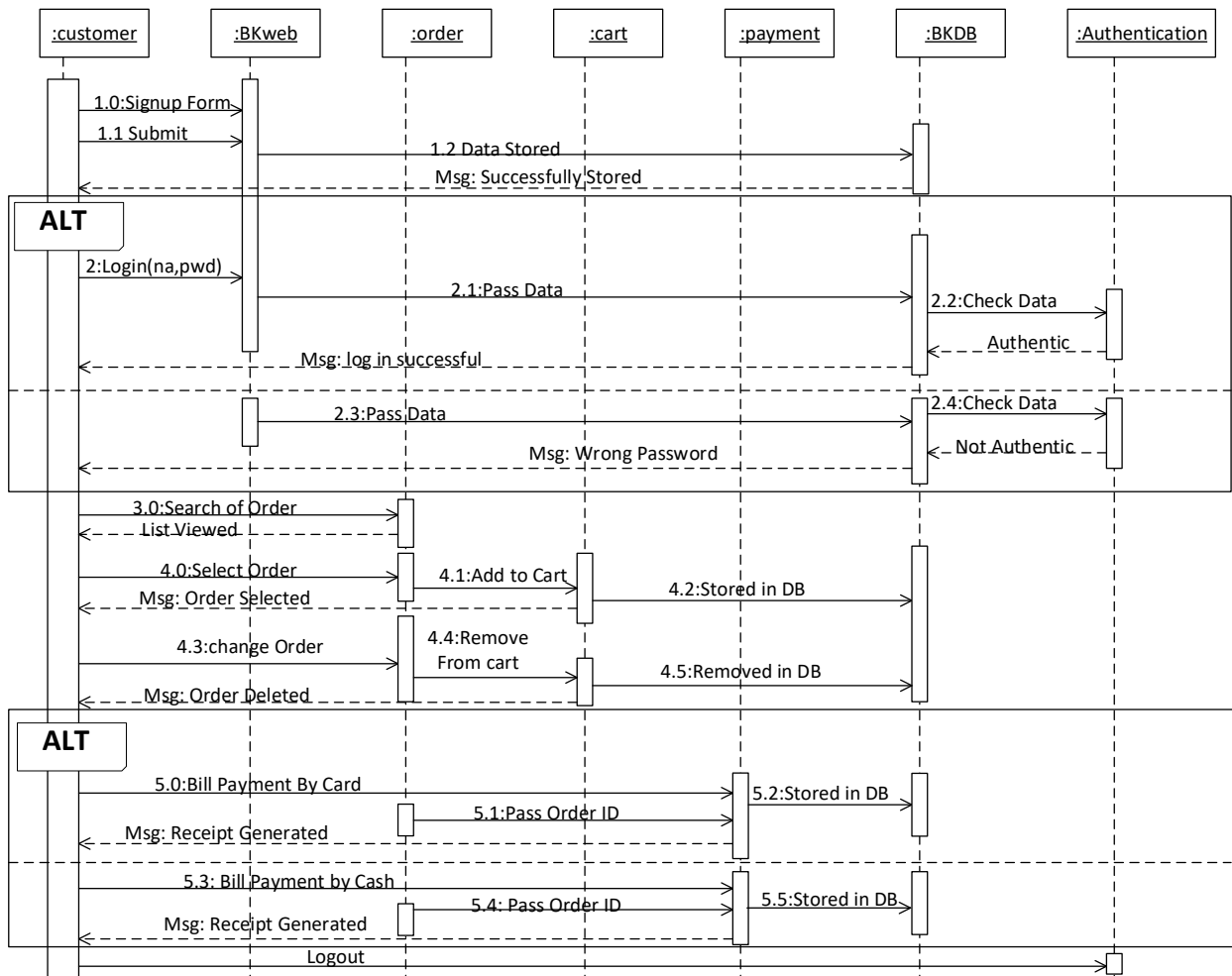
Class diagram indicates the classes used in Bawarchi Khana. If a customer wants make an order, then make order and pay bill against selected order. User can perform multiple tasks. Admin manage the accounts. User is parent class. Customer, admin and chef are inherited by user class. Filled diamond sign shows dependency. Classes which are fully composite are shown by filled diamond sign.



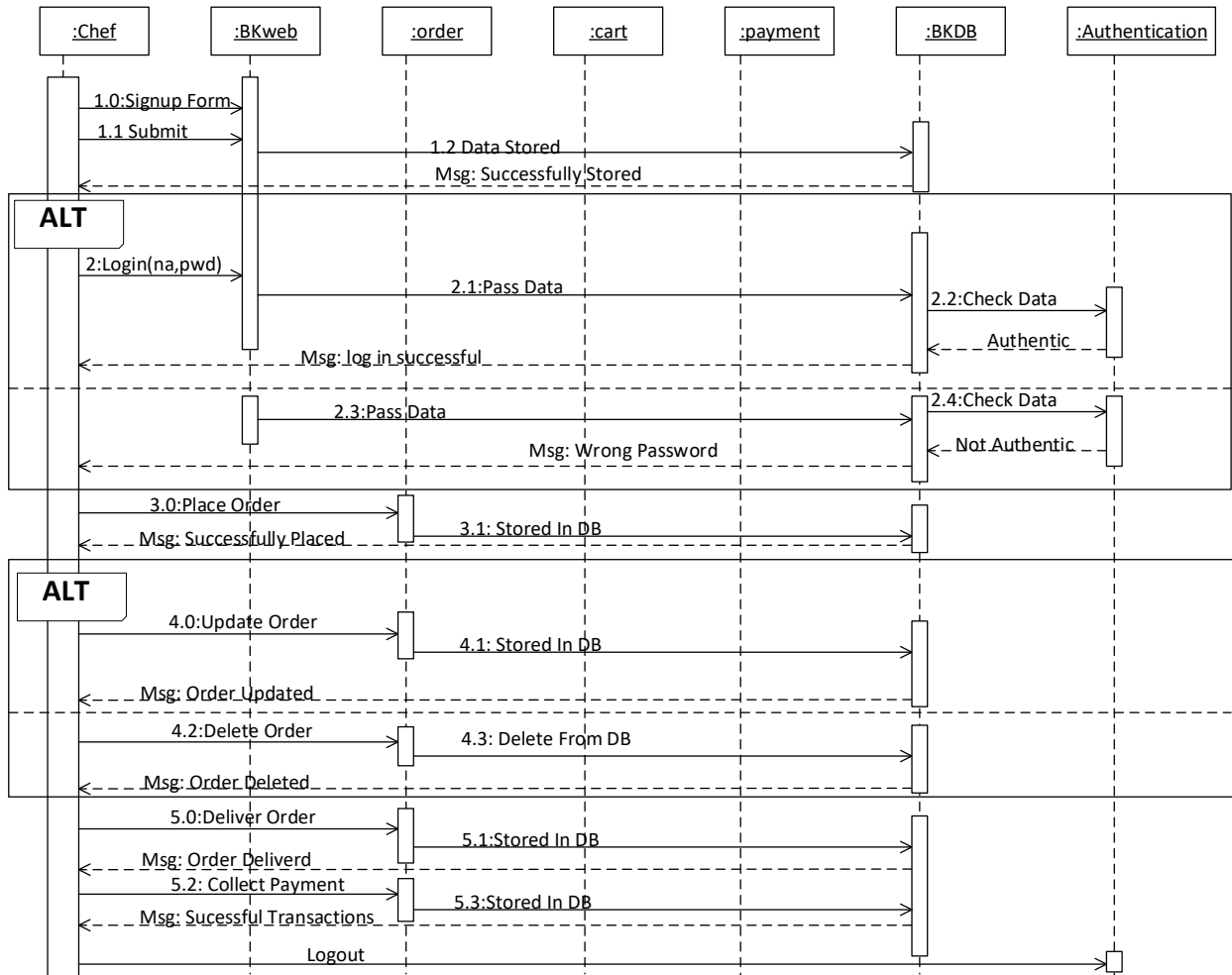
4.5. Sequence / Collaboration Diagram

Sequence diagram is an interaction diagram that shows how the objects operate with one another in order. How message is exchanged between the objects of the scenario. Sequence diagrams are sometimes called event diagrams. Activations and life lines are used in sequence diagrams for exchange the message between objects.

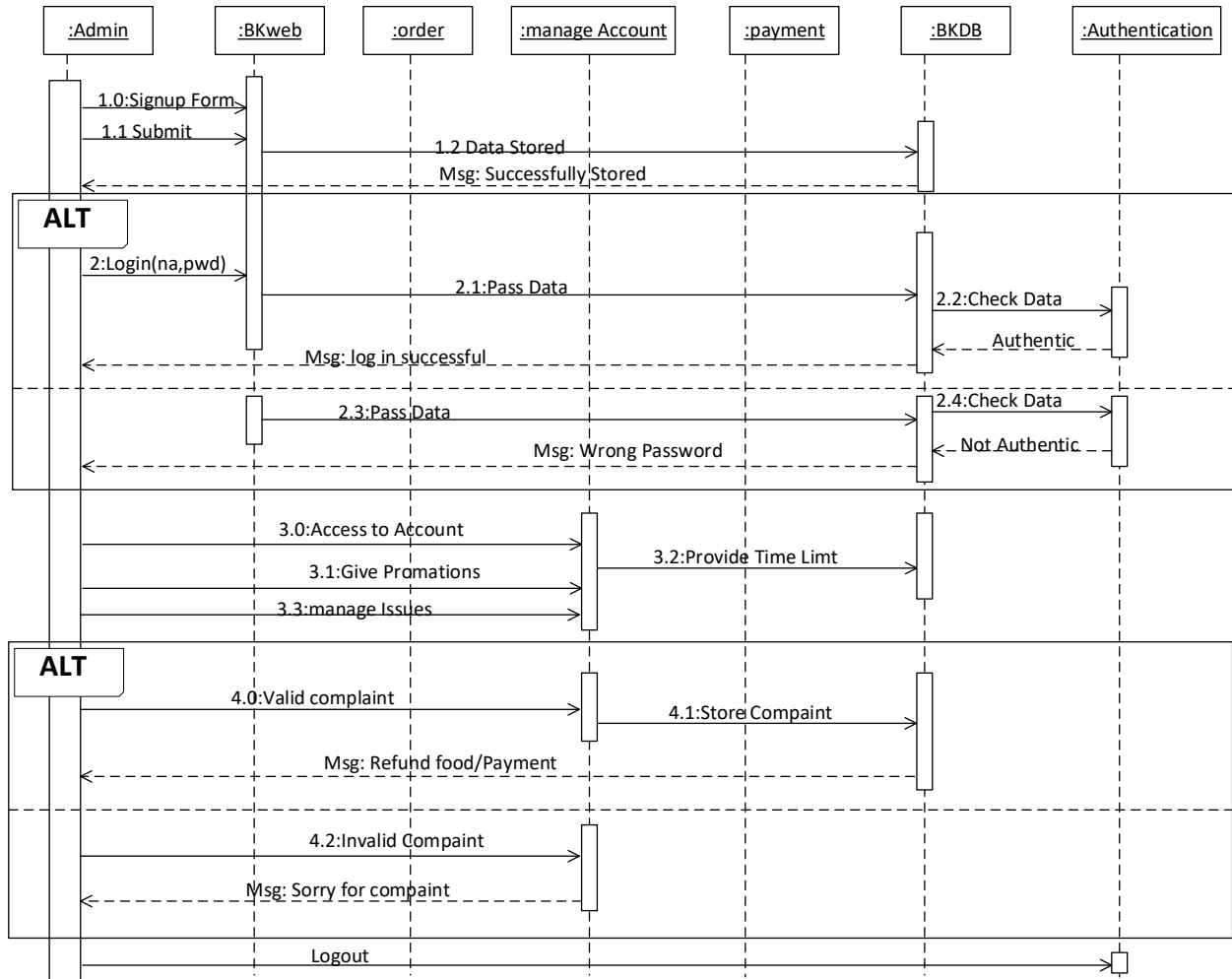
Sequence diagram for Customer



Sequence diagram for Chef



Sequence diagram for Admin



4.6. Operation contracts

Operation Contract 1

Operation name	Signup
Cross Reference	Signup
Pre-Condition	System Startup
Post Condition	Object Creation: user Attribute: Signup (Full Name, Email, Password, confirm password, Address, Contact Number, Gender) Association: Relationship between end-user and website.

Operation Contract 2

Operation name	Login
Cross Reference	Login
Pre-Condition	User must be signed up
Post Condition	Object Creation: user Attribute: Login (Email, Password) Association: Relationship between end-user and website.

Operation Contract 3

Operation name	Order
Cross Reference	Customer must select order by selecting.
Pre-Condition	Customer must in logged in
Post Condition	Object Creation: Order Attribute: Order (orderid, order detail, Cid) Association: Relationship between customer and website.

Operation Contract 4

Operation name	Shopping Cart
Cross Reference	Orders must be placed by chef.
Pre-Condition	Food must be selected by customer.
Post Condition	Object Creation: Cart Attribute: Cart (CartID, orderid, order1, order2, ..., ordern) Association: Relationship between customer and website.

Operation Contract 5

Operation name	Deliver order
Cross Reference	Order
Pre-Condition	Order must be placed to chef.
Post Condition	Object Creation: order Attribute: Order (orderid, order detail, Cid) Association: Relationship between chef and website.

Operation Contract 6

Operation name	Manage Account
Cross Reference	Admin
Pre-Condition	Admin must be logged in to website.
Post Condition	Object Creation: No object created. Attribute: No attributes Association: Relationship between admin and website.

Operation Contract 7

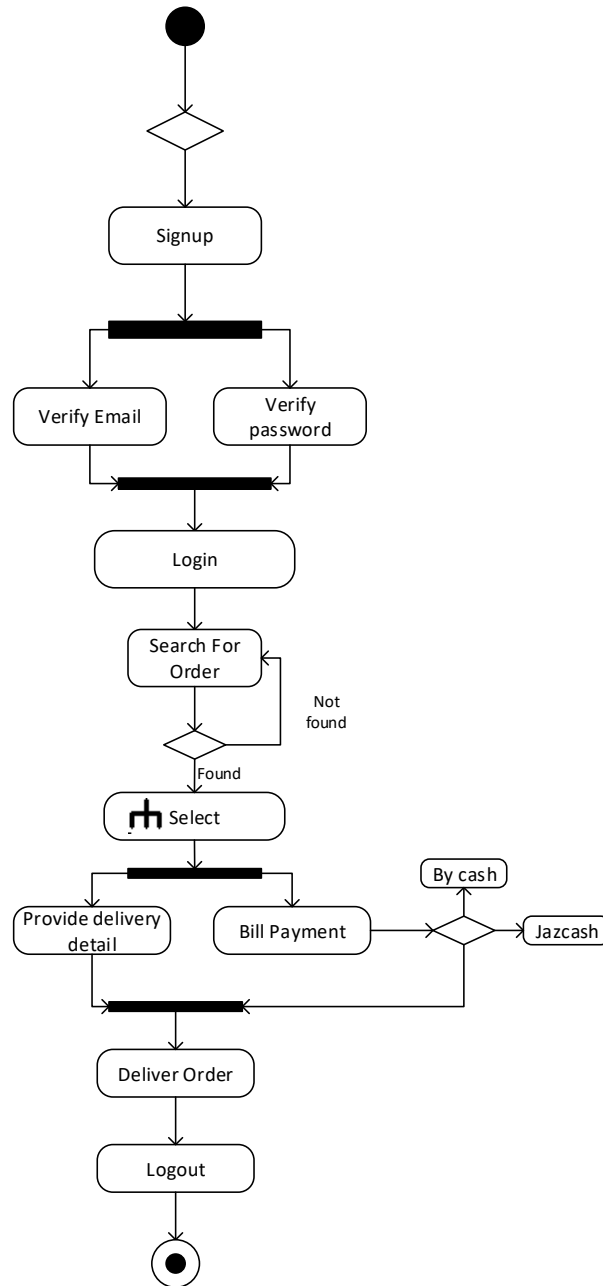
Operation name	Payment
Cross Reference	Payment
Pre-Condition	Receipt generation of total bill of orders placed.
Post Condition	Object Creation: Payment Attribute: Payment(p.id, Cid, Cname, Pay method) Association: Relationship between customer and chef.

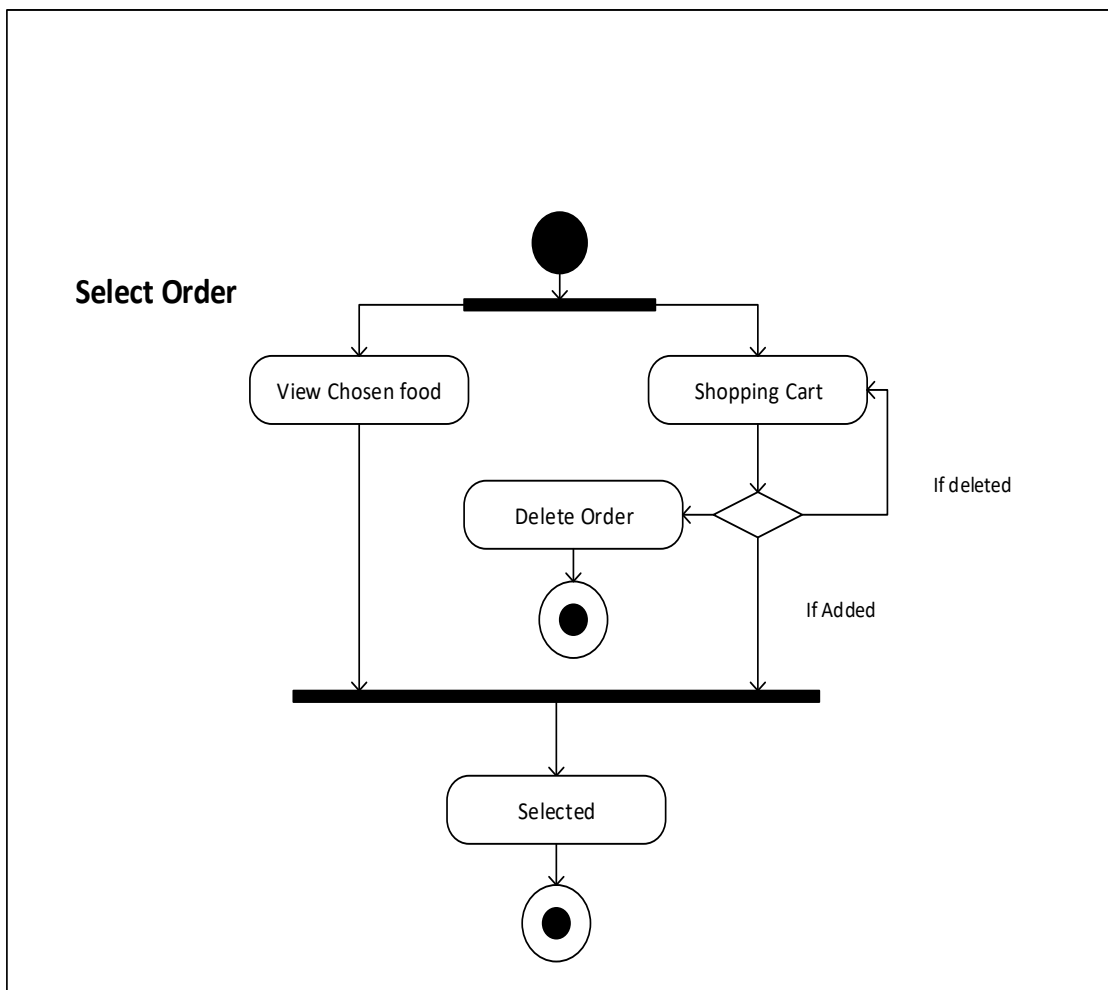
Operation Contract 8

Operation name	Logout
Cross Reference	Logout
Pre-Condition	User must be login
Post Condition	Object Creation: No object created Attribute: No attributes Association: Relationship broke between User and website.

4.7. Activity Diagram

Activity diagram shows very clearly that the user firstly signs up the account and if the user is already signed up then directly get login. Search for order, select order and submit and make payment for the delivery.

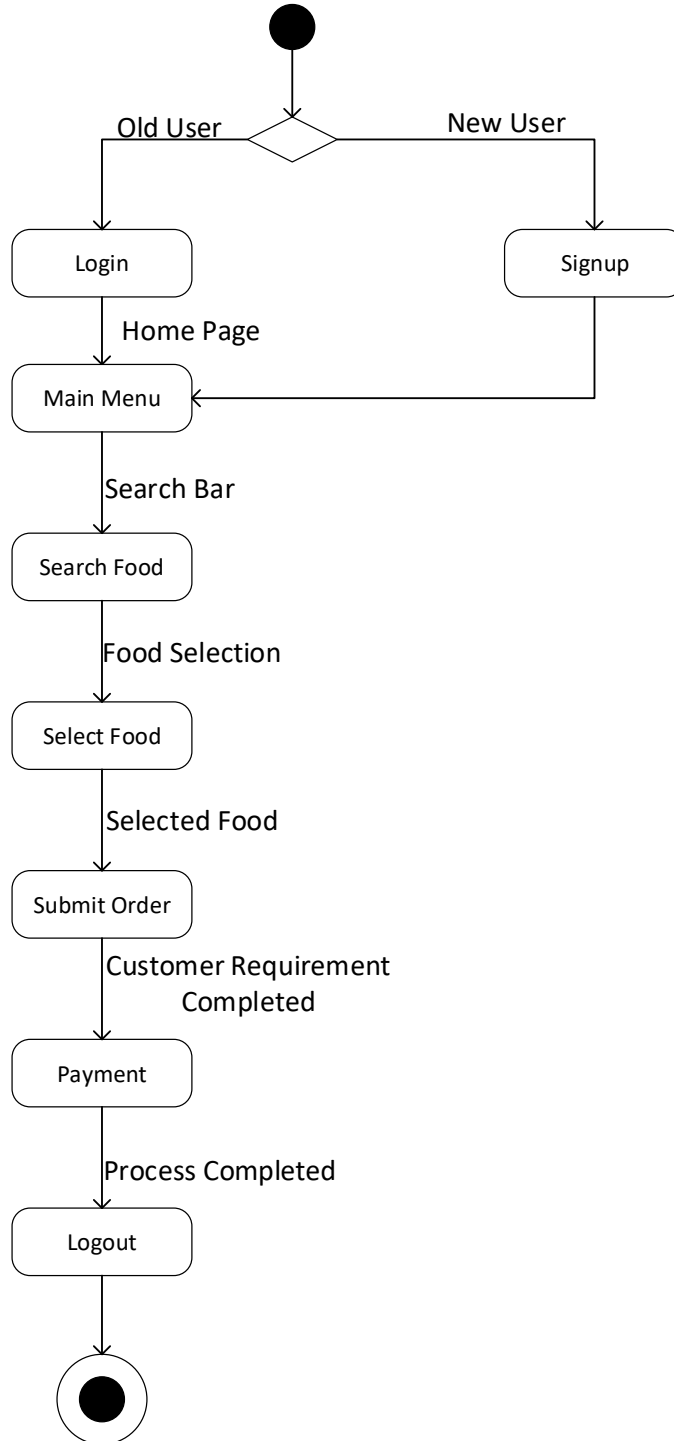




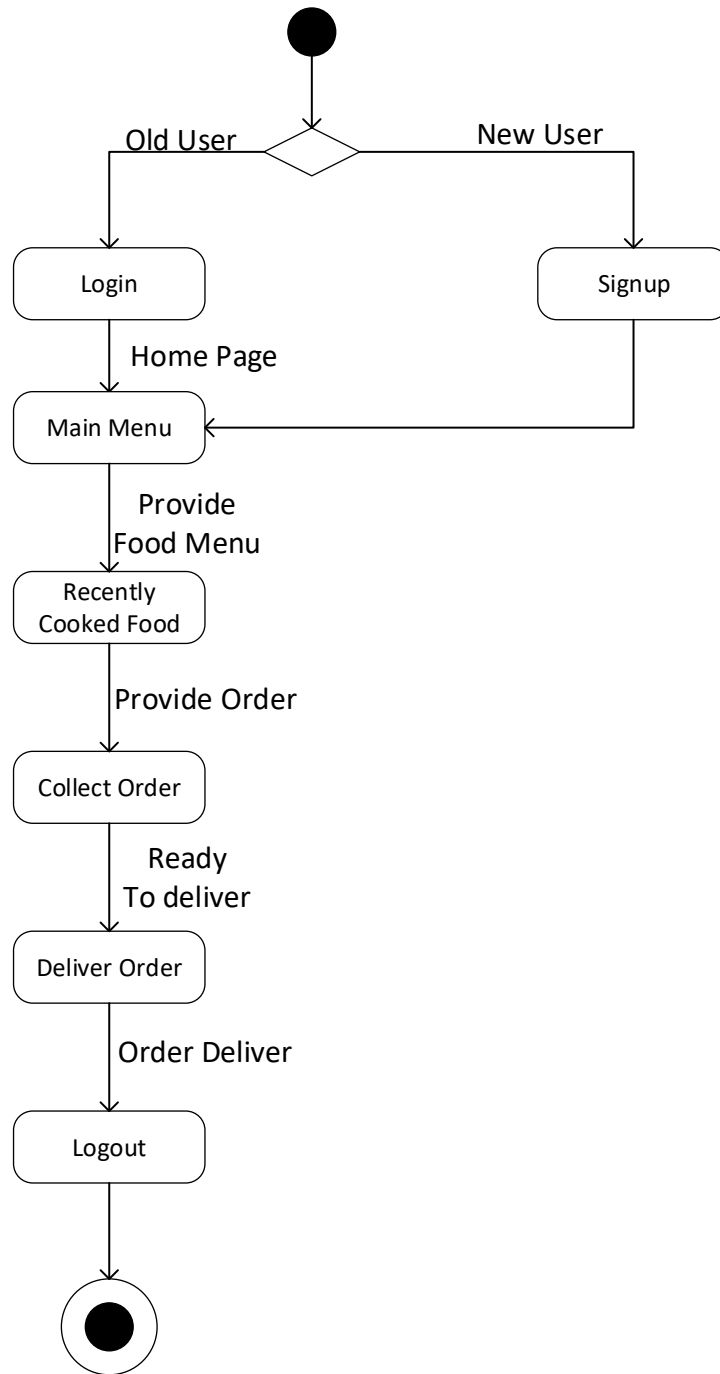
4.8. State Transition Diagram

State diagram simply state the working of the user against the software

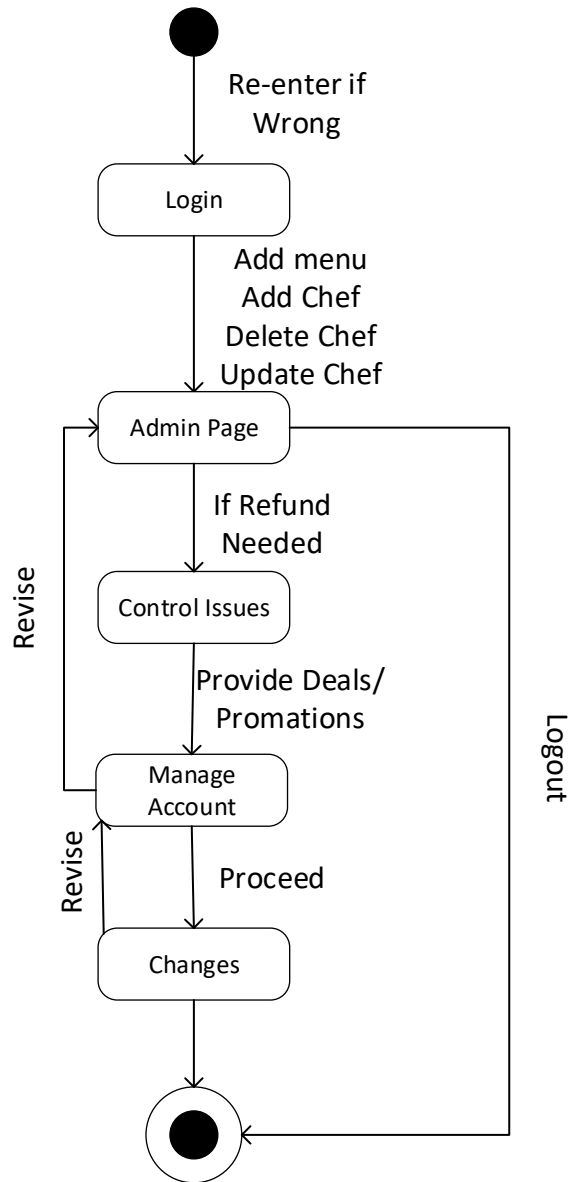
State Diagram For Customer:



State Diagram for Chef:

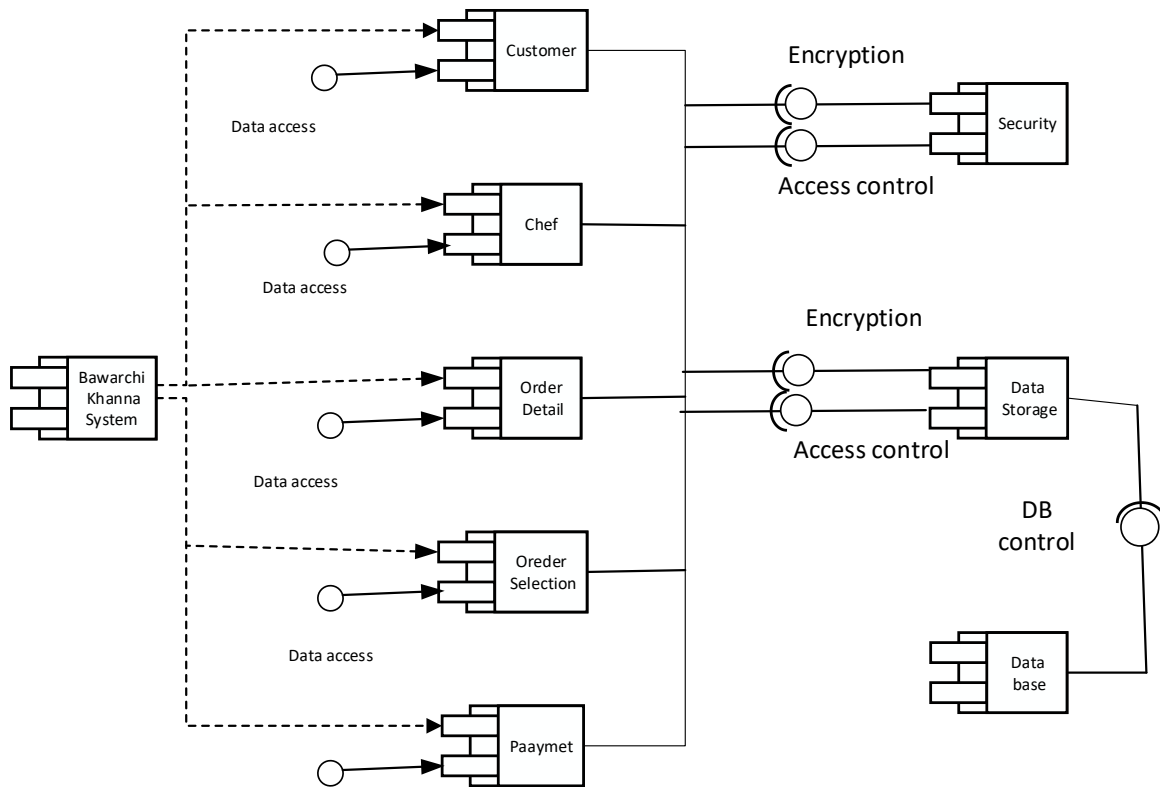


State Diagram for Admin:



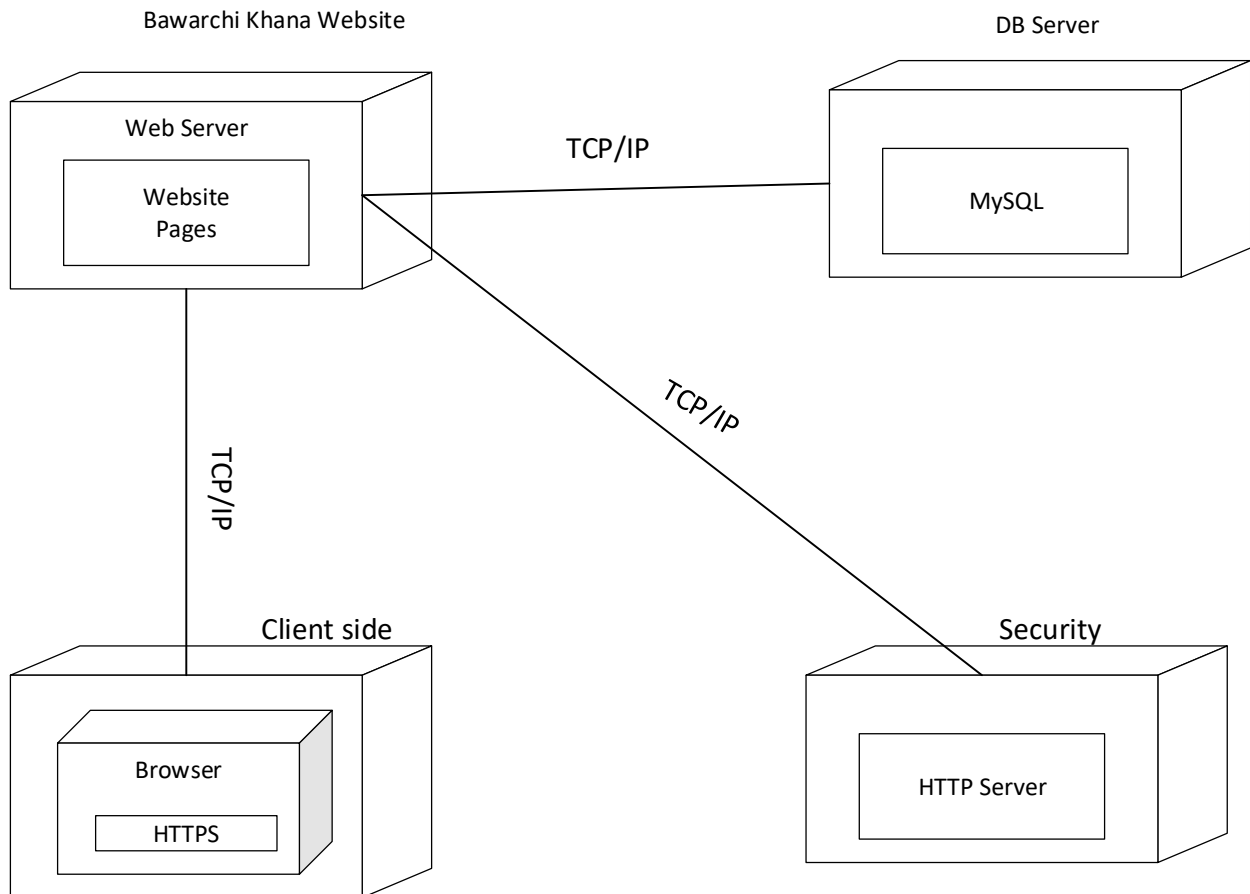
4.9. Component Diagram

Bawarchi Khana website holds the components like customer, chef, order detail, order selection and payment. All components data is stored into database by data storage component which is connected by full moon or crescent moon.



4.10. Deployment Diagram

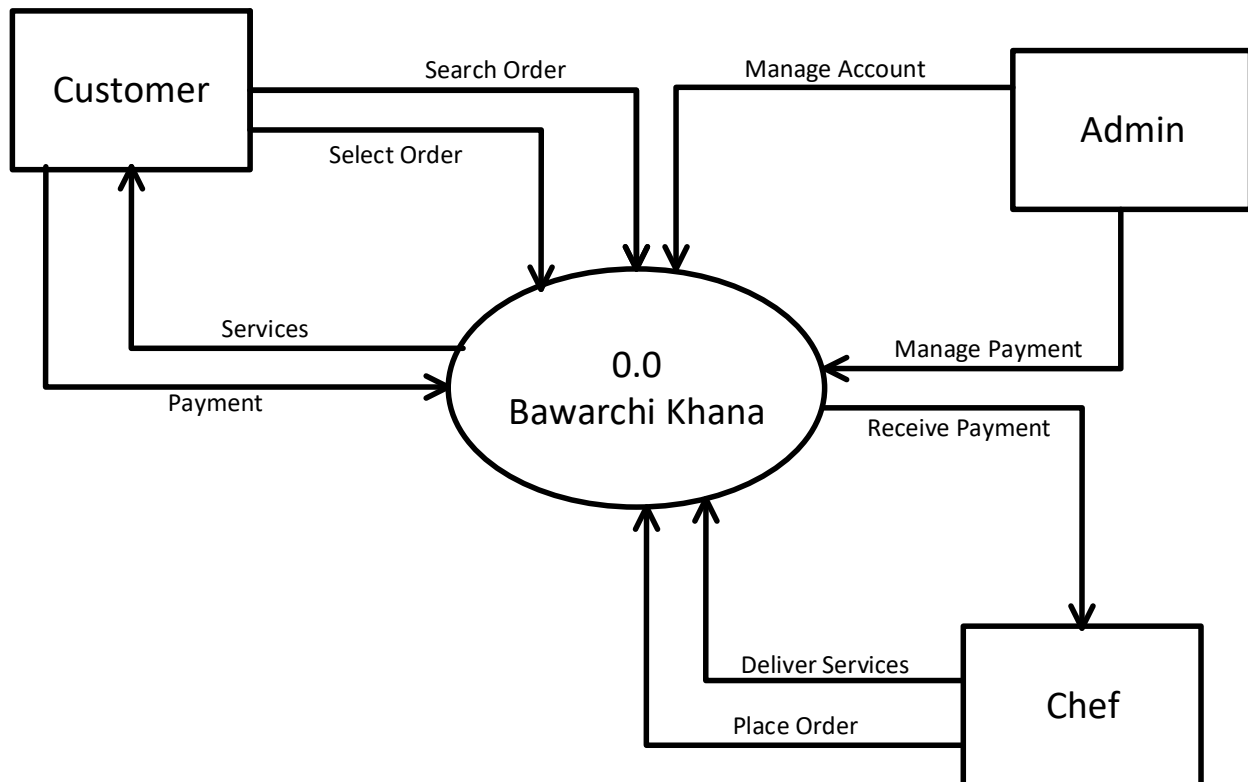
This diagram tells how the system will be deployment in real world. Only major parts of the website/software are shown in diagram. All are connected by TCP/IP protocol to make secure. Db server is database storage.



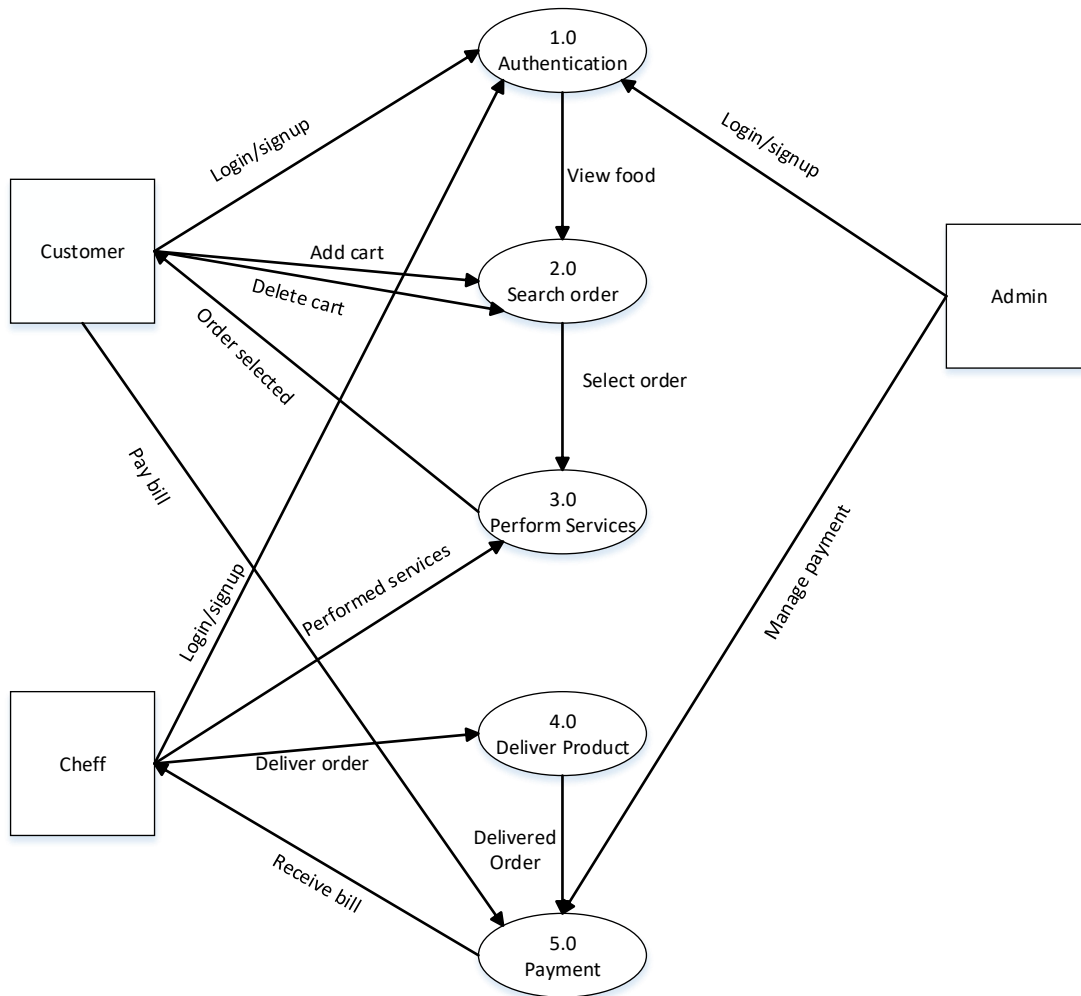
4.11. Data Flow diagram

Data flow diagram shows how different environments will interact with each other. Bawarchi Khana interaction with chefs, customers and admin. Data flow as it is cleared from its name how the flow of processes will take place. As customer will search for order, select order and submit for order. Processing of all phases can be understood by diagram.

Context Level:



Level 0:



Chapter 5

Implementation

Chapter 5: Implementation

Implementation and deployment is the part in which the software is implemented or deploying into real world. This process is carried out after analysis and designing phase. We use adobe dream viewer and phpstorm for PHP coding. We use MySQL database for storing the data. We use classes and attributes to create tables in database. In this chapter we tell which type of tools & techniques that are used, which web servers are required for our website and which coding standards are used.

5.1. Important Flow Control/Pseudo codes

Code for Registration

```

<div class="col-md-12 register" style="...">
  <h1 class="register-heading" style="...">Be part of Bawarchi</h1>
  <form method="post" action="registerScript.php" class="row register-form" enctype="multipart/form-data">
    <div class="col-md-6">
      <div class="form-group">
        <label>Full Name</label>
        <input name="name" type="text" class="form-control" placeholder="Full Name *" minlength="5" required/>
        <div><h6 style="..."><?php echo @$_SESSION['err']['name'] ?></h6> </div>
      </div>
      <div class="form-group">
        <label>CNIC Number</label>
        <input name="cnic" pattern="[0-9]+" class="form-control" title="number only" type="text" placeholder="CNIC *" minlength="13"
        <div><h6><?php echo @$_SESSION['err']['cnic'] ?></h6> </div>
      </div>
      <div class="form-group">
        <label>Address</label>
        <input name="address" class="form-control" type="text" placeholder="Address *" minlength="5" maxlength="500" required/>
        <div><h6><?php echo @$_SESSION['err']['address'] ?></h6> </div>
      </div>
      <div class="form-group">
        <label>Contact Number</label>
        <input name="contact" type="text" class="form-control" placeholder="Contact Number *" minlength="11" maxlength="11" required
        <div><h6><?php echo @$_SESSION['err']['contact'] ?></h6> </div>
      </div>
      <div class="form-group" style="...">
        <div class="max1">

```

Code for Login:

```

<div class="container-fluid">
  <div class="container register" style="...">
    <a href="index.php" class="fa-2x"><i class="fas fa-home"></i></a>
    <div class="row">
      <div class="col-md-6 register" style="...">
        <div class="tab-content" id="myTabContent">
          <div class="tab-pane fade show active" id="home" role="tabpanel" aria-labelledby="home-tab">
            <h1 class="register-heading" style="...">Log-In</h1>
            <form action="loginScript.php" method="POST" class="row register-form">
              <div class="col-md-12">
                <div class="form-group">
                  <label>Email</label>
                  <input name="email" type="email" class="form-control" placeholder="email">
                  <div><h6 style="..."><?php echo @$_SESSION['err']['email'] ?></h6> </div>
                  <div><h6 style="..."><?php echo @$_SESSION['err']['notexist'] ?></h6> </div>
                </div>
                <div class="form-group">
                  <label>Password</label>
                  <input name="password" type="password" class="form-control" placeholder="password" />
                  <div><h6 style="..."><?php echo @$_SESSION['err']['password'] ?></h6> </div>
                </div>
                <div class="row remember align-items-center" style="...">
                  <input type="checkbox">Remember Me
                </div>
                <div class="form-group">
                  <input type="submit" name="login" value="Login" class="btn btn-success float-right">
                  <?php echo @$_msg;?>
                </div>
              </div>
            </form>
          </div>
        </div>
      </div>
    </div>
  </div>
</div>

```

5.2. Components, Libraries, Web Services and stubs

- Apache Server
- HTTP server
- XAMPP server
- Secure user profile
- Administration module
- Automatic receipt generation
- Mobile web Friendly
- Social media component

5.3. Deployment Environment

In Deployment environment Apache is used to run HTTP servers. My SQL server is used to store data in database. There are some processes involved in deployment environment.

- Development
- Testing
- Staging
- Deployment

Development

We make code and make changes according to user requirements in local environment.

Testing

In testing phase, we integrate the sub systems as it is the integration environment. Testing is carried out if problems are faced, then changes may occur. It may also be quality assurance.

Staging

This is the phase where tested changes are run against environment and data to ensure that the software/system will work properly when deployed in users system.

Deployment

Now software is ready to use.

5.4. Tools and Techniques

Front-end:

- HTML
- CSS
- JavaScript
- Bootstrap

Back-end:

- PHP
- XAMPP

phpstorm

5.5. Best Practices / Coding Standards

- Communication with stakeholders
- No repetition of coding
- Every requirement is documented
- Function and classes are always commented during coding
- Use a detailed work definition document
- WBS (work breakdown structure) should be made to follow plan.
- Ask for feedback
- Agreements should be managed by admin if needed.
- Meetings should be arranged.

5.6. Version Control

We are launching the first version of Bawarchi Khana. New versions will be planned to launch in future.

Chapter 6

Testing and Evaluation

Chapter 6: Testing and Evaluation

Testing and Evaluation is the process by which a system or components are compared against requirements and specifications through testing. The results are evaluated to assess progress of design, performance and supportability. Test-case specification is performed for system testing by keeping in mind several issues, which are discussed in the following subtopics

6.1. Use Case Testing

Use Case Testing is a functional black box testing technique that helps testers to identify test scenarios that exercise the whole system on each transaction basis from start to finish.

- Use Cases capture the interactions between 'actors' and the 'system'.
- 'Actors' represents user and their interactions that each user takes part into.
- Test cases based on use cases and are referred as scenarios.

Sign in

Main Success Scenario	Step	Description
A=Actor	1	A: provide required detail.
S=System	2	S: System Save Data in database and make profile of chefs and customers.
Extension	2a	S: User must visit the sign-in page.

Login

Main Success Scenario	Step	Description
A=Actor	1	A:Enter Email and password
S=System	2	S:Valid Password
	3	Allow Account Access
Extension	2a	S: Invalid Password Message Display on the Screen asks for Re-enter password.

Logout

Main Success Scenario	Step	Description
A=Actor	1	A:Enter Logout
S=System	2	S: System Show Message to User logout
Extension	2a	S: User must login Message Display on the Screen

Menus

Main Success Scenario	Step	Description
A=Actor	1	A: For searching order
S=System	2	S: System Show Menu list
Extension	2a	S: User must browse the Bawarchi khana website

Select order

Main Success Scenario	Step	Description
A=Actor	1	A:View Order detail
S=System	2	S: System show selected order in cart.
Extension	2a	S: User must search the orders.

Submit order

Main Success Scenario	Step	Description
A=Actor	1	A:Submit selected order
S=System	2	S: Generate receipt against selected order

Extension	2a	S: User must provide the delivery location.
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Bill Payment

Main Success Scenario	Step	Description
A=Actor	1	A:Pay bill against receipt.
S=System	2	S: Display confirmation message.
Extension	2a	S: User must login and make order.

Provide Food Menu

Main Success Scenario	Step	Description
A=Actor	1	A:Menu provided by chef on chef profile which will be visible to customers.
S=System	2	S: System show the food detail uploaded by chef to customers.
Extension	2a	S: Chef must be login.

Collect Order

Main Success Scenario	Step	Description
A=Actor	1	A:collect orders selected or submitted by customers
S=System	2	S: System will show the delivery charges and time.
Extension	2a	S: Chef must be login.

Deliver Food

Main Success Scenario	Step	Description
A=Actor	1	A: Chef will update customer about food that food is ready.
S=System	2	S: System will ask feedback.
Extension	2a	S: User must login and order food.

Manage Accounts

Main Success Scenario	Step	Description
A=Actor	1	A: Admin will manage accounts when bugs occur and offer promotions.
S=System	2	S: System show promotions and discounts.
Extension	2a	S: User must login.

6.2. Equivalence partitioning

Mobile number: Must be 11 digits.

Invalid	Valid	Invalid
3767788238	03001234567	45673030

CNIC number: Must be 13 digits.

Invalid	Valid	Invalid
1234-7637-6-6	3640212345678	45673030232577

6.3. Boundary value analysis

Login

Email

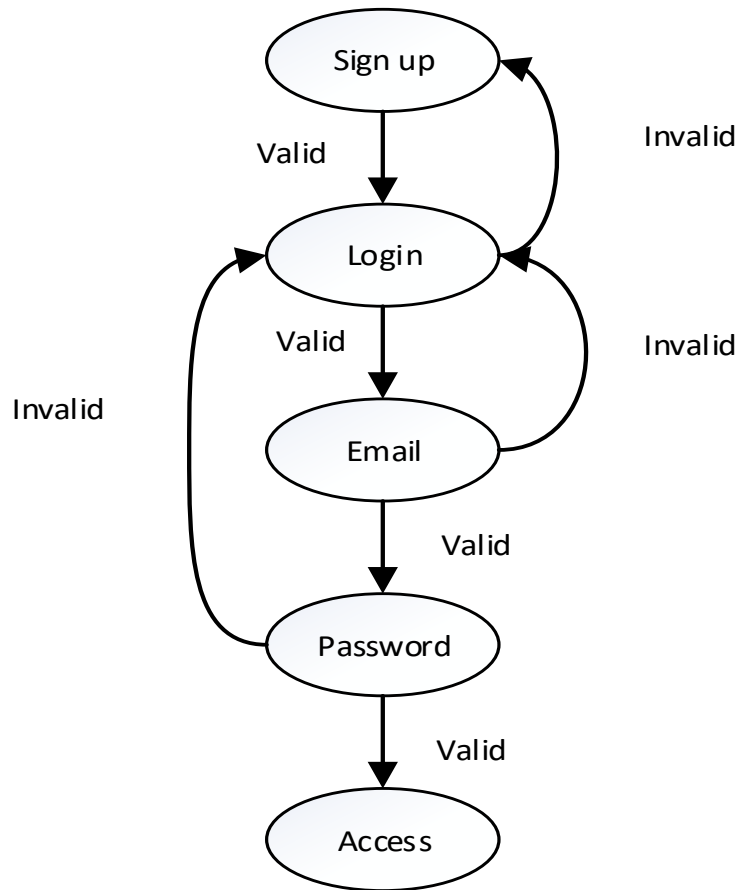
Invalid (min-1)	Valid (min, +max, -min, max)	Invalid (max+1)
3	3 to 30	30

Password

Invalid (min-1)	Valid (min, +max, -min, max)	Invalid (max+1)
8	8 to 25	25

6.4. Data flow testing

Data flow testing is a family of test strategies based on selecting paths through the program's control flow in order to explore sequences of events related to the status of variables or data objects.



6.5. Unit testing

Unit testing is a white-box testing technique. The main consideration in this test is verification of all modules of the software system. Each module is unit tested, as follows:

- Unit testing for the module User Management is tested by valid user or invalid user.
- Unit testing for the module User Account management is provided by testing Login, Logout and creating new or deleting updating existing user.
- Unit testing for the module Detail of order result give detail accurately.
- Unit testing for the module Add/update/delete food menu detail.

TEST CASES FOR UNIT TESTING OF MODULES

Test Case No	Identifier	Test item	Input Specifications	Output Specifications	Pass / Fail	Description
1	UTS-SU-01	Signup	Fill All required Fields	Field not selected, Welcome Message	Pass	Signup is required for every user.
2	UTS-LOG-01	Login	Email, Password	Error message, Welcome Message	Pass	To verify login user authentication
3	UTS-SR-01	Search order		Menus are showed	Pass	To View active food display by chefs.
4	UTS-SEL-01	Select order		Add to cart	Pass	Selected food orders are added to cart.

5	UTS-SUB-01	Submit order	Order is selected	Order is finally submitted for ordering.	Pass	Order is received by chef.
6	UTS-CO-01	Collect Order	Collect Submitted order	Customer detail is provided	Pass	Chef collect the order
7	UTS-DO-01	Deliver Order	Customer Detail is provide	Receive Payment	Pass	Food is delivered by the chef

6.6. Integration testing

Integration testing is the technique for testing the interfaces of software components. Each software components in unit tested, and all the components are integrated to perform together. The tests are conducted to ensure that the components are working properly after interfacing.

All modules are integrated by an incremental approach, and integration testing of the system is performed as follows:

- Integrate login module and test that the software is properly connected to the database.
- Integrate all modules and test by inserting updating, and deleting records.

Test Case No	Identifier	Test item	Input Specifications	Output Specifications	Pass / Fail	Description
1	ITS-REG-01	Signup, Login	First Signup is required then Login	Verified user can Access, Must Signup	Pass	Signup is required for every user.
2	ITS-MENU-01	Chef, Menu	Create Menu, Update or Delete	Menus Display on Dashboard, Inactive Status will not be displayed	Pass	Chef must fill all required fields to provide menu

3	ITS-ORD-01	Customer, Cart	Customer add order to cart	Quantity of order can increase, Generate Bill	Pass	Must Provide Address and contact number
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Chapter 7

Summary, Conclusion and Future Enhancements

Chapter 7: Summary, Conclusion & Future Enhancements

7.1. Project Summary

Our website is about delivering the healthy and fresh home cooked food. We would like to expand the service to delivering items from door by door. Placing an order with Bawarchi Khana could not be more convenient. Customers visit our website and choose from a variety of recent home cooked food. The customer will place their order through us, and will receive the total cost which includes the price of food and tax from our Bawarchi as well as our own delivery charge. The customer then has the option to pay online with a credit card or choose the option to pay with cash, which we will collect at the time of delivery. Our concept for the website is in development, but we expect to receive a high volume of our orders via the internet.

7.2. Achievements and Improvements

- Main achievement is we have provided opportunity of earning to women working at homes.
- Learnt how to survive in a competitive business environment.
- Our platform is providing employment opportunity to Chefs and End users.
- Learnt to work in a team.
- Learnt time management.
- We will try to improve & take care of our project, we will try to make it more secure, maintain its availability and it will be more responsive at a time.

7.3. Critical Review

Main goal is we are providing platform for household women who want to work and earn but are restricted. As we are providing platform for both chefs and customers.

We are facilitating them with platform where they can collect orders and can make money. We know our competitors and we have learnt how to survive in a market, for being stay in a market we must have to take a uniqueness to compete everyone in a business environment.

7.4. Lessons Learnt

We learnt how to work in team and make a successful project without any failure. We briefly learned about PHP. Learnt how to compete with competitors for more earning and for survival in market.

7.5. Future Enhancements/Recommendations

We will make android app where our customers will able to buy food items from our android application with full transaction process. Now we are delivering the food manually and later on we will deliver food properly by delivery boys.

Reference and Bibliography

Reference and Bibliography

- [1] Kimes, S. E. (2011). The current state of online food ordering in the US restaurant industry. *Cornell Hospitality Report*, 11(17), 6-18.
- [2] Murphy, Andrew. "The emergence of online food retailing: a stakeholder perspective." *Tijdschrift voor economische en sociale geografie* 93, no. 1 (2002): 47-61.
- [3] McAleenan, G. Christopher. "Web-based food ordering system utilizing." U.S. Patent Application 10/993,051, filed May 19, 2005.
- [4] Cleland-Huang, Jane, Raffaella Settini, Xuchang Zou, and Peter Solc. "The detection and classification of non-functional requirements with application to early aspects." In *Requirements Engineering, 14th IEEE International Conference*, pp. 39-48. IEEE, 2006.
- [5] Arpad Bakay, Gabor Karsai, Jason Garrett, Charles Thomason, Greg Nordstrom, Jonathan Sprinkle, and Peter Volgyesi. "The generic modeling environment." In *Workshop on Intelligent Signal Processing, Budapest, Hungary*, vol. 17. 2001.
- [6] Cotter, Jeffrey J. "Food order/delivery system." U.S. Patent 4,797,818, issued January 10, 1989.
- [7] Menninger, Anthony Frank, and Michael James Burk. "System, method and computer program product for order confirmation in a supply chain management framework." U.S. Patent 6,954,736, issued October 11, 2005.
- [8] Moon, M., Yeom, K. and Chae, H.S., 2005. An approach to developing domain requirements as a core asset based on commonality and variability analysis in a product line. *IEEE transactions on software engineering*, 31(7), pp.551-569.
- [9] Sarma, M., & Mall, R. (2007, December). Automatic test case generation from UML models. In *Information Technology, (ICIT 2007). 10th International Conference on* (pp. 196-201). IEEE.