
Software Requirements Specification

for

Shopping Mall Management System

Version 1.0

**Prepared by Ashutosh Aswal
Chirag Mehra
Keshav Bhatia
Aadarsha Panta**

PEC Chandigarh

Table of Contents

Table of Contents ii

Revision History ii

1. Introduction 1

 1.1 Purpose 1

 1.2 Product Scope 1

 1.3 References 1

2. Overall Description 2

 2.1 Product Functions 2

 2.2 Operating Environment 2

 2.3 Design and Implementation Constraints 2

 2.4 Assumptions and Dependencies 2

3. External Interface Requirements 3

 3.1 User Interfaces 3

 3.2 Hardware Interfaces 3

 3.3 Software Interfaces 3

 3.4 Communications Interfaces 3

4. System Features 4

 4.1 Functional Requirements 4

 4.2 Backup Functionality 4

5. Nonfunctional Requirements 5

 5.1 Performance Requirements 5

 5.2 Software Quality Attributes 5

6. Other Requirements 5

Revision History

Name	Date	Reason For Changes	Version

1. Introduction

1.1 Purpose

Purpose of making this system is to provide more facilities to mall manager, sales clerk and customers to get efficient business. Mall management is a well formulated concept in developed countries which are more matured markets.

Mall management largely encompasses several activities that go into the maintenance of the mall. This covers facilities management functions, operation management, accounts management and customer service. It is basically a combination of services that factor in people, place, processes and technology in a particular building. Professional mall management results in the best possible utilisation of resources available.

1.2 Product Scope

The scope defines three roles of users of the project, the manager, sales clerk at the mall and the customers. The administrator is the manager of the mall. The Mall Management System aims at assisting the manager and shop owners at performing managerial tasks, and easy tracking of sales & ongoing transactions.

1.3 References

The application has been developed after thorough discussion with the faculty members and teaching assistants.

The following sites and books were referred while making the application:

- www.w3schools.com
- *Fundamentals of Software Engineering, By Rajib Mall*
- www.google.com

2. Overall Description

2.1 Product Functions

The Product focuses on mainly three classes of people:

- *Mall Owners/Admin:*
 - (a) Login to Application.*
 - (b) Approve/Decline shop setup request.*
 - (c) Send Notifications to shop owners.*
 - (d) Maintain Guestbook*
 - (e) Query for Inventory details for various items at the mall.*
 - (f) Update price for an item.*
- *Shop Owners:*
 - (a) Login to Application.*
 - (b) Add/remove/sell items.*
 - (c) Discontinue shop.*
- *Customers:*
 - (a) Details about the list of shops.*
 - (b) Details about list of products available.*
 - (c) Add/Remove items from shopping cart.*
 - (d) Check total amount payable.*
 - (e) Comments/Feedback for shopping experience.*

2.2 Operating Environment

This application is web based and will be used on any System with Internet connection but here we are using API's to work and facilliate our information.

2.3 Design and Implementation Constraints

The software must run on the Web browser with good internet facility. The app will connect with the centralize database using internet.

2.4 Assumptions and Dependencies

Following are the assumptions made while developing the product:

- *The shop owners or manager will agree to share their items' specifications, availability and other details with this product.*
- *Shop owners are expected to regularly check/update for the correctness of the database.*

3. External Interface Requirements

3.1 User Interfaces

Home Screen:

- *Mall admin menu.*
- *Shop owner menu.*
- *Customer menu.*

Mall admin options:

- *Login*
- *Manage Shop creation request.*
- *Manage Guestbook.*
- *Query for Inventory details of any item.*
- *Update price.*
- *Send notifications.*

Shop owner options:

- *Login.*
- *Setup Shop.*
- *Discontinue shop.*
- *Add/remove items.*
- *Send notification to admin.*

Customer options:

- *Login.*
- *Check order details.*
- *Add/view guestbook.*
- *Browse items*
- *Add to cart..*
- *Cancel order before shipping.*
- *Payment.*

3.2 Hardware Interfaces

- *At least 1 GB of storage on the server side.*
- *Internet connection on both client and server side.*

3.3 Software Interfaces

- *Any operating system for web browser interface.*
- *JAVA DB server database.*

3.4 Communications Interfaces

For communication the application needs an internet browser or android application with working internet connection.

4. System Features

4.1 Functional Requirements

The application should maintain a record for the following details:

- **Items' Details:**

After search/click on an Item the application displays following information:

- (a) Item Name.*
- (b) Specifications.*
- (c) Quantity.*
- (d) Price.*
- (d) Shop Number.*

- **Shop owners' Details:**

To be accessible for Mall owner/admin.

- (a) Owner's Name.*
- (b) Shop Number.*
- (c) Contact details.*
- (d) Lease period.*

- **Sales Statistics:**

The application should support printing the sales statistics for every item, the shopping mall deals with for any particular day or any particular period. The sales statistics should indicate the quantity of an item sold, the price realized, and the profit.

4.2 Backup Functionality:

The application should maintain a backup of the database to prevent losses due to server or internal errors.

5. Nonfunctional Requirements

5.1 Performance Requirements

Some performance requirements identified are as follows:

- *The database should be able to accommodate items details according to the its size.*
- *The software shall support use of multiple users at a time.*
- *The login action should not take more than 25 seconds.*
- *Need at least 2.5mbps Internet connection.*
- *The application should be able to work 24X7*

5.2 Software Quality Attributes:

The application has been made user friendly with Graphical Interface.

The software quality attributes are assumed as under:

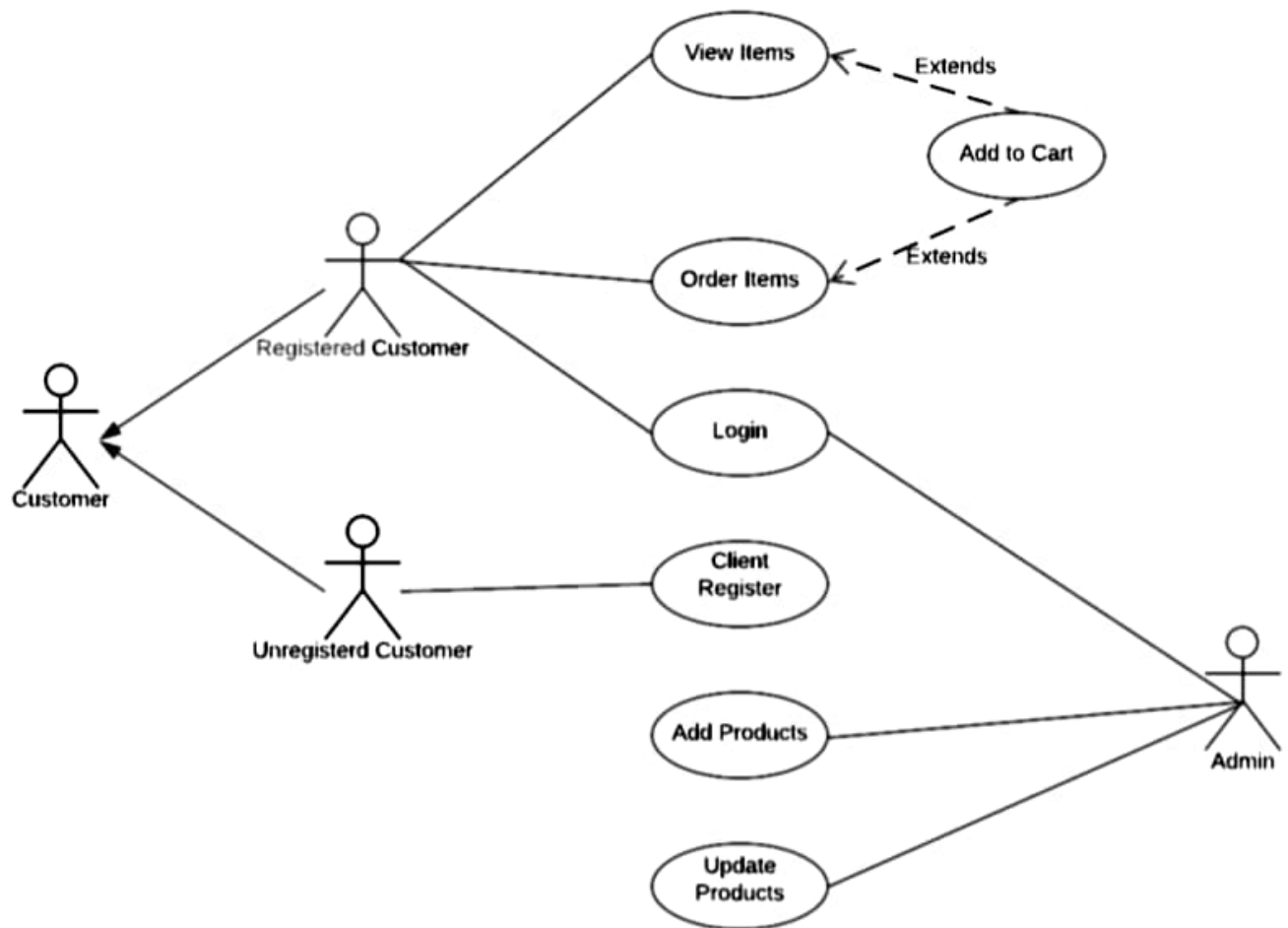
- *Accurate and fully updated.*
- *Fast.*
- *Platform Independent.*
- *Maintainability*

6. Other Requirements:

- *Latest Browser is recommended for the best experience of the application.*

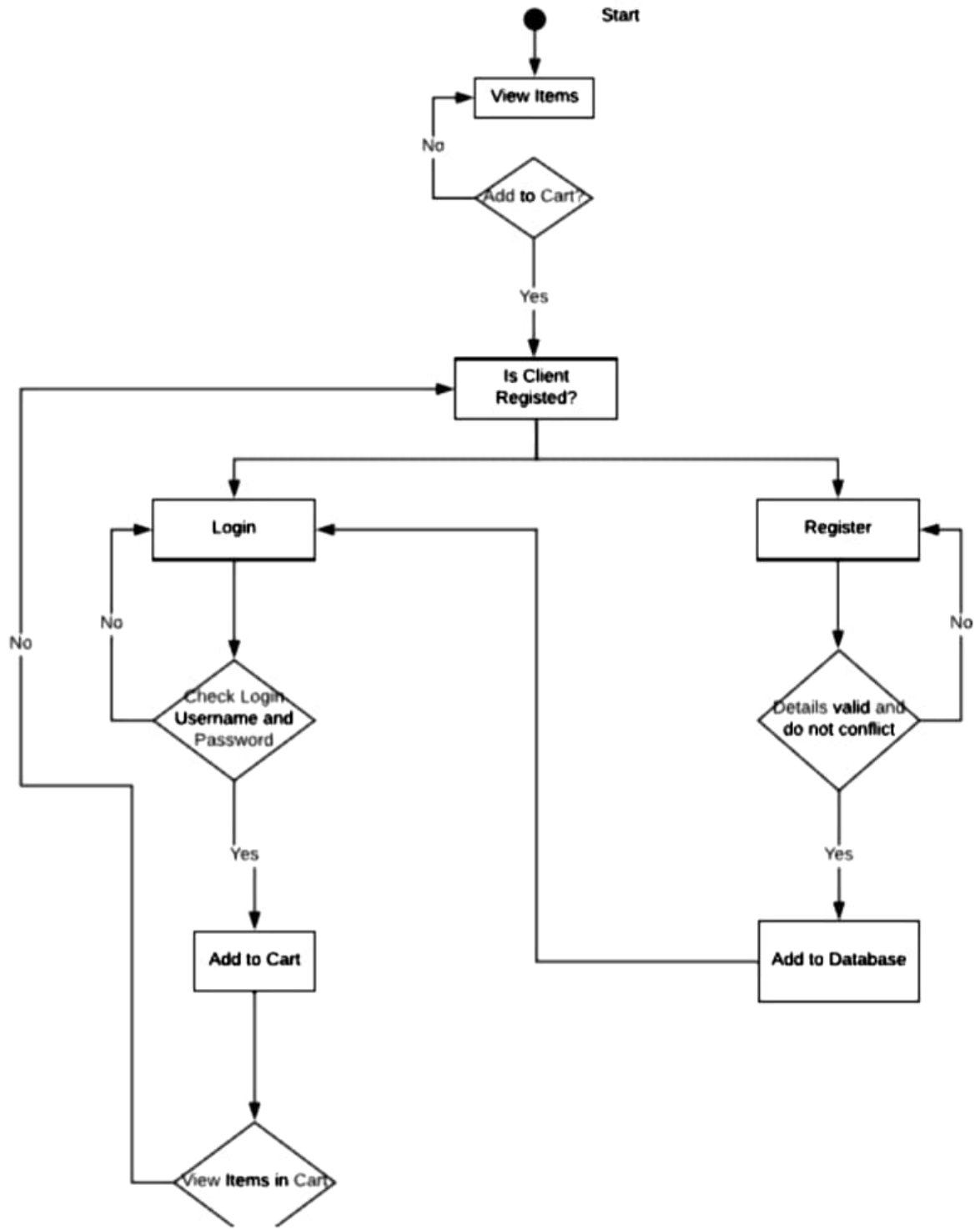
Appendix B: Analysis Models

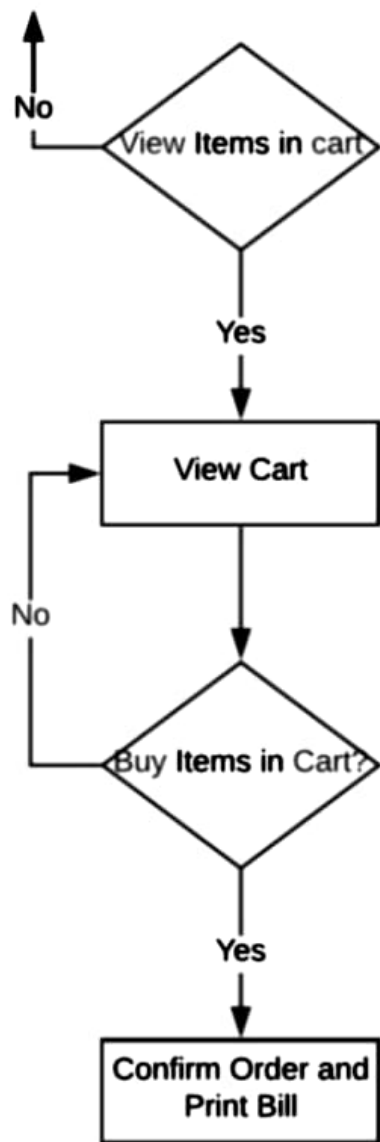
B1: Use Case Diagram



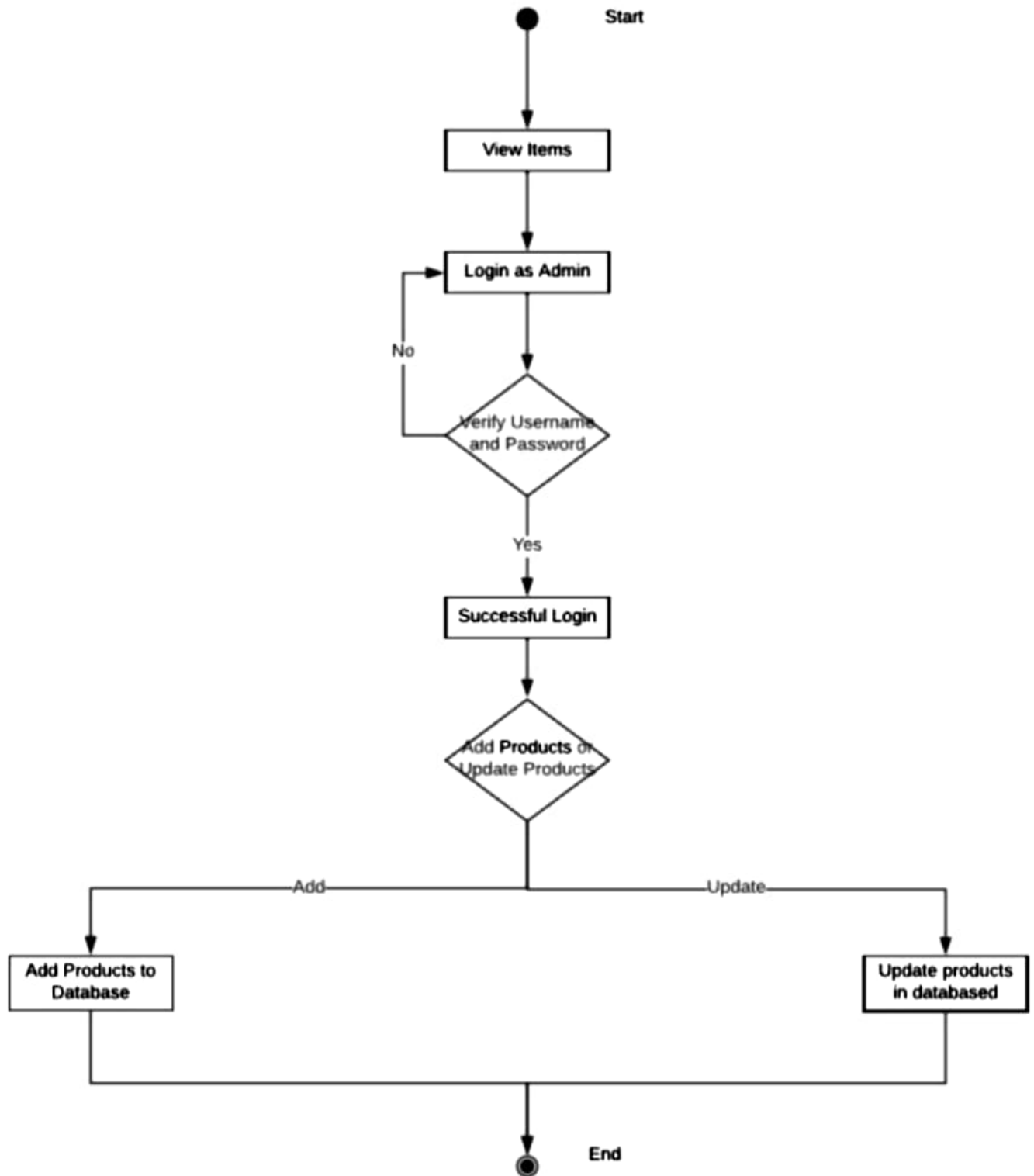
B2: Activity Diagram

For User

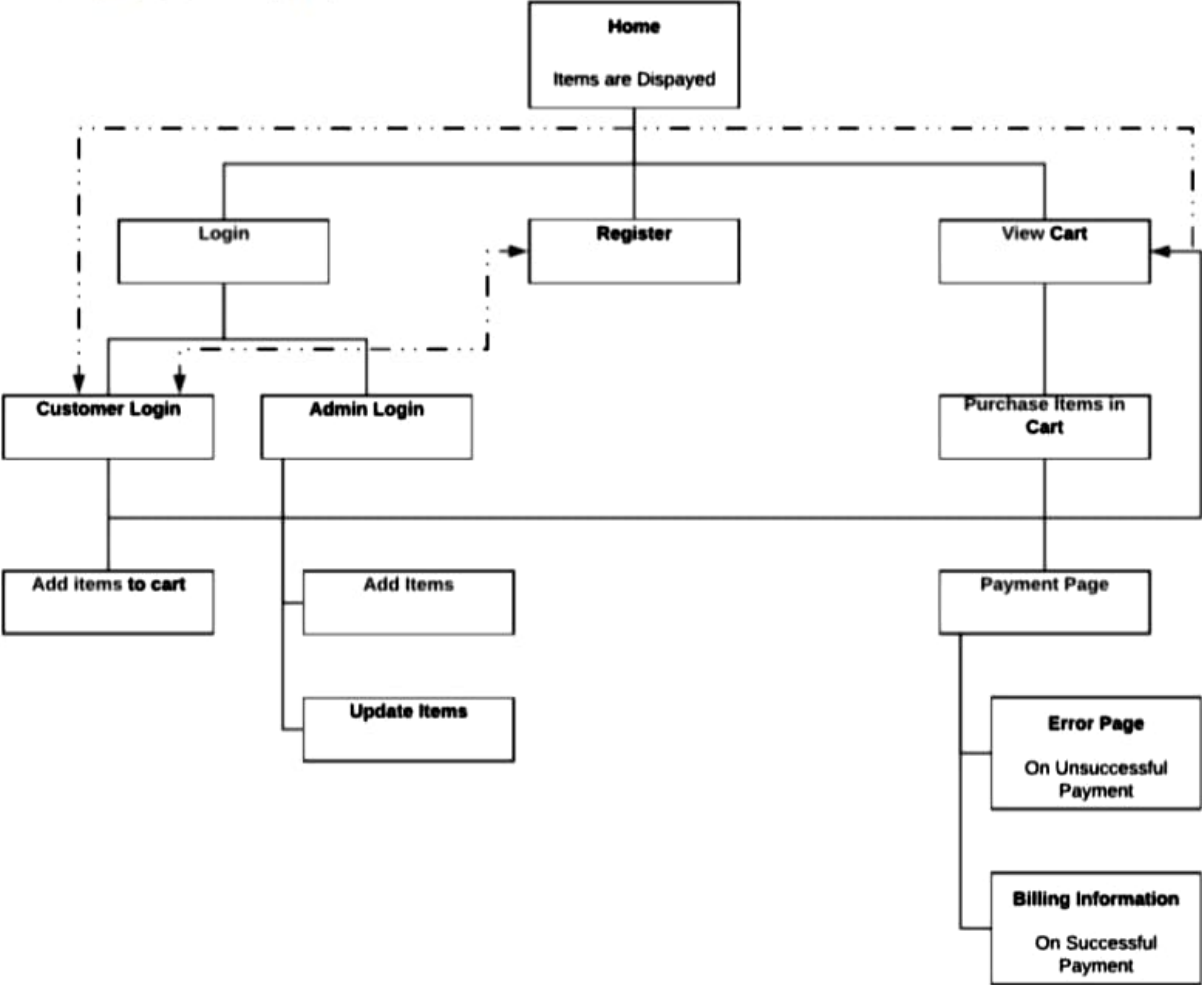




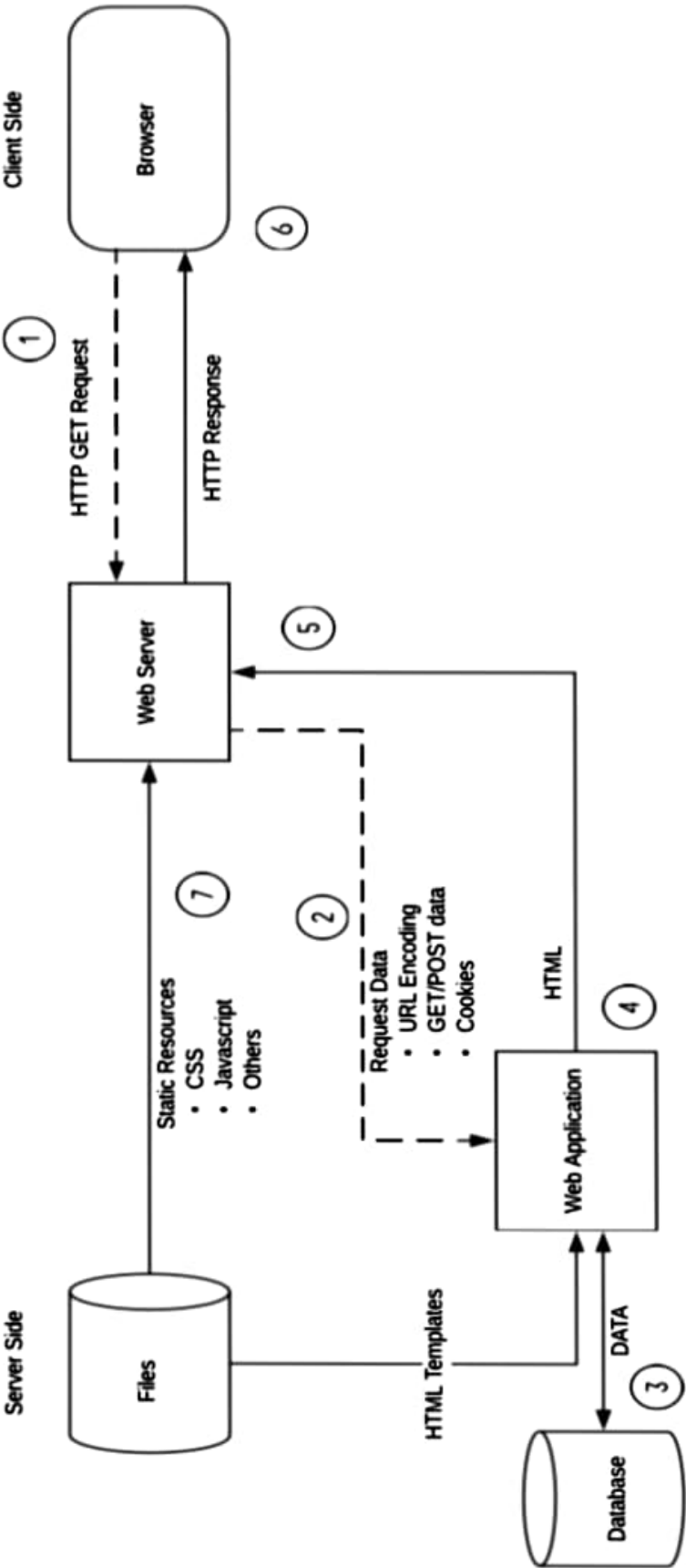
For Admin



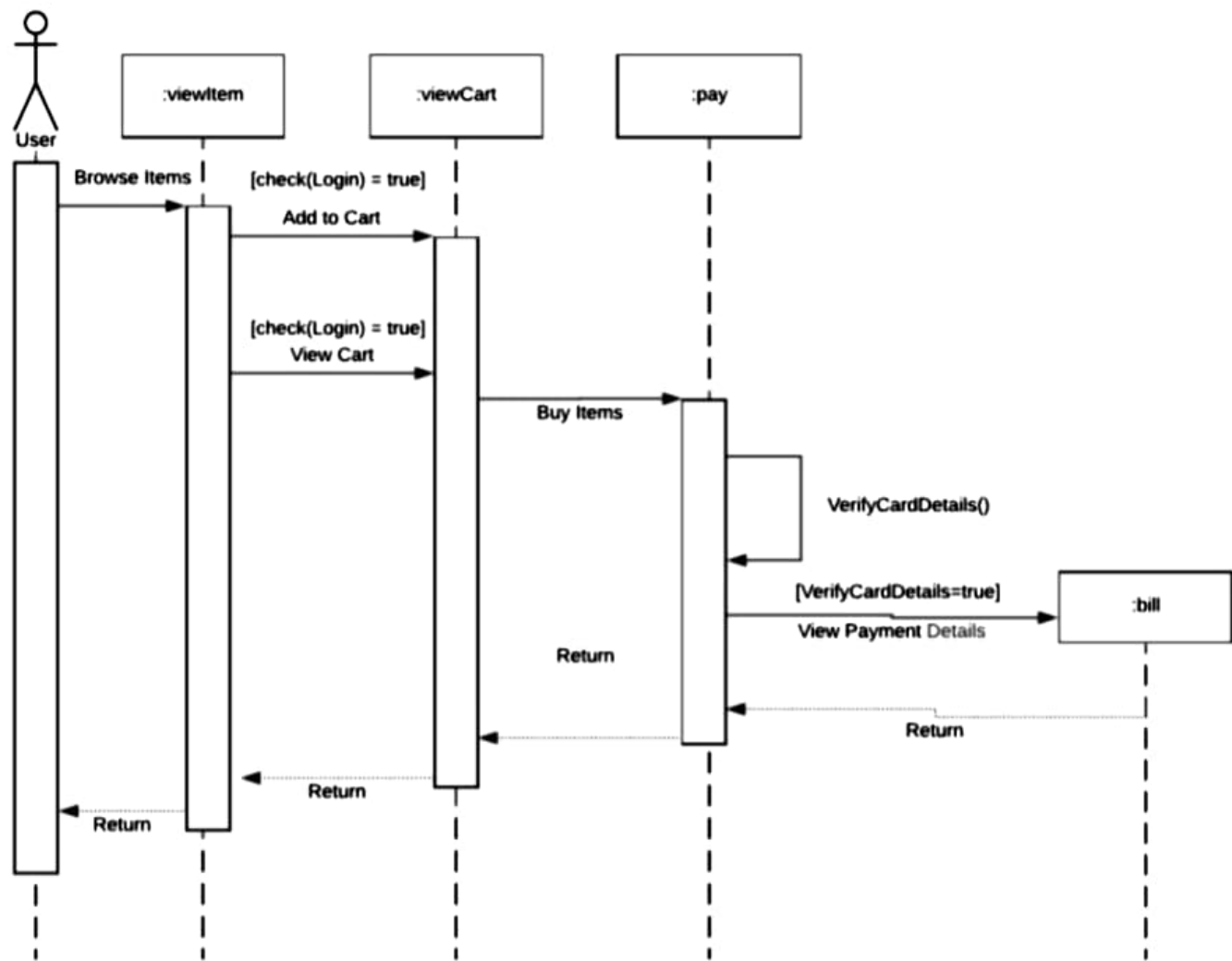
B3: Navigation Diagram

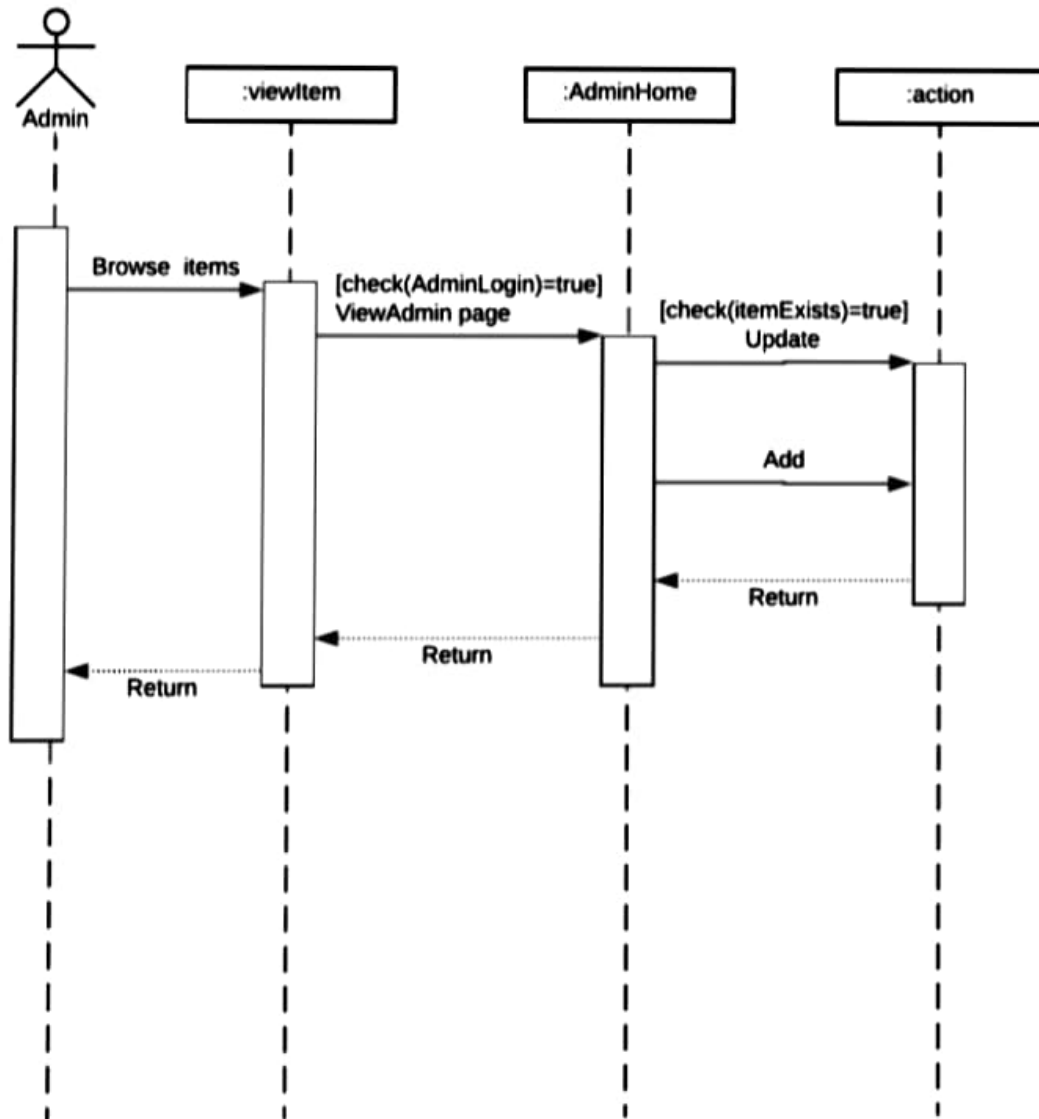


B4: Overall System Architecture Diagram



B5: Sequence Diagram





B6: ER Diagram

