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Software Engineering CSE3001

Project title

E-COMMERCE REVIEW SYSTEM

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Chapter:1 –Abstract

As most of the people require review about a product before spending their money on the product. So, people come across various reviews in the website but these reviews are genuine or fake is not identified by the user. In some review websites some good reviews are added by the product company people itself in order to make product famous this people belong to Social Media Optimization team. They give good reviews for many different products manufactured by their own firm. User will not be able to find out whether the review is genuine or fake. To find out fake review in the website this "Fake Product Review Monitoring and Removal for Genuine Online Product Reviews Using Opinion Mining" system is introduced. This system will find out fake reviews made by the social media optimization team by identifying the IP address. User will login to the system using his user id and password and will view various products and will give review about the product. To find out the review is fake or genuine, system will find out the IP address of the user if the system observes fake review send by the same IP Address many a times it will inform the admin to remove that review from the system. This system uses data mining methodology. This system helps the user to find out correct review of the product.

OBJECTIVE

- User-friendly interface for both the users and the system admin
- A database which will contain the details of the users and the products to be registered
- Admin will add products to the system.
- Admin will delete the review which is fake.
- User once access the system; user can view product and can post review about the product.
- System will track the IP address of the user.
- If the system observes fake review coming from same IP address many a times this IP address will be tracked by the system and will inform the admin to remove this review from the system.

PROJECT SCOPE

The E-Commerce Site Utilizing an Honest Review System will allow any user to create an account to become a customer. The customer, through the process of account creation, will have the option to become a member of the site. The system will allow customers to browse, search, select, and add things to a shopping cart. The system also allows a manager to manage the inventory with full create, retrieve, update and delete functionality with regards to reviews given in the system. It will also allow, on an inventory wide basis, customers and managers to interact.

Chapter:2 -System Analysis (SRS document)

2.1. INTRODUCTION

The Software Requirements Specification is designed to document and describe the agreement between the customer and the developer regarding the specification of the software product requested. Its primary purpose is to provide a clear and descriptive "statement of user requirements" that can be used as a reference in further development of the software system. This document is broken into a number of sections used to logically separate the software requirements into easily referenced parts. This Software Requirements Specification aims to describe the Functionality, External Interfaces, Attributes and Design Constraints imposed on Implementation of the software system described throughout the rest of the document. Throughout the description of the software system, the language and terminology used should be unambiguous and consistent throughout the document.

Definition, Acronyms, or Abbreviations

♦ **SRS**- Software Requirement Specification

♦ **Reorder Threshold**-The numeric value of an item's stock that must be reached before the system will order additional quantities of the item

♦ **Session**- The time which a User is actively using the system

♦ **Shopping Cart -** An object that lists a customer's selected Items, their applied promotions and gives them an option to check out

♦ **Stock**-The quantity of any particular item the inventory has on hand

♦ **Text Box**- A user interface element that allows a User to input text to the system

♦ **Transaction** -The information related to a customer's purchase that is logged ❖ **Inventory**- An object that holds items available for purchase by the Customer

♦ **Item**- An individual entity in the inventory which has several descriptive attributes:

♦ **Manager**- A single person that has the ability to create, retrieve, update and delete items in the store. This person cannot simultaneously act as a Customer and Manager.

♦ **User**-The Pers

- ❖ **GUI**- Graphical User Interface

♦ **Stakeholder**- The person who will participate in system Ex. Customer, Administrator, Visitor etc

♦ **Barcode**- A unique identifier assigned to single items Book an instance of an Item that has these additional attributes: Title, Author 3

♦ **Button**- A user interface element that allows a User to click and inform the system to take an action

♦ **Checkbox**- A user interface element that allows a User to inform the system that he/she selected a particular item

♦ **Checkout**-The process a customer goes through to purchase an Item

♦ **Customer**- A person that is a user of the system but has created an account

♦ **Promotion**- An item-wide percentage-off price discount applied to a member's shopping cart

♦ **Reorder**-The system process that automatically orders new stock of an item on who operates the software product.

Overview

This system provides an easy solution for customers to buy the product without going to the shop and also to shop owner to sale the product. This proposed system can be used by any naïve users and it does not require any educational level, experience or technical expertise in computer field but it will be of good use if user has the good knowledge of how to operate a computer.

GENERAL DESCRIPTION

The system application enables vendors to set up online shops, customers to browse through the shops, and a system administrator to approve and reject requests for new shops and maintain lists of shop categories. Also, the developer is designing an online shopping site to manage the items in the shop and also help customers to purchase them online without visiting the shop physically. The online shopping system will use the internet as the sole method for selling goods to its consumers.

Product Perspective

This product aimed toward a reason where with this increasing consumer base, e-commerce sites need a proper check system to allow customers to buy genuine and good products. This helps Customers in utilizing a proper review system that will help them search and find the best products they need.

Product Functions

Providing better product description:

Here Users will be allowed to add better alternatives to the products in their reviews directly. This will allow buyers to find better alternatives to the items they are interested in.

Categorization of users:

There will be ranking and achievements based on the helpfulness which will give the users incentive to further post more reviews about items they have bought.

Review weight system:

Buyers can mention if a review is helpful or not. Reviewers will be given classes according to the helpfulness of each review. The more helpful reviews they post, the higher will be their classes. Their reviews will be placed higher than the reviewers with lower classes.

Direct checkout to payment:

Users can Directly buy an item without the hassle of adding it to cart and checkout to payment gateway.

Wholesale dealings:

It helps in Allowing vendors to take personal or wholesale orders from customers. Thus, Products available for cheap on the site.

Custom made order:

For customized merchandise, order can be placed by the provision of upload of a sample here Products described by user to the seller. And Order processing done by site. Thus, Custom made products are delivered to the users.

User Characteristics

This Ecommerce site utilizing honest review system users is simply anyone that has access to the Internet and a web browser. It is assumed that the user is familiar enough with a computer to operate the browser, keyboard and mouse and is capable of browsing to, from and within simple websites. Users should be familiar with the terms like login, register, order system etc.

General Constraints

➔ A full internet connection is required for OSS.

➔ Reviews by new users have to be elaborate so that fake users cannot slump down sales of competing products.

➔ Our databases will be encrypted using RSA cryptosystems making it more secure than conventional database security systems.

Assumptions

Client:

The user is capable of operating these system's basic functions including but not limited to being able to power on the system, login and open either Internet Explorer or Mozilla Firefox, and navigate the browser to the address of this website.

Provider:

We have assumed that this website will be running on a properly working web server and database system with an Internet connection that allows this system to perform all communications with clients.

Assumptions:

There is no need for anyone to be able to order more than a single copy of a book (or any item) in a single transaction.

FUNCTIONAL REQUIREMENTS

PRIME SORT

Description: Most e-commerce websites suffer from the issue of sorting results in a search. Most ecommerce sites prioritize ratings over quantity. They don't care about the quantity of reviewers but the final rating of the product. As such, the product with 5-star rating from 3 people will be higher on the searched list over a product with 50 reviews and a 4.2-star rating. The product with 50 reviews has more validity as more people have tried it out but still the ratings are prioritized. We plan to tackle this problem. We will implement a search based on the number of reviewers and their reviews to sort the searches.

Input: Reviews from users Processing: The reviews will be sorted according to the number of verified user reviews.

Output: Sorted reviews

BRAND SORT

Description: Leading brands will be based on the votes of reviewers. It will also affect the sorting of the items on the search list. The items from brands with higher number of votes will be on top of the list compared to the brands with lower number of votes.

Input: Famous Brands Processing: Products will be prioritized according to famous brands in the search list.

Output: Sorted products according to fame of brands

BETTER PRODUCT SUGGESTION

Description: Users will be allowed to add better alternatives to the products in their reviews directly. This will allow buyers to find better alternatives to the items they are interested in.

Input: Other better products according to reviews.

Output: Suggestions of products according to reviews.

USER CLASSES

Description: Users will be categorized based on the helpfulness of their reviews. It will later be utilized for the review weight system. There will be ranking and achievements based on the helpfulness which will give the users incentive to further post more reviews about items they have bought.

Input: Number of reviews given by users. Processing: Assigns classes based on number of reviews given by the user.

Output: User reviews powers up users by classes.

REVIEW WEIGHT SYSTEM

Description: Buyers can mention if a review is helpful or not. Reviewers will be given classes according to the helpfulness of each review. The more helpful reviews they post, the higher will be their classes. Their reviews will be placed higher than the reviewers with lower classes.

Input: Users and classes. Processing: Sorts the users based on the user class.

Output: Weight of the users varied based on class.

ONE CLICK CHECKOUT

Description: Directly buy an item without the hassle of adding it to the cart.

Input: User buys item.

Output: Direct checkout to the payment gateway.

REORDER MECHANISM

Description: There are some products which need to be ordered frequently with certain time intervals (e.g.: printer ink, food, soaps, etc.). So, products will have a reorder time for which reminders can be set.

Input: Frequently bought products by users. Processing: Keeps frequently bought items for reordering quickly.

Output: Notification for reordering products.

WHOLESALE DEALINGS

Description: Allowing vendors to take personal or wholesale orders from customers.

Input: Products from wholesalers. Processing: Order quantity should be of a sizeable amount.

Output: Products available for cheap on the site.

CUSTOM MADE ORDER

Description: For customized merchandise, order can be placed by the provision of upload of a sample
Input: Products described by user to the seller. Processing: Order processing done by site.
Output: Custom made product delivered to the user

NON-FUNCTIONAL REQUIREMENTS

ELIMINATION OF FAKE REVIEWS:

Description: Reviews by new users have to be elaborate so that fake users cannot slump down sales of competing products.

Input: All Reviews. Processing: Filtering fake review.

Output: Authentic reviews available.

SECURITY:

Description: Our databases will be encrypted using RSA cryptosystems making it more secure than conventional database security systems.

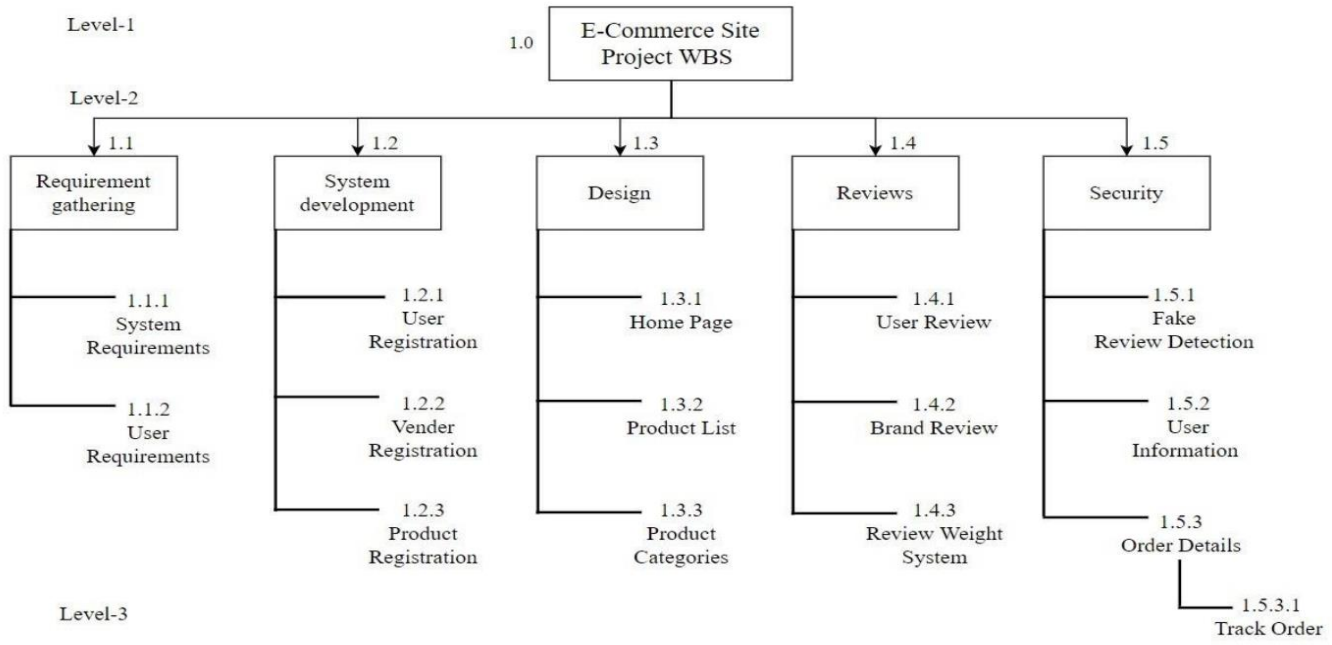
Input: Databases. Processing: Encrypt using RSA cryptosystem.

Output: Encrypted Database.

SCHEDULING CHARTS

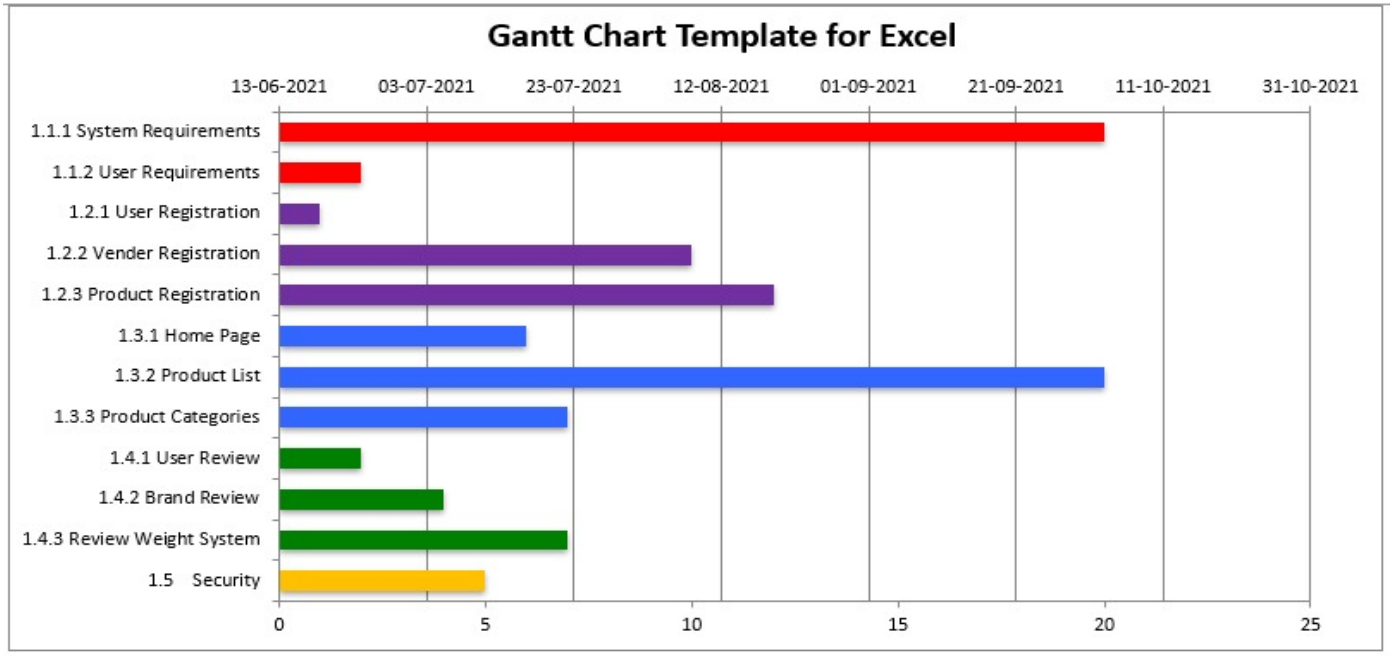
Work Breakdown Structure

A work-breakdown structure (WBS) in project management and systems engineering, is a deliverable-oriented breakdown of a project into smaller components. A work breakdown structure is a key project deliverable that organizes the team's work into manageable sections.



Gantt Chart

A Gantt chart is a project management tool assisting in the planning and scheduling of projects of all sizes, although they are particularly useful for simplifying complex projects. Project management timelines and tasks are converted into a horizontal bar chart, showing start and end dates, as well as dependencies, scheduling and deadlines, including how much of the task is completed per stage and who is the task owner. This is useful to keep tasks on track when there is a large team and multiple stakeholders when the scope changes.



Stimuli response

One click Checkout:

Description: Directly buy an item without the hassle of adding it to cart.
Input: User buys item.
Output: Direct checkout to the payment gateway.

A) User sets up an account and purchase an item.

User action	System actions
1)Create an account	
	2)Account verification mail is sent
3)Selects a product	
	4)Product availability is checked
	5)Vendor contacted for the product
6)One click Checkout	
	7)Display information regarding the purchase of product
8)Confirm purchase	
	9)Directed to payment gateway
10)Payment done	
	11)Email sent to the user about order delivery

Review Weight System:

Description: Buyers can mention if a review is helpful or not. Reviewers will be given classes according to the helpfulness of each review. The more helpful reviews they post, the higher will be their classes. Their reviews will be placed higher than the reviewers with lower classes.

Input: Users and classes.
Processing: Sorts the users based on the user class. Output: Weight of the users varied based on class.

B) User reviews an item

User action	System actions
1)Writes a review	
	2)Shows it to other customers
	3)Customer finds it helpful
	4)User gets a higher class
	5) Sorting of reviews
6)Gets higher class	

Custom Made Orders:

Description: For customized merchandise, order can be placed by the provision of upload of a sample feature.
Input: Products described by user to the seller. Processing: Order processing done by site.
Output: Custom made product delivered to the users.

3)Custom made order

User action	System actions
1)Product description added	
	2)Product availability checked
	3)Contact vendor
	4)Obtain the product
5)Conform purchase	
	6)Redirected to payment gateway
7)Payment done	
	8)Product sent
9)Product received	

Reorder Mechanism:

Description: There are some products which need to be ordered frequently with certain time intervals (e.g.: printer ink, food, soaps, etc.). So products will have a reorder time for which reminder can be set.
Input: Frequently bought products by users.
Processing: Keeps frequently bought items for reordering quickly. Output: Notification for reordering products.

D)Reordering products

User action	System actions
1)Product bought multiple times	
	2)Add the product to frequently bought
	3)Ask user to set an interval for reorder
4)Time set	
	5)Notification for conformation sent to user in intervals
6)Confirms purchase	
	7)Product sent to user

Data Dictionary

C_name: Customer's Name (string)
C_addr: name + house + street + city + pin
C_email: Customer's E-mail ID (string)
C_phone: Customer' Phone No. (int)
I_name: Item's Name (string)
I_price: Item's Prince (int)
I_reviews: {int}*
Quantity: int
CP_name: Company's Name (string)
CP_reviews: {int}*
OR_ID: C_phone + {I_name + Quantity}*

Standard Compliance

The following table lists the different standards that the project is to be in compliance with.

DNS:	Domain Name Service
HTTP	Hypertext Transfer Protocol.
PAR:	Positive Acknowledgment and Retransmission

Chapter:3 -System Design

STRUCTURAL UML DIAGRAMS

UML Class diagram

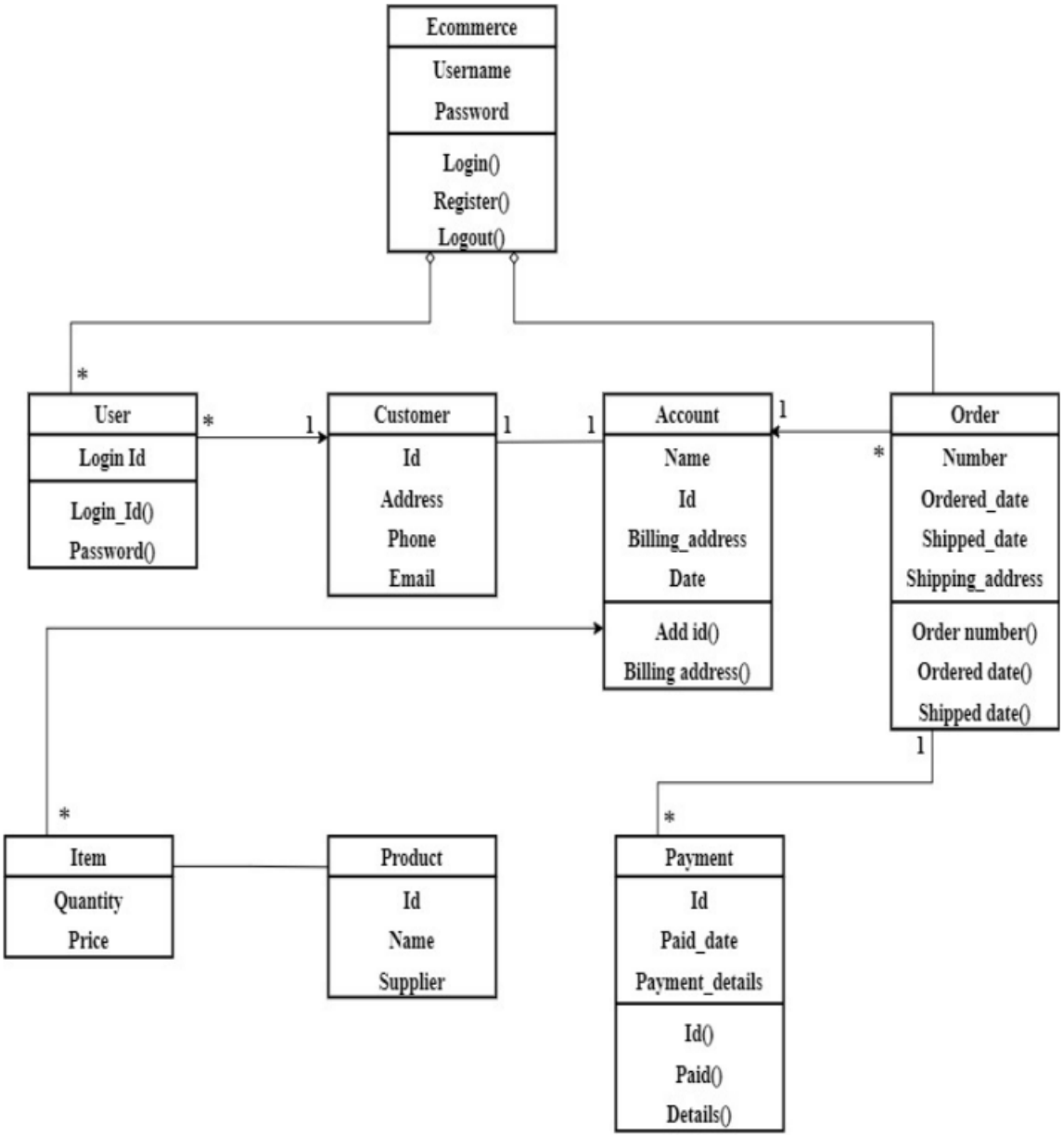
Class diagram is a static diagram. It represents the static view of an application. Class diagram is not only used for visualizing, describing, and documenting different aspects of a system but also for constructing executable code of the software application. Class diagram describes the attributes and operations of a class and also the constraints imposed on the system. The class diagrams are widely used in the modelling of object-oriented systems because they are the only UML diagrams, which can be mapped directly with object-oriented languages.

Class diagram shows a collection of classes, interfaces, associations, collaborations, and constraints. It is also known as a structural diagram.

Purpose of Class Diagrams

The purpose of class diagram is to model the static view of an application. Class diagrams are the only diagrams which can be directly mapped with object-oriented languages and thus widely used at the time of construction. UML diagrams like activity diagram, sequence diagram can only give the sequence flow of the application, however class diagram is a bit different. It is the most popular UML diagram in the coder community. The purpose of the class diagram can be summarized as −

- Analysis and design of the static view of an application.
- Describe responsibilities of a system.
- Base for component and deployment diagrams.
- Forward and reverse engineering.



UML Deployment diagram

Deployment diagrams are used to visualize the topology of the physical components of a system, where the software components are deployed. Deployment diagrams are used to describe the static deployment view of a system. Deployment diagrams consist of nodes and their relationships.

Purpose of Deployment Diagrams

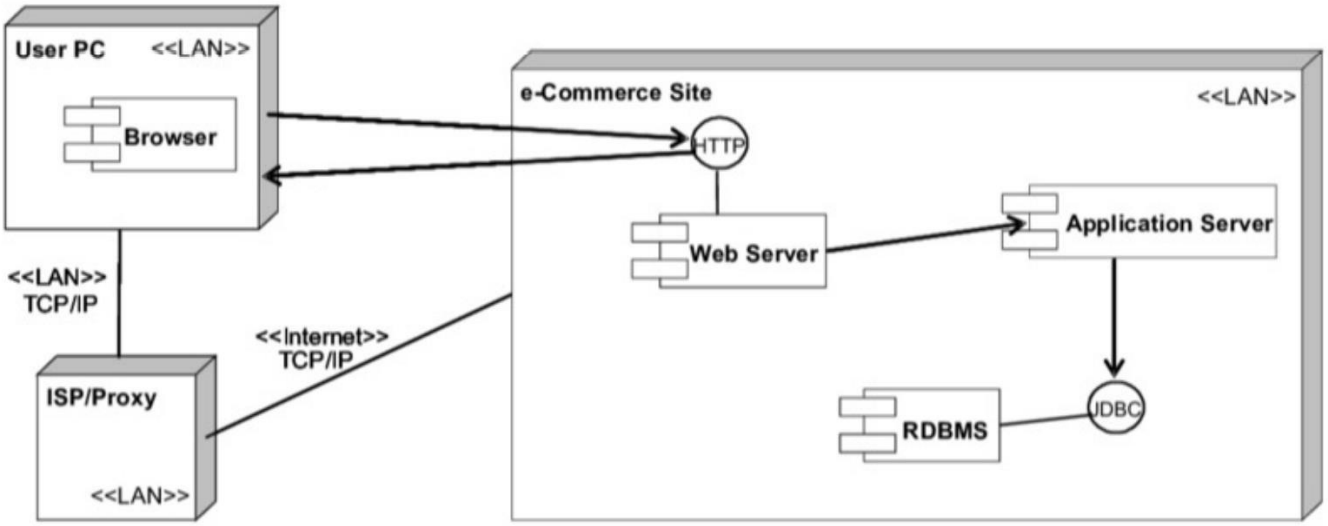
The Term Deployment itself describes the purpose of the diagram. Deployment diagrams are used for describing the hardware components, where software components are deployed. Component diagrams and deployment diagrams are closely related. Component diagrams are used to describe the components and deployment diagrams shows how they are deployed in

hardware. UML is mainly designed to focus on the software artifacts of a system. However, these two diagrams are special diagrams used to focus on software and hardware components. Most of the UML diagrams are used to handle logical components but deployment diagrams are made to focus on the hardware topology of a system. Deployment diagrams are used by the system engineers. The purpose of deployment diagrams can be described as −

• Visualize the hardware topology of a system.

• Describe the hardware components used to deploy software components.

• Describe the runtime processing nodes.



BEHAVIORAL UML DIAGRAMS

UML Activity diagram

Activity diagram is another important diagram in UML to describe the dynamic aspects of the system. Activity diagram is basically a flowchart to represent the flow from one activity to another activity. The activity can be described as an operation of the system. The control flow is drawn from one operation to another. This flow can be sequential, branched, or concurrent. Activity diagrams deal with all type of flow control by using different elements such as fork, join, etc.

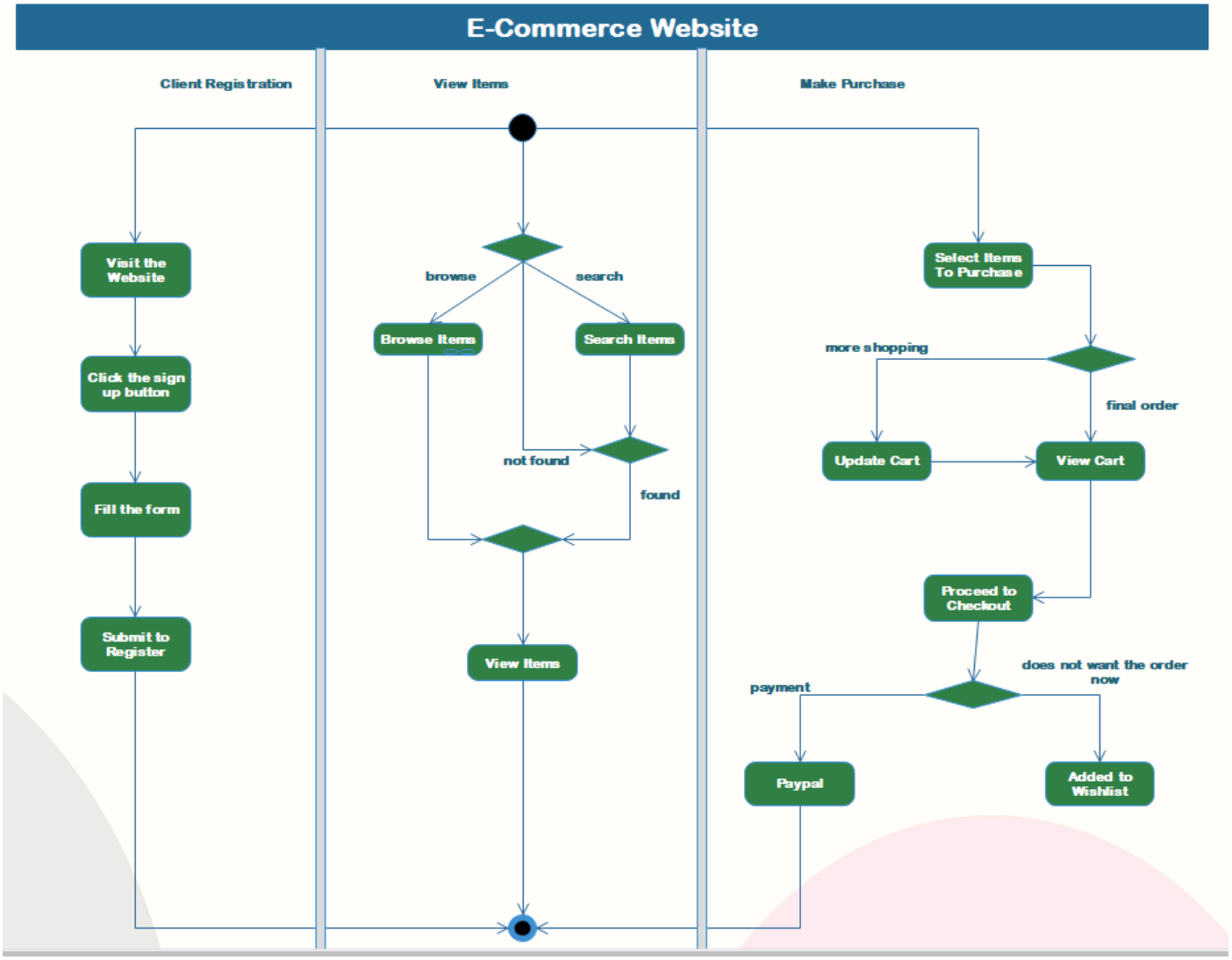
Purpose of Activity Diagrams

The basic purposes of activity diagrams are similar to other four diagrams. It captures the dynamic behavior of the system. Other four diagrams are used to show the message flow from one object to another but activity diagram is used to show message flow from one activity to another. Activity is a particular operation of the system. Activity diagrams are not only used for visualizing the dynamic nature of a system, but they are also used to construct the executable system by using forward and reverse engineering techniques. The only missing thing in the activity diagram is the message part. It does not show any message flow from one activity to another. Activity diagram is sometimes considered as the flowchart. Although the diagrams look like a flowchart, they are not. It shows different flows such as parallel, branched, concurrent, and single. The purpose of an activity diagram can be described as −

• Draw the activity flow of a system.

• Describe the sequence from one activity to another.

• Describe the parallel, branched and concurrent flow of the system.


E-Commerce Website
Client Registration
View Items
Make Purchase
Visit the Website
Click the sign up button
Fill the form
Submit to Register
browse
search
Browse Items
Search Items
not found
found
View Items
Select Items To Purchase
more shopping
final order
Update Cart
View Cart
Proceed to Checkout
payment
does not want the order now
Paypal
Added to Wishlist

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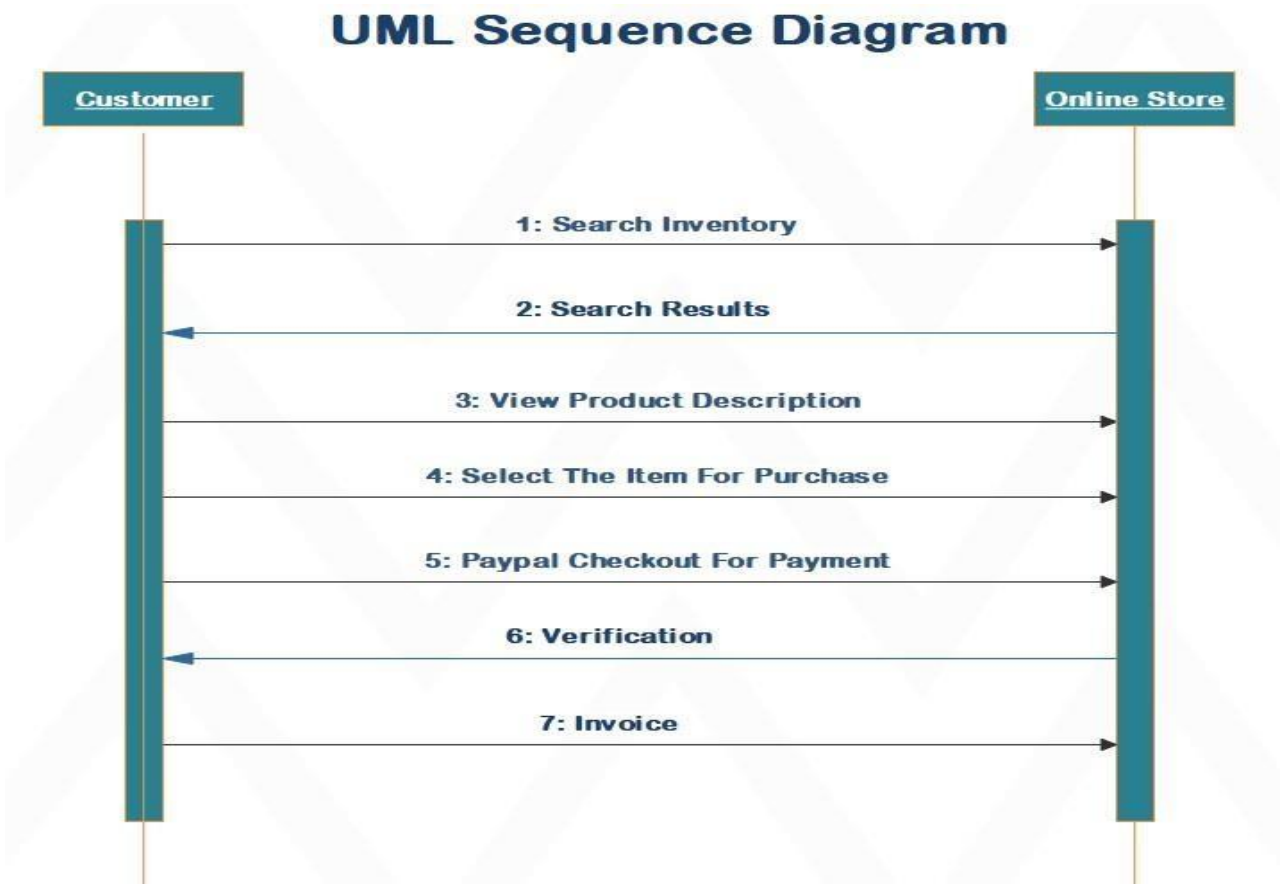
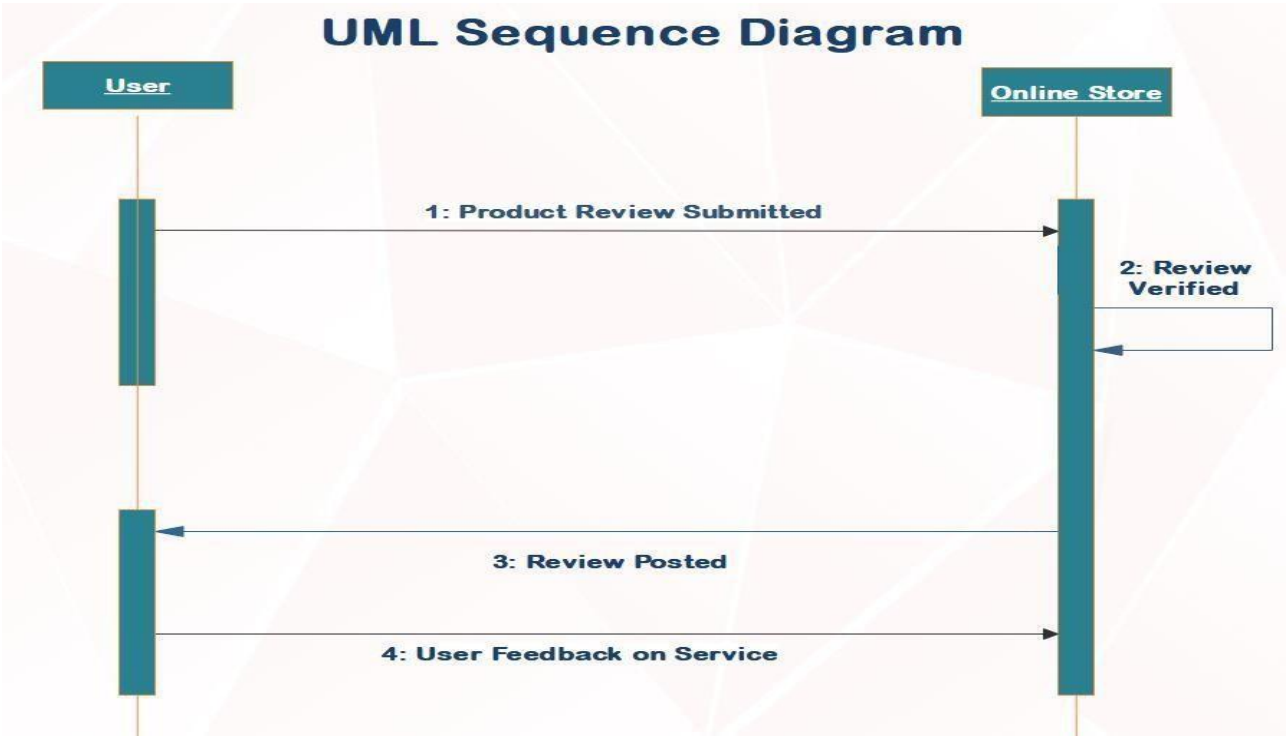
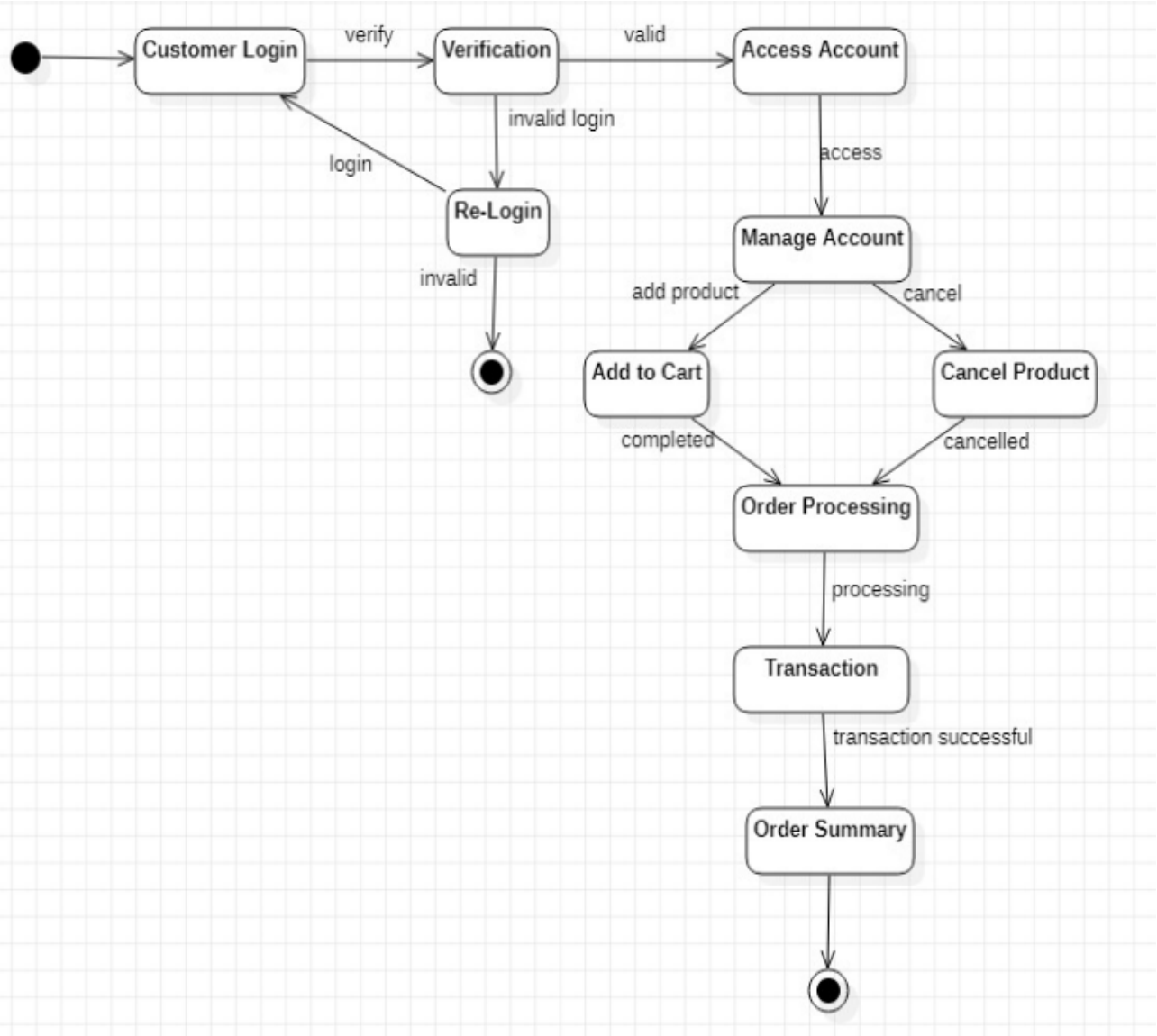
***UML Sequence diagram**





UML State diagram



USE CASE DIAGRAM

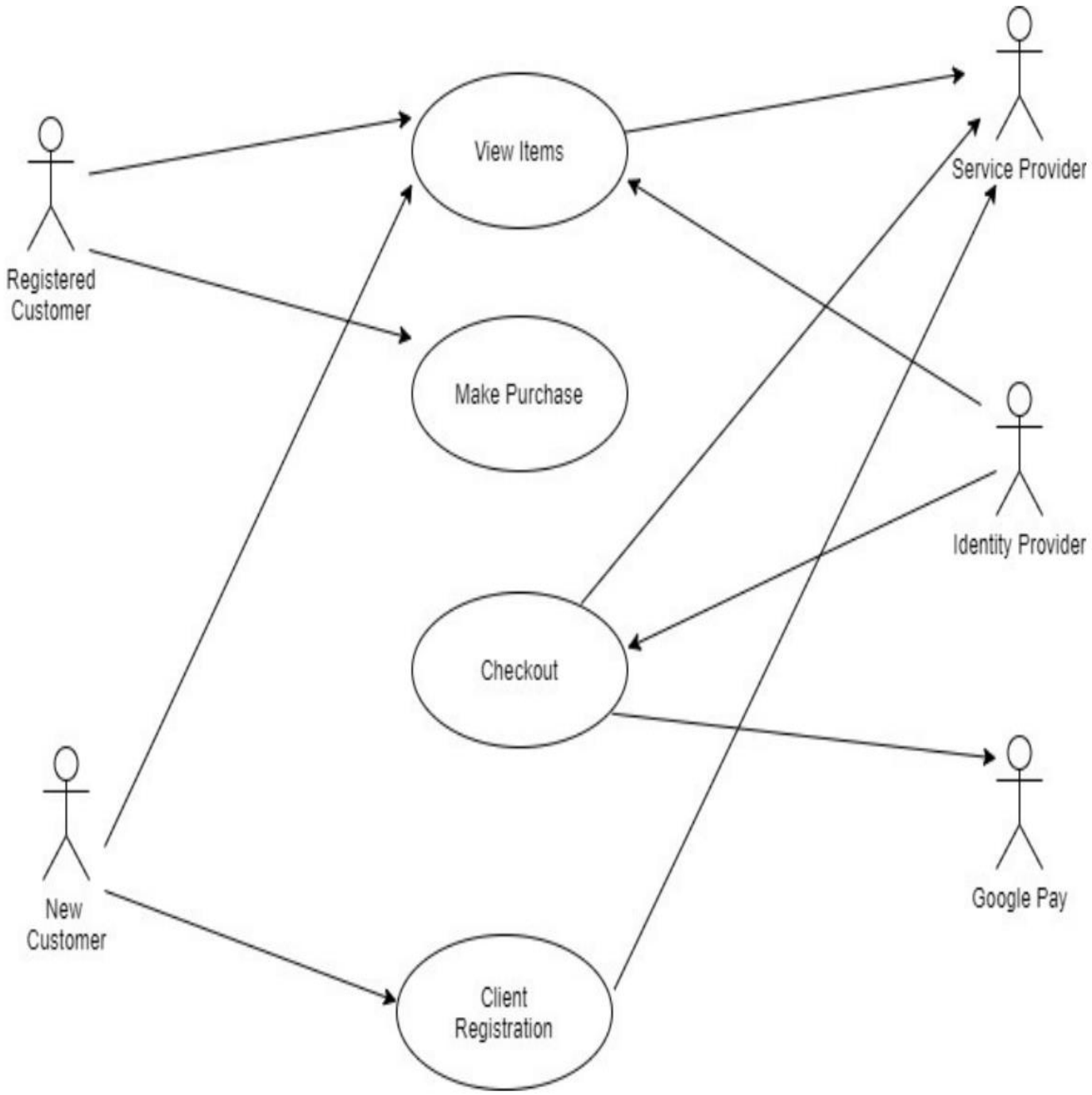
To model a system, the most important aspect is to capture the dynamic behavior. Dynamic behavior means the behavior of the system when it is running/operating. Only static behavior is not sufficient to model a system rather dynamic behavior is more important than static behavior. In UML, there are five diagrams available to model the dynamic nature and use case diagram is one of them. Now as we have to discuss that the use case diagram is dynamic in nature, there should be some internal or external factors for making the interaction. These internal and external agents are known as actors. Use case diagrams consists of actors, use cases and their relationships. The diagram is used to model the system/subsystem of an application. A single use case diagram captures a particular functionality of a system. Hence to model the entire system, a number of use case diagrams are used.

Purpose of Use Case Diagrams

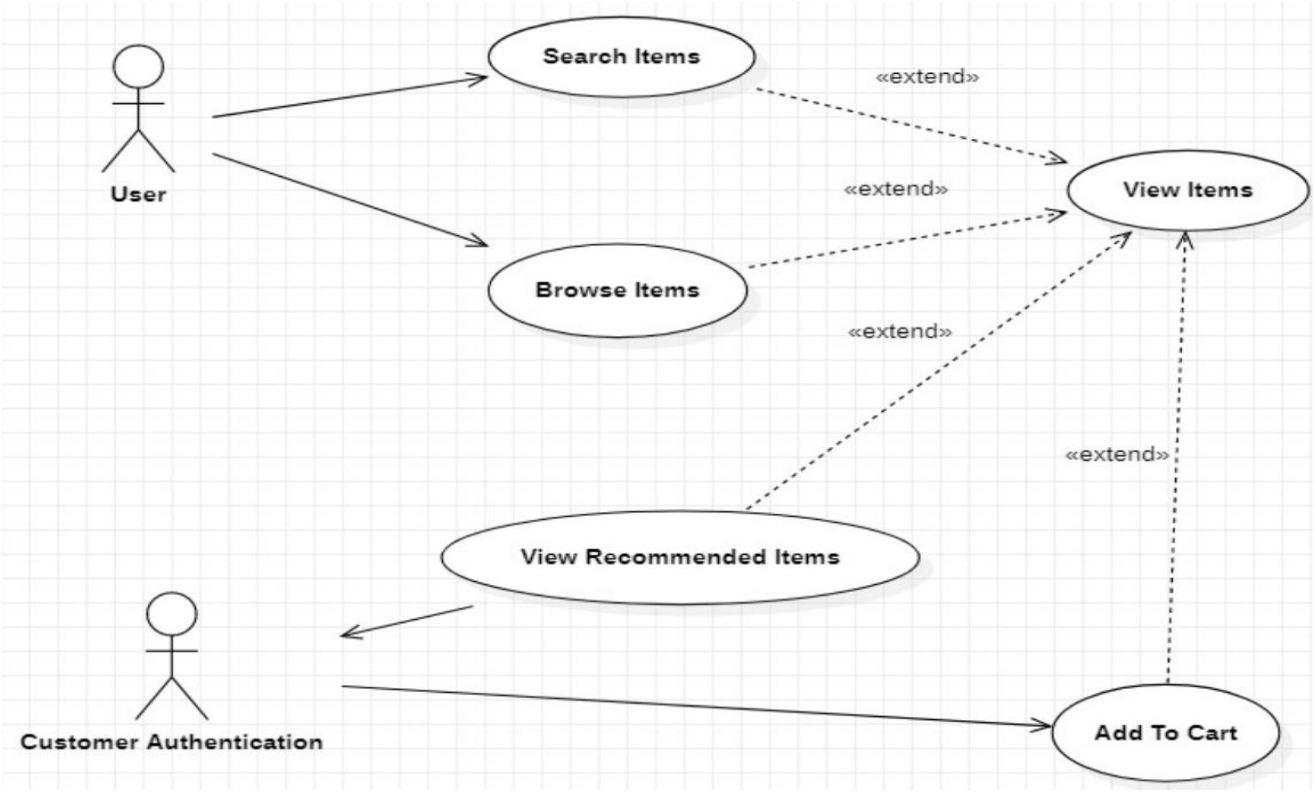
The purpose of use case diagram is to capture the dynamic aspect of a system. However, this definition is too generic to describe the purpose, as other four diagrams (activity, sequence, collaboration, and State chart) also have the same purpose. We will look into some specific purpose, which will distinguish it from other four diagrams. Use case diagrams are used to gather the requirements of a system including internal and external influences. These requirements are mostly design requirements. Hence, when a system is analyzed to gather its functionalities, use cases are prepared and actors are identified. When the initial task is complete, use case diagrams are modelled to present the outside view. In brief, the purposes of use case diagrams can be said to be as follows –:

- Used to gather the requirements of a system.
- Used to get an outside view of a system.
- Identify the external and internal factors influencing the system.
- Show the interaction among the requirements are actors

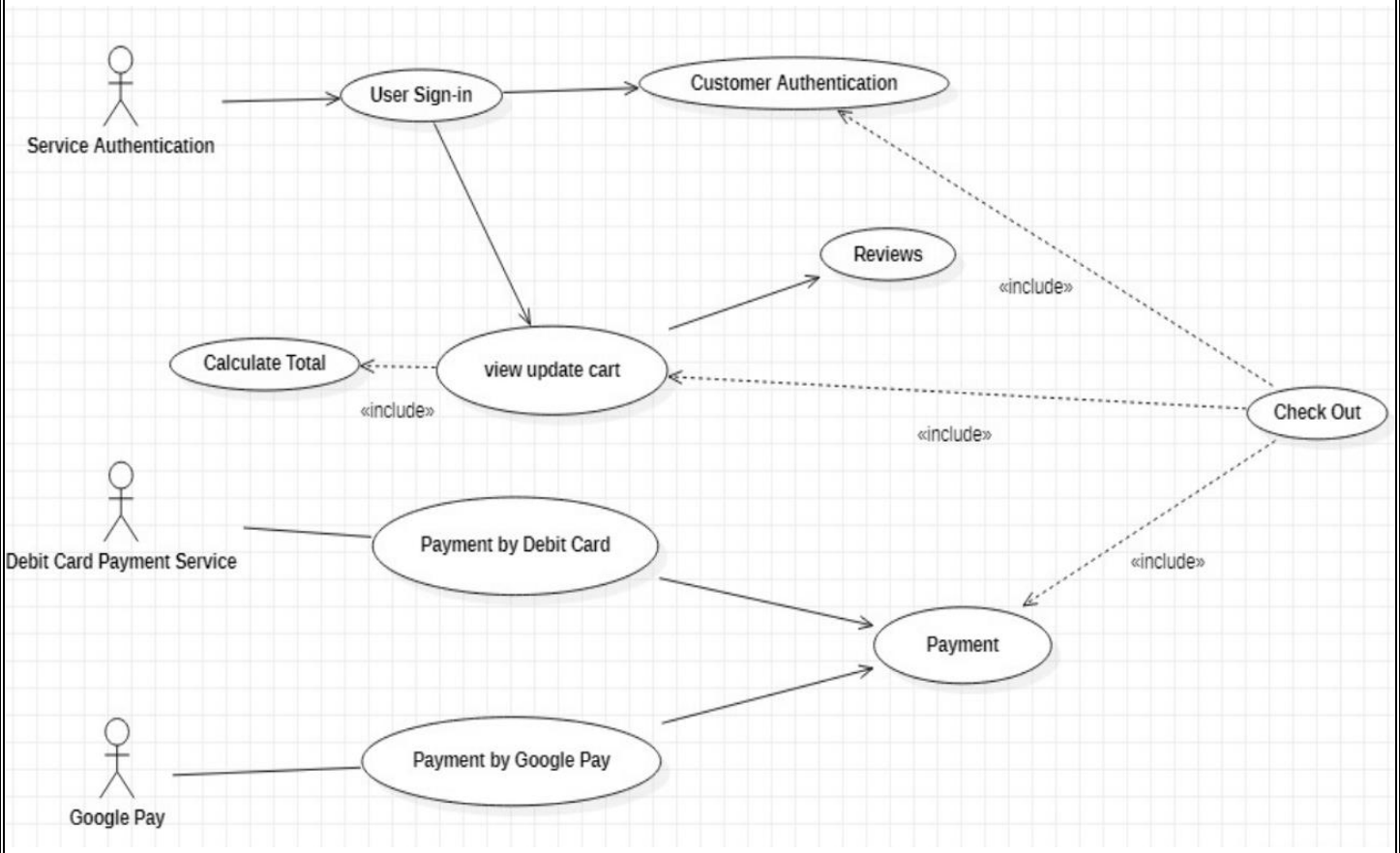
Use Case Diagram



View Item Use Case

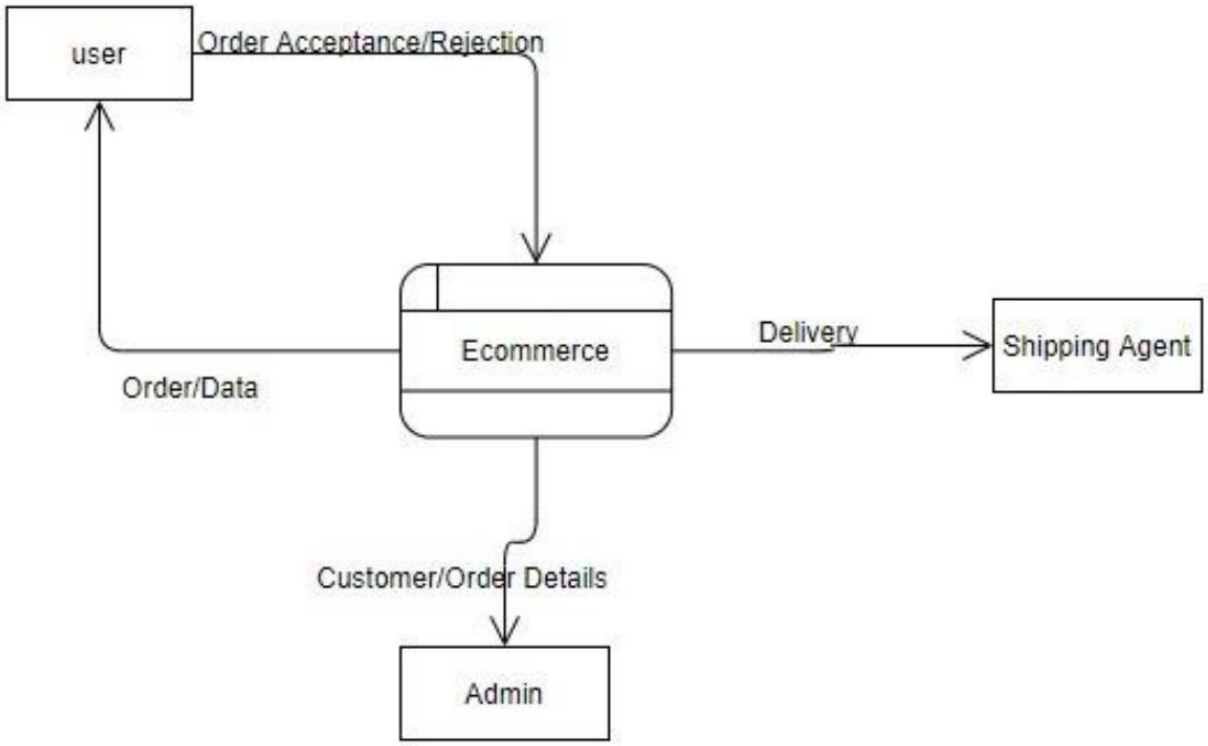


3.4.1.2. Checkout, Payment, Authentication Use Case Diagram

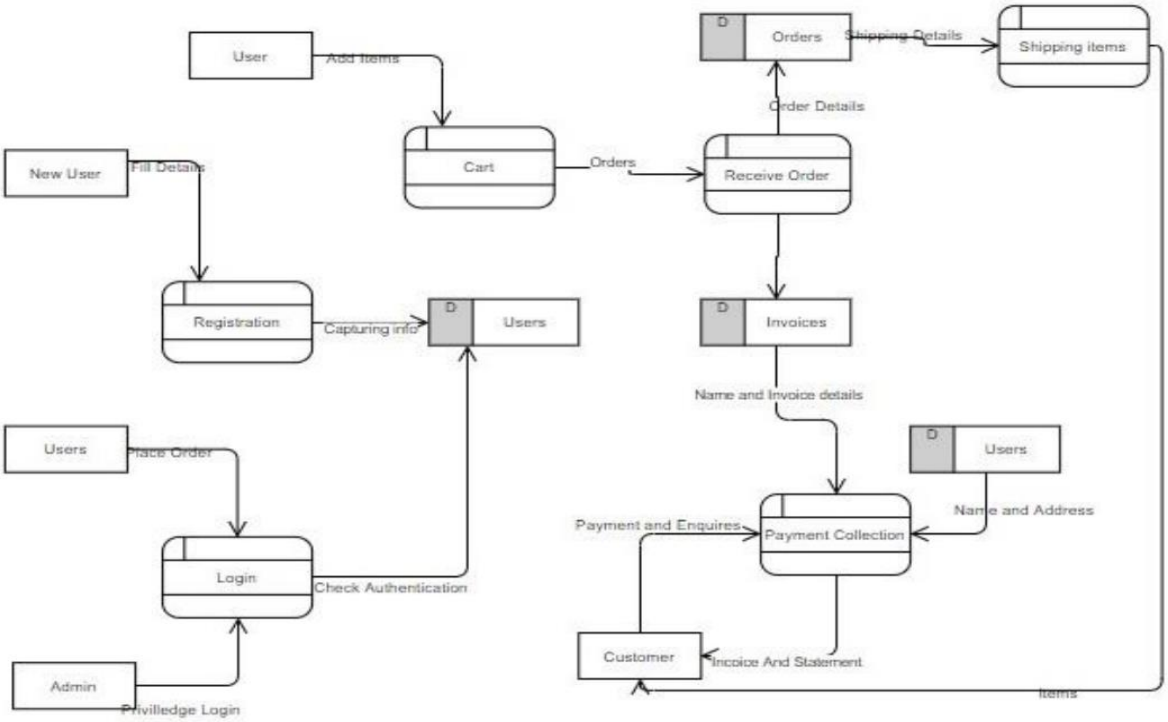


DATA FLOW DIAGRAMS

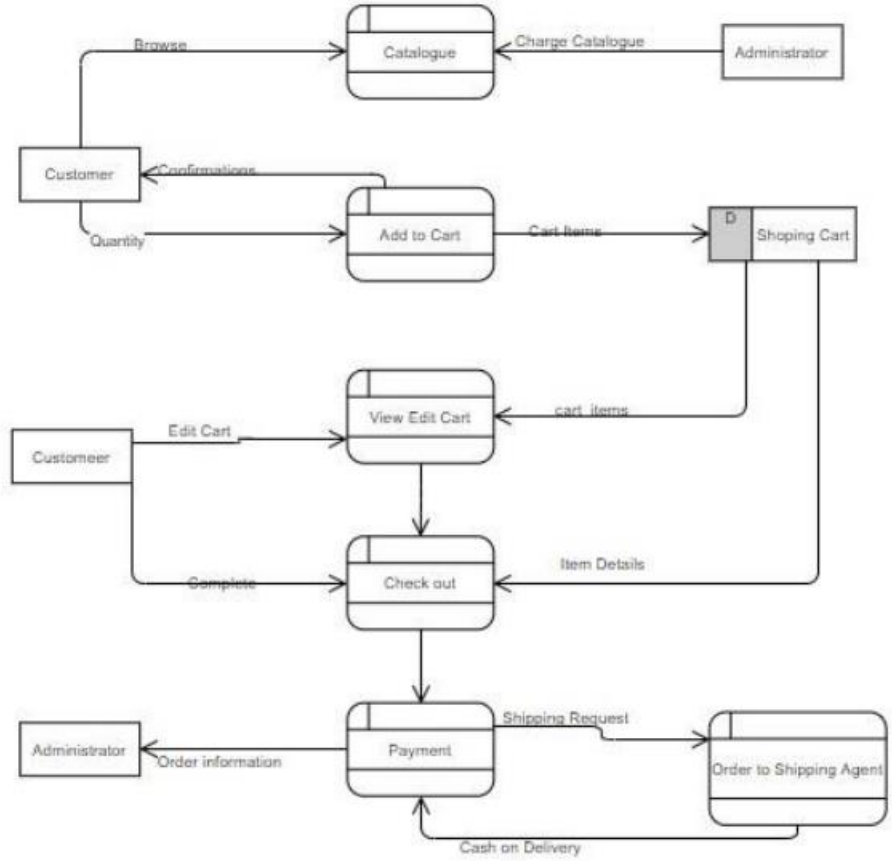
DFD (level-0)



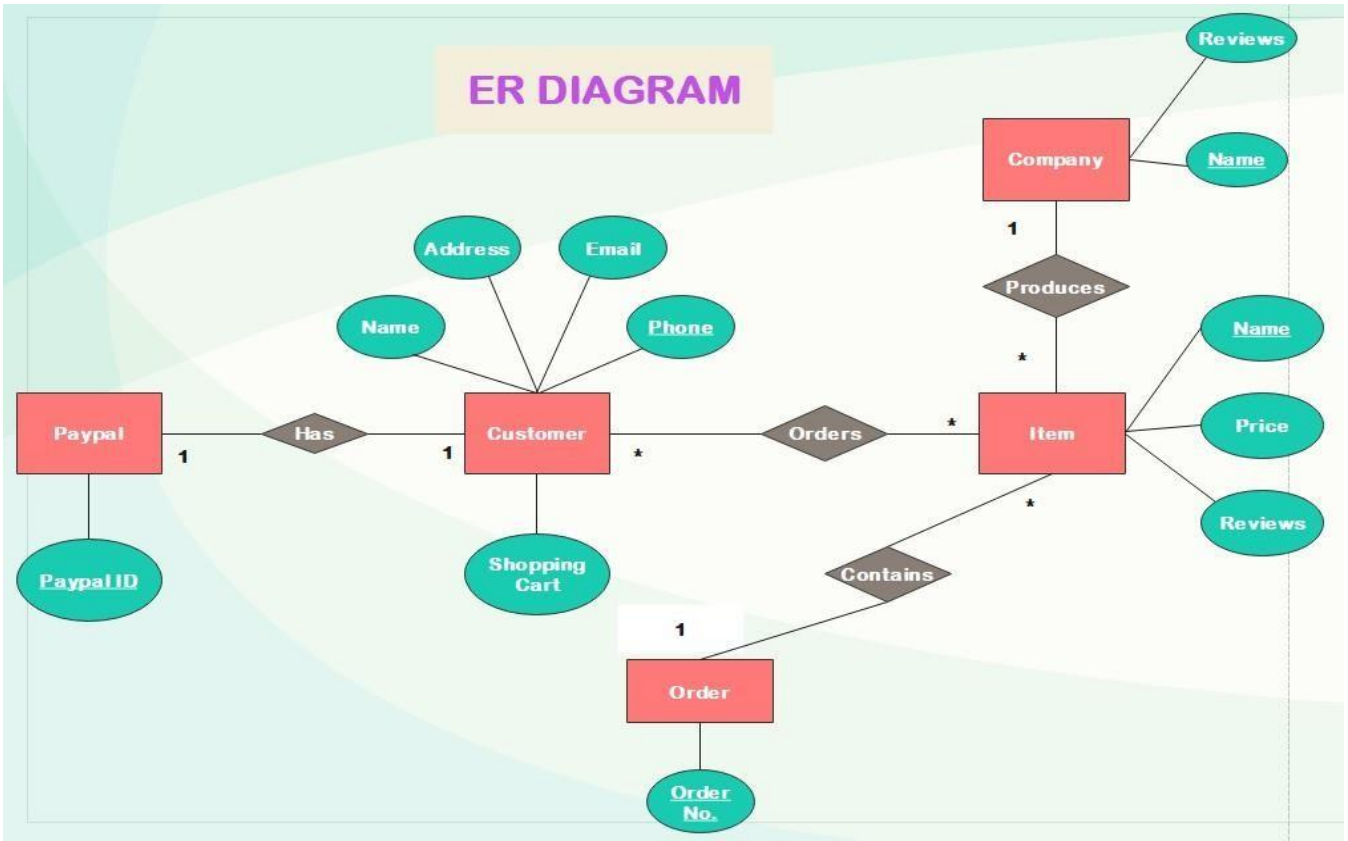
DFD (level-1)



DFD (level-2)



ER DIAGRAM



Chapter :4- Software Test Plan

Test Cases

Test Case-1

	Project Name:	E-Commerce Review System	Test Designed by:	sanjil			
	Module Name:	Home page	Test Designed date:	11-05-2021			
	Release Version	1.O	Test Executed by:	puneeth			
			Test Execution date:	11-10-2021			
Pre-condition	Good Browser with better internet connection						
Dependencies:	none						
Test Priority	high Priority						
Test Case#	Test Title	Test Summary	Test Steps	Test Data	Expected Result	Actual Result	Status
ECRS1	Home page	home page will be displayed or not after login	open chrome browser	user id	Chrome browser is opened	Chrome browser is opened	pass
			search for the website	passsword	Website is opened	Website is opened	pass
			Enter user id and password		enter user id and password	enter user id and password	pass
			select login option		home page is displayed	home page is displayed	pass
ECRS2	Home page	Products displayed on home page are categorised	open chrome browser	user id	Chrome browser is opened	Chrome browser is opened	pass
			search for the website	passsword	Website is opened	Website is opened	pass
			Enter user id and password		Enter user id and password	enter user id and password	pass
			select login option		Products will be categorised and displayed	Products will be categorised and dis	pass
ECRS3	Home page	Application is verified on different browsers			Homepage is same on different browsers	Homepage is not same	fail

Test Case-2

	Project Name:	E-Commerce Review System	Test Designed by:	sanjil			
	Module Name:	Product Details	Test Designed date:	11-05-2021			
	Release Version:	1.O	Test Executed by:	saurav			
			Test Execution date:	11-10-2021			
Pre-condition	Good browser with better internet connection						
Dependencies:	none						
Test Priority	high priority						
Test Case#	Test Title	Test Summary	Test Steps	Test Data	Expected Result	Actual Result	Status
ECRS4	Product Details	details on the products are verified	Open chrome Browser	user id	Chrome browser is opened	opened	pass
			search for the website	password	Website is opened	opened	pass
			Enter user id and password		enter user id and password	verified	pass
			select login option		home page is displayed	displayed	pass
			Select the products displayed on home page		details of the product displayed correct	correct details displayed	pass
ECRS5	Product Details	details on the products are verified	Select the products displayed on home page		correct images displayed	correct images	pass
ECRS6	Product Details	details on the products are verified	Select the products displayed on home page		product specifications and reviews will be displayed	good reviews	pass

Test Case-3

	Project Name:	E-Commerce Review System	Test Designed by:	sanjil			
	Module Name:	Search Products	Test Designed date:	11-05-2021			
	Release Version:	1.O	Test Executed by:	puneeth			
			Test Execution date:	11-10-2021			
Pre-condition	User should login to the website with good browser with better internet connection						
Dependencies:	none						
Test Priority	medium priority						
Test Case#	Test Title	Test Summary	Test Steps	Test Data	Expected Result	Actual Result	Status
ECRS7	Search Products	find the required products easily by searching	Click on Search bar	user id	accepts all names	accepts all names including numbers	pass
				password			
ECRS8	Search Products	find the required products easily by searching	enter the product name to be searched		search for the product	searched	pass
ECRS9	Search Products	find the required products easily by searching	click on the search icon option		take to the next tab	next tab opened	pass

Test Case-4

	Project Name:	E-Commerce Review System	Test Designed by:	sanjil		
	Module Name:	Cart	Test Designed date:	11-05-2021		
	Release Version:	1.O	Test Executed by:	saurav		
			Test Execution date:	11-10-2021		

Pre-condition	Login to the website and search for the products required
Dependencies:	none
Test Priority	medium

Test Case#	Test Title	Test Summary	Test Steps	Test Data	Expected Result	Actual Result	Status
ECR10	Cart	Products will be added into the cart	select the required product	user id	product will be selected	selected and displayed	pass
			click on add to the cart of that product	password	product will be added to cart	product will be displayed in cart	pass
ECR11	Cart	Products will be added into the cart	click on '+' to increase quantity		increase in quantity	quantity is increased	pass

Test Case-5

	Project Name:	E-Commerce Review System	Test Designed by:	sanjil		
	Module Name:	Orders	Test Designed date:	11-05-2021		
	Release Version:	1.O	Test Executed by:	puneeth		
			Test Execution date:	11-10-2021		

Pre-condition	Required products should be added into the cart
Dependencies:	none
Test Priority	High Priority

Test Case#	Test Title	Test Summary	Test Steps	Test Data	Expected Result	Actual Result	Status
ECR12	My Orders	Details of the product and order id is verified	go to my orders page	user id	orders page will be opened	orders page opened	pass
			Total Orders placed	password	all the order details will be displayed	did not display	fail
ECR13	My Orders	Details of the product and order id is verified	Track the order		shows the position of the order	error	fail
ECR14	My Orders	Details of the product and order id is verified	delivery date		expected delivery date	error	fail

Test Case-6

	Project Name:	E-Commerce Review System	Test Designed by:	sanjil		
	Module Name:	Review System	Test Designed date:	11-05-2021		
	Release Version:	1.O	Test Executed by:	saurav		
			Test Execution date:	11-10-2021		

Pre-condition	user should login to the website with good browser
Dependencies:	none
Test Priority	Medium Priority

Test Case#	Test Title	Test Summary	Test Steps	Test Data	Expected Result	Actual Result	Status
ECR15	Review System	Reviews about the product will be displayed	login to the review page	user id	logged into the review page	logged into the review page	pass
			write a review for a product	password	reviews can be written	write a review	pass
ECR16	Review System	Reviews about the product will be displayed	reviews will be verified		fake reviiews will be removed	original reviews will be displayed	pass

Chapter :5

5.1 SAMPLE CODE

LOGIN HEADER

```
<!DOCTYPE html>
<html>
<head>

<link href="css/bootstrap.css" rel="stylesheet" type="text/css" media="all" />
<link href="css/style.css" rel="stylesheet" type="text/css" media="all" />
<link rel="stylesheet" href="css/ken-burns.css" type="text/css" media="all" />
<link rel="stylesheet" href="css/animate.min.css" type="text/css" media="all" />

<meta name="viewport" content="width=device-width, initial-scale=1">
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<meta name="keywords" content="ONLINE SHOPPING" />
<script type="application/x-javascript"> addEventListener("load", function() { setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); } </scri

<script src="js/jquery.min.js"></script>
<script src="js/bootstrap.min.js"></script>

<link href='//fonts.googleapis.com/css?family=Cagliostro' rel='stylesheet' type='text/css'>
<link href='//fonts.googleapis.com/css?family=Open+Sans:400,300,300italic,400italic,600,600italic,700,700italic,800,800italic' rel='stylesheet' type='text/css'>
<style type="text/css">body {
  background-image: url(images/background.jpg) ; /* fallback for old browsers */
  font-family: "Roboto", sans-serif;
  -webkit-font-smoothing: antialiased;
  -moz-osx-font-smoothing: grayscale;
}
</style>
```

PLACE ORDER

```
<?php
    session_start();
    include("login_header.php");
    $conn = mysqli_connect("localhost","root","");
    if (mysqli_connect_errno())
    {
        echo "Failed to connect to MySQL: " . mysqli_connect_error();
    }
    mysqli_select_db($conn,"ita");
    if(isset($_GET['submit']))
    {
        $_SESSION["user"] = $_GET['username'];
        $username = $_GET['username'];
        $email = $_GET['email'];
        $pid = $_GET['pid'];
        $pname = $_GET["pname"];
        $price = $_GET["price"];
        $quantity = $_GET['quantity'];
        $total = $_GET['total'];
        $address = $_GET['address'];
        $date = date("Y-m-d");
        $sql = "insert into orders (username, email, pid, pname, price, quantity, total, address, date) values
                                ('$username', '$email', '$pid', '$pname', '$price', '$quantity', '$total', '$address', '$date')";
        if (mysqli_query($conn, $sql))
        {
            $_SESSION["user"] = $_GET['username'];
            echo "<script>window.alert('Order placed successfully!!')
            window.location.href='men.php?login=1 & username={$username}'</script>";
        }
        else
        {
            $_SESSION["user"] = $_GET['username'];
            echo "<script>window.alert('Could not place order')
            windo.location.href='men.php?login=1 & username={$username}'</script>";
        }
```

ADMIN DELETE FAKE REVIEW

```php
<?php
    //header("Cache-Control", "no-cache, no-store, must-revalidate");
    session_start();
        include("admin_login_header.php");
    $conn = mysqli_connect("localhost","root","");
    if (mysqli_connect_errno())
    {
        echo "Failed to connect to MySQL: " . mysqli_connect_error();
    }
    $conn = mysqli_connect("localhost","root","");
    mysqli_select_db($conn,"ita");
    //$sql = "SELECT * FROM products where pid like '1%' ORDER BY pid ";
    $sql = "select * from reviews";
    $result = $conn->query($sql);
?>
<HTML>
<HEAD>
<TITLE>Review Monitoring</TITLE>
<style>

table,tr,td {
        border-style: solid;
        border-color: grey;
        border-collapse: collapse;
        padding: 10px;
        width: auto;
        background-color: #fff;
        font-family: Helvetica;
        font-weight: normal;
        align-items: center;
        align-content: center;
    }
```

REVIEW PRODUCT

```php
<?php
    session_start();
    header("Cache-Control", "no-cache, no-store, must-revalidate");
    $login = $_GET['login'];
    $username = "Dummy";
    if($login==0)
        include("header.php");
    if($login==1 && isset($_SESSION["user"]))
    {
        $username = $_SESSION["user"];
        include("login_header.php");
    }
    $conn = mysqli_connect("localhost","root","");
    mysqli_select_db($conn,"ita");
    $sql = "select * from orders where username like '$username' order by pid";
    if ($result = $conn->query($sql))
    {

    }
    else
    {
        echo '<br><font face="verdana" color="blue" size="6"><b>You have not purchased any products to write a review!!<b></font>';
        echo '<br><br><img src="images/sad.jpg" height="200px" width="200px" align="center"/><br><br>';
        echo '<h2><a href="sign-out.php"><font face="helvetica" color="red">LOGOUT</font></a></h2>';
    }

?>
<HTML>
<HEAD>
<TITLE>Review Product</TITLE>
<!--<link href="imageStyles.css" rel="stylesheet" type="text/css" />-->
```

SHOP

```
<!DOCTYPE html>
<html>
<head>
<title>Online Shopping</title>
<!--css-->
<link href="css/bootstrap.css" rel="stylesheet" type="text/css" media="all" />
<link href="css/style.css" rel="stylesheet" type="text/css" media="all" />
<link rel="stylesheet" href="css/ken-burns.css" type="text/css" media="all" />
<link rel="stylesheet" href="css/animate.min.css" type="text/css" media="all" />
<!--css-->
<meta name="viewport" content="width=device-width, initial-scale=1">
<meta http-equiv="Content-Type" content="text/html; charset=utf-8" />
<meta name="keywords" content="ONLINE SHOPPING" />
<script type="application/x-javascript"> addEventListener("load", function() { setTimeout(hideURLbar, 0); }, false); function hideURLbar(){ window.scrollTo(0,1); }
<!--js-->
<script src="js/jquery.min.js"></script>
<script src="js/bootstrap.min.js"></script>
<!--js-->
<!--webfonts-->
<link href='//fonts.googleapis.com/css?family=Cagliostro' rel='stylesheet' type='text/css'>
<link href='//fonts.googleapis.com/css?family=Open+Sans:400,300,300italic,400italic,600,600italic,700,700italic,800,800italic' rel='stylesheet' type='text/css'>
<!--webfonts-->
</head>
<body>
    <!--header-->
    <div class="col-md-12 wel-grid">
        <div class="header">
            <div class="container">
                <nav class="navbar navbar-default">
                    <div class="container-fluid">
                <!---Brand and toggle get grouped for better mobile display-->
                        <div class="navbar-header">
                            <div class="navbar-brand">
                                <h1><a href="">Online Shopping</a></h1>
                            </div>
                        </div>
```

SIDE MENU

```
<?php
    $login = $_GET['login'];
?>
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>
body {
    font-family: "Lato", sans-serif;
}

.sidenav {
    height: relative;
    width: 300px;
    position: fixed;
    z-index: 1;
    top: 0;
    left: 0;
    background-color: #458b3b;
    overflow-x: hidden;
    padding-top: 20px;
    margin-top: 160px;
    vertical-align: center;
    color: #FFF;
}

.sidenav a {
    padding: 10px 8px 10px 16px;
    text-decoration: none;
    font-size: 25px;
    color: #FFF;
    display: block;
}
```

DATABASE

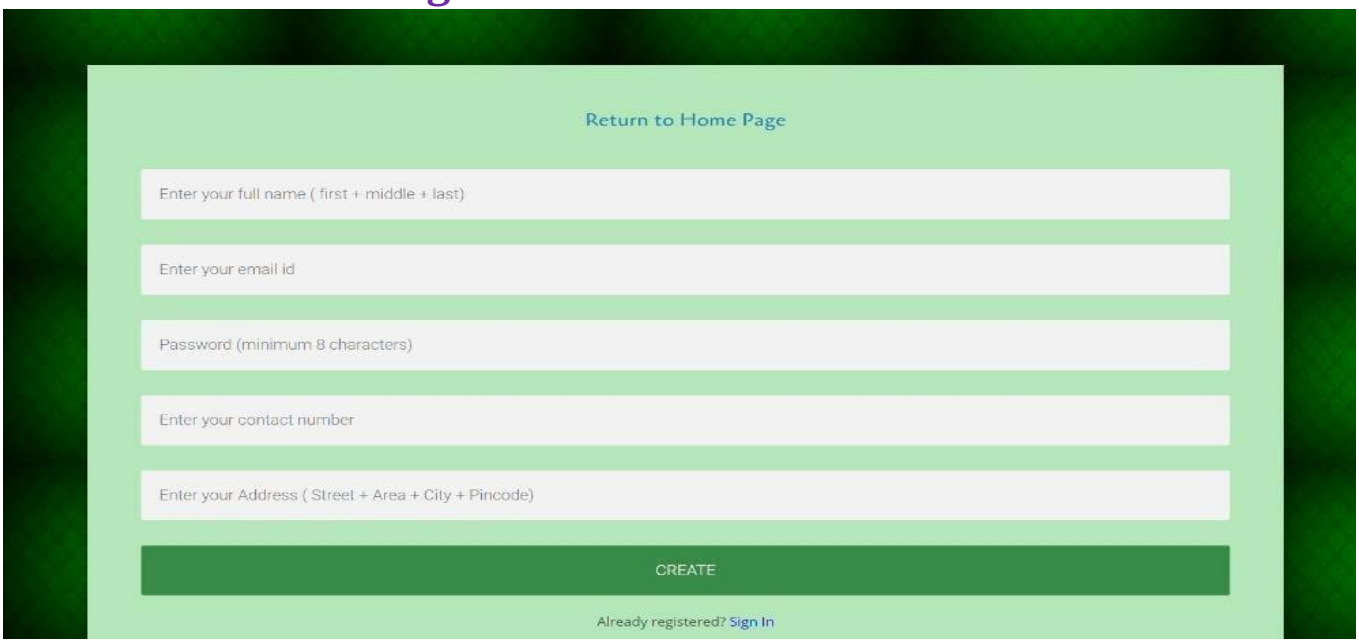
```sql
-- Table structure for table `admin`
--

CREATE TABLE `admin` (
  `aid` int(11) NOT NULL,
  `username` varchar(30) NOT NULL,
  `password` varchar(50) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `admin`
--

INSERT INTO `admin` (`aid`, `username`, `password`) VALUES
(1, 'admin', 'admin123');

-- --------------------------------------------------------

--
-- Table structure for table `category`
--

CREATE TABLE `category` (
  `cid` int(11) NOT NULL,
  `cname` varchar(30) NOT NULL
) ENGINE=InnoDB DEFAULT CHARSET=latin1;

--
-- Dumping data for table `category`
--

INSERT INTO `category` (`cid`, `cname`) VALUES
(1, 'men'),
(2, 'women'),
(3, 'books'),
(4, 'gadgets'),
(5, 'sports');

-- --------------------------------------------------------
```

Chapter :6

6.1 Module Interface

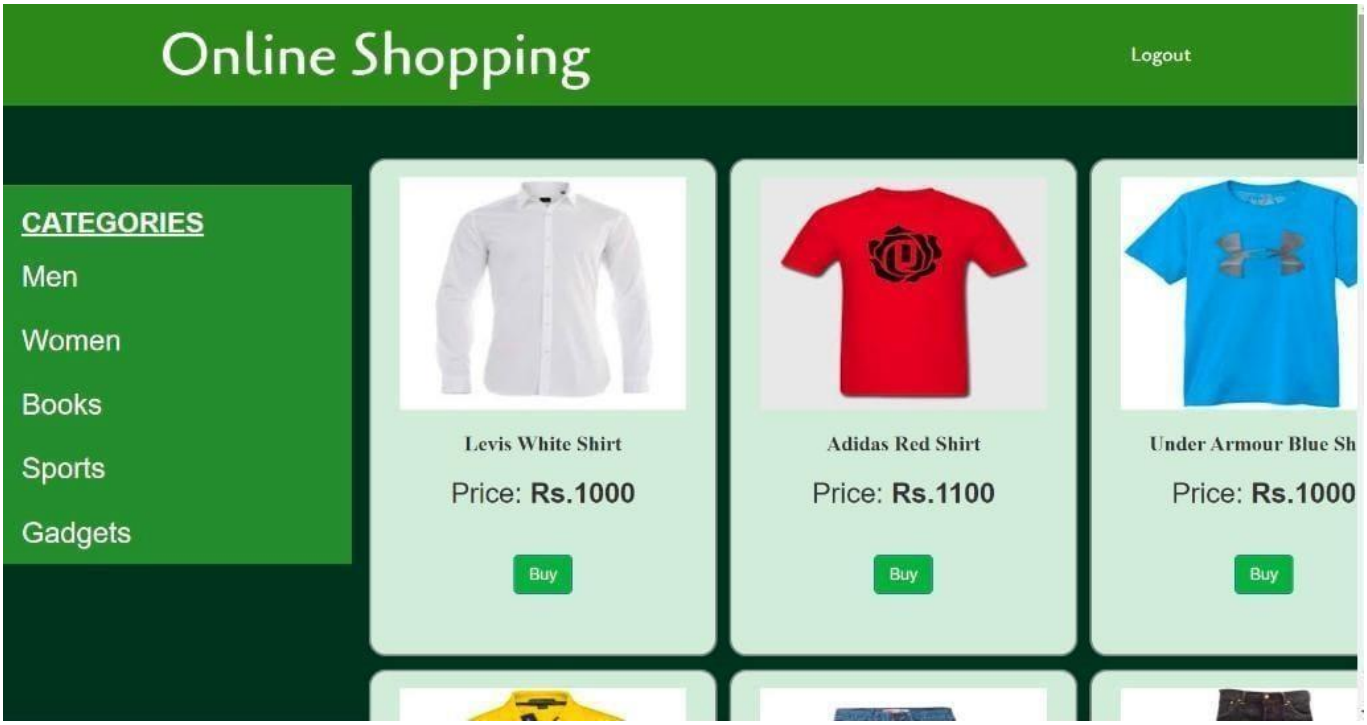
Home page Design

User Interface Design



Login page if you are already A user:

Online Shopping site:



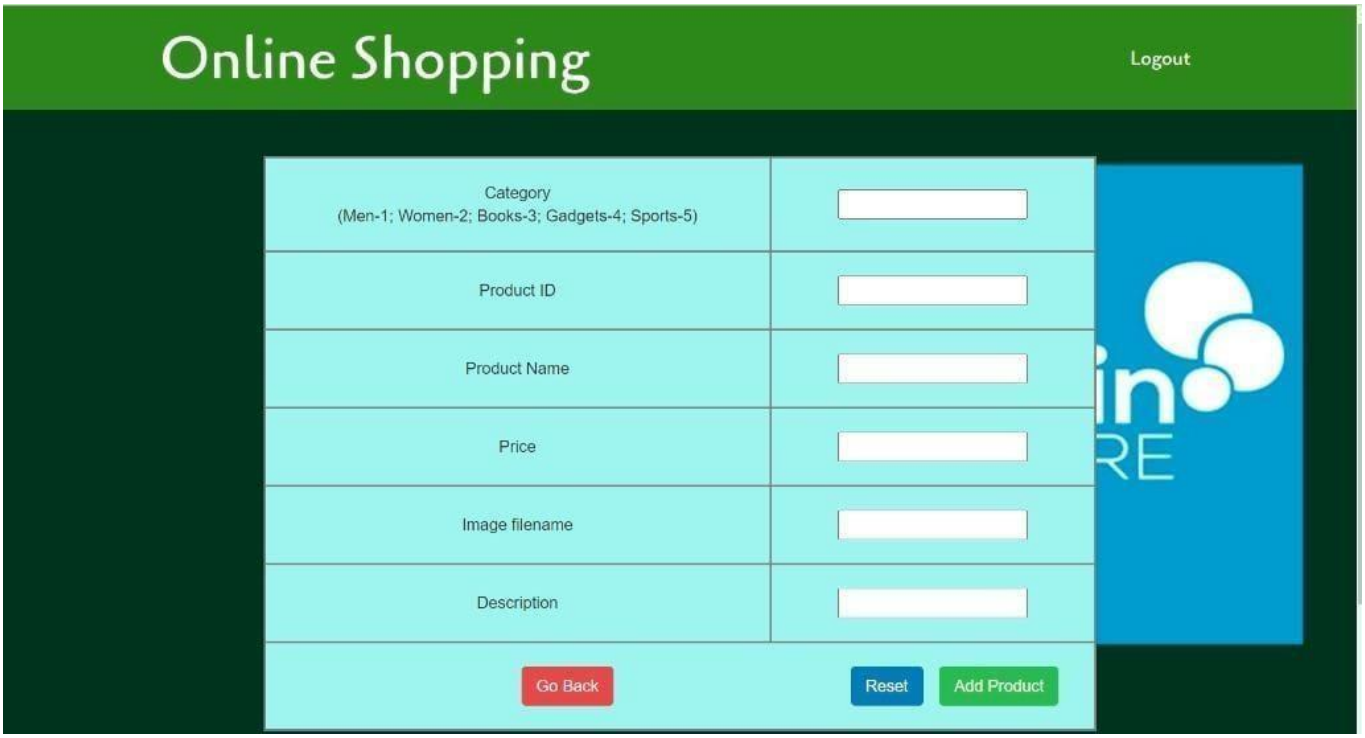
Admin Login page:

Admin view site:

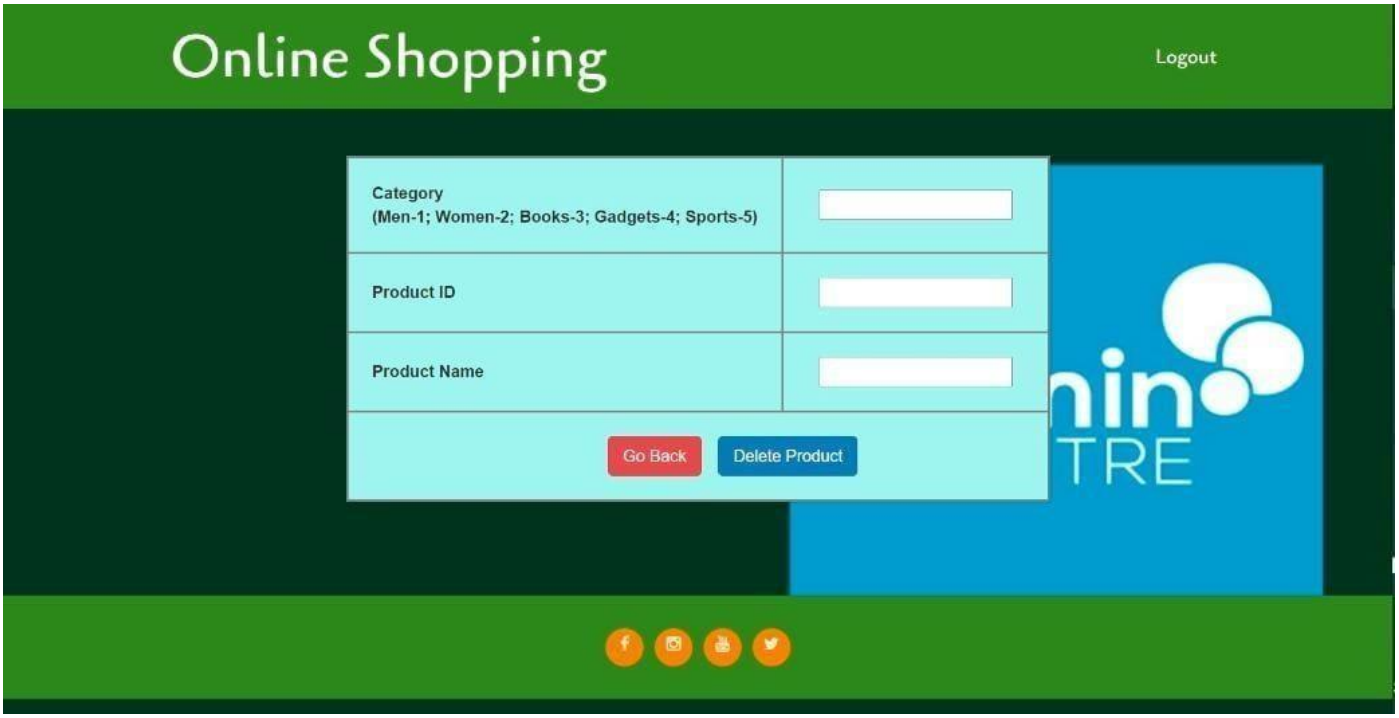
6.2 Process Interface

Review site for The products user purchased:

Add product(Admin side):

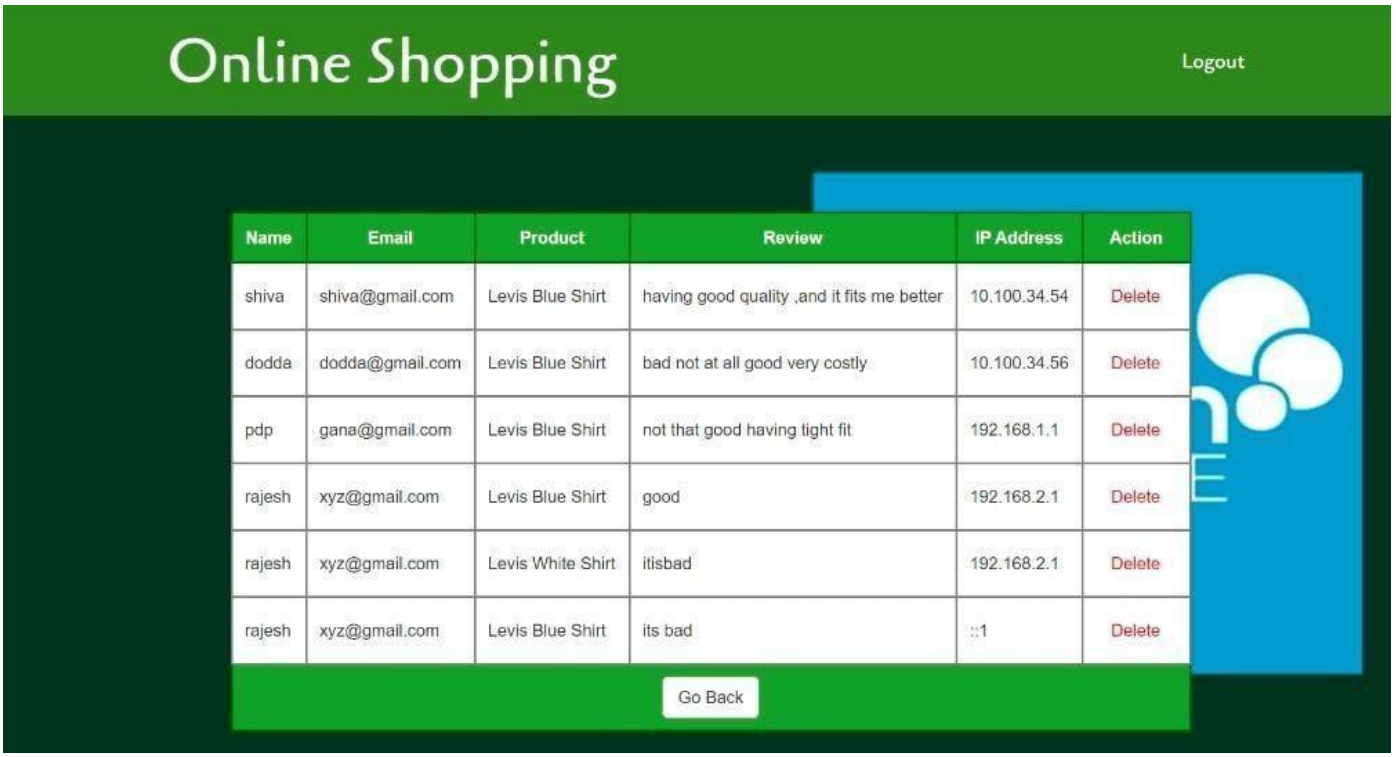


Delete Product(Admin Side) :



Rate Product:

Fake Review Elimination Site using Ip address:



Description:

When a user logins with the same mail and password and when submits Multiple Reviews The system Will track the ip address of the user using Opinion Mining Methodology I gives a signal to The Admin so that Admin can eliminate The fake reviews and fake reviews spam can be minimized .

Chapter :7 -Result Analysis and Discussions

The proposed Fake Product Review Monitoring system brings out the technology which helps to find out the review that made for product is true or not. The reason for introducing this Monitoring and removing system is to purchase the required products in a best manner. Because fake reviews also been added by owner or seller of that particular product. Users or customers of the product can't able to find these types of reviews. So proposed system would identify the fake kind of reviews based on the IP address of users. Firstly, the user will log in to their account and will do purchase the products as they want.

While reviews are added by users, the IP address is made to be noted. If many reviews are received from same IP address, that would be intimated to administrator. Then the administrator is allowed to remove those reviews that are added in fake manner. This process of tracking the IP address has been taking over by data mining technologies. Finally this methodology helps to identify the correct review. Using the trustworthy reviews one can able to buy the best and wishful products. Providing good products enhance the good reviews and better sales. This system also paves a way to bring out the best turnover for the sellers.

Advantages: -

- User gets genuine reviews about the product.
- User can post their own review about the product.
- User can spend money on valuable products.

Disadvantages: -

- If the social media optimization team uses different IP address to send the review, system will fail to track the fake review.

Application: -

This application will be used by the people who like to spend their money on valuable products.

Chapter :8 - Conclusion

There have been made several attempts for spam review detection till today. In this paper, we propose a general framework to detect spam reviews. Sentiment analysis or opinion mining is a field of study that analyses people's sentiments, feelings, or emotions towards certain entities. This paper tackles a fundamental problem of sentiment analysis, sentiment polarity categorization. Now a day's technology is growing day by day and there are so many websites and application available in the online market by which they sell their product. Every product contains millions of reviews and on basis of these reviews' user buy the product most of the time. There are some organizations which post fake reviews on genuine product and user gets stuck.

Our software will help the user to pay for the right product. Our software will do analysis and then if any fake review is found from any IP address consistently then admin user can block that IP address. It also sends mail to user regarding blocked IP address. In this way it monitors the fake review made on any product. And user can be sure about the products availability on that application and reviews too.

CHAPTER :9- Future Work

- The restriction of requirement of product name in particular product review can be removed though it might be a tough task.
- The admin has to manually block the IP of the spammer account by identifying its pattern, automatic blocking can also be achieved in the future scope of the system.

A review of the applications of feelings analysis applicable to their methods and technologies are provided here. This analysis of study and literature offers valuable insights into the advantages and value of interpreting and classifying feelings. The primary issue is the exact classification of all sentiment analysis techniques. Many experiments have had high success rates, but the accuracy percentages in all approaches and languages have still not been achieved. Most sentiment analysis methods depend on English-language text, and the methods developed are therefore mainly English. Work should be improved in other languages because the knowledge is not accessible in English alone.

The limited focus of this study is that the application side there is primarily focused on the exclusion of the hardware and theory-related aspects. The growth in deep learning is making emotional research more and more difficult. Sentiment analysis has just gone beyond a modern-technology curiosity and will shortly covert an important resource for all modern-day businesses. You particularly need to find the right Feature Set for current hot deep learning that may become the subject of the research on sentiment analysis.

REFERENCES

1. Xinkai Yang, “One Methodology for Spam Review Detection Based on Review Coherence Metrics”, International Conference on Intelligent Computing and Internet of Things (IC1T) 2015.

2. Dea Delvia Arifin,, Shaufiah and Moch. Arif Bijaksana,” Enhancing Spam Detection on Mobile Phone Short Message Service (SMS) Performance using FP-Growth and Naive Bayes Classifier”.The 2016 IEEE Asia Pacific Conference on Wireless and Mobile (APWiMob). International Journal of Pure and Applied Mathematics Special Issue 13207

3. Xing Fang and Justin Zhan,” Sentiment analysis using product review data”, Fangand Zhan Journal of Big Data (2015).

4. Shirani-Mehr, Houshmand. "SMS spam detection using machine learning approach." (2013)

5. Xie, Sihong, Guan Wang, Shuyang Lin, and Philip S. Yu. "Review spam detection via temporal pattern discovery", Proceedings of the 18th ACM SIGKDD international conference on Knowledge discovery and data mining - KDD 12, 2012.

6. NJindal and B.Liu, "Review spam detection", In Proceedings of the 16th International Conference on World Wide Web, pp1l89-1190, 2007.

7. N. Jindal and B. Liu., "Opinion spam and analysis", In Proceedings of the International Conference on Web Search and Web Data Mining (WSDM), pp2 I 9-230, 2008.

8. G. Wang, S. Xie, B. Liu, and P. S. Yu, "Review graph based online store review spammer detection", IEEE 11th International Conference on Data Mining, pp 1242-1247,2011.

9. Liu B (2012) Sentiment Analysis and Opinion Mining. Synthesis Lectures on Human Language Technologies. Morgan & Claypool Publishers

10. Tan LK-W, Na J-C, Theng Y-L, Chang K (2011) Sentence-level sentiment polarity classification using a linguistic approach. In: Digital Libraries: For Cultural Heritage, Knowledge Dissemination, and Future Creation. Springer, Heidelberg, Germany.