

# **PROJECT REPORT**

## **SMART FASHION RECOMMENDER APPLICATION**

**submitted by**

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# **CHAPTER 1**

## **INTRODUCTION**

### **1.1 PROJECT OVERVIEW**

Clothing is a kind of symbol that represents people's internal perceptions through their outer appearance. It conveys information about their choices, faith, personality, profession, social status, and attitude towards life. Therefore, clothing is believed to be a nonverbal way of communicating and a major part of people's outer appearance.

E-commerce and fashion applications are both expanding. Additionally, it has certain issues with locating the desired goods for the user in the web apps. It can be very helpful to have a chatbot that comprehends the algorithm of a certain application. We are integrating a chatbot like this into a web application, which is supplied with the algorithmic knowledge of the application. It entirely assists the user from identifying their needs to processing payments and starting deliveries. By gathering basic user information and behaviours, it functions as an advanced filter search that may give the user what they want with the use of visual and naming representation.

### **1.2 PURPOSE**

The main objective is to create a model that can make fashion recommendations simply by glancing at its photograph. When a model accepts a photograph, she first assesses whether or not it features a fashion item before making a recommendation.

This project's primary goal is to Create a recommendation system for clothing that responds to questions about shopping for clothing to determine the style of the input image. If The fashion photograph provided is accurate, then a similar ensemble of apparel will be suggested retrieving items from various e-commerce websites that were found with comparable search terms

# **CHAPTER 2**

## **LITERATURE SURVEY**

### **2.1 EXISTING PROBLEM**

Due to the lack of purchase data or the lack of information about the aesthetic appearance of the product in category names, traditional recommender systems like Collaborative Filtering or Content-Based Filtering struggle in the fashion sector. Recent literature, on the other hand, has made use of models that capture a rich representation of fashion items through product images, text descriptions or customer reviews or videos which are frequently learned through surrogate tasks like classification or product retrieval. However, in order to generalize effectively across various picture (or text) styles, attribute changes, etc. while learning product representations from such input data, vast datasets are required. Furthermore, there is still work to be done in developing a representation that learns which product aspects buyers value the most when assessing fashion products.

### **2.2 REFERENCES**

Smart Clothing Recommendation System with Deep Learning, 2019 3rd International Symposium on Multidisciplinary Studies and Innovative Technologies

Batuhan Aşıroğlu, Mehmet Ilkay Atalay, Alkan Balkaya, Erden Tu Zu Nkan, Mustafa Da Gtekin, Tolga Ensar

A recommendation program is a comprehensive suite of web applications that includes predicting user responses to options. The recommendation system has been a hot topic for a long time. A recommendation program commonly called Recommendation Techniques, they are simple algorithms that aim to provide the most relevant and accurate information to the user by filtering useful items from a large pool of information resources. Recommendation engines discover data patterns in the data set by studying consumer preferences and generating results related to their needs and interests. In real-time examples like Amazon.

*The System with Style Feature Decomposition, 2019 IEEE 9th International Conference on Consumer Electronics (ICCE-Berlin)*

*Yong-Goo Shin, Yoon-Jae Yeo, Min-Cheol Sagong, Seo-Won Ji, and Sung-Jea Ko*

Recently, convolutional neural network (CNN) -based fashion recommendation techniques, which automatically recommend the matching clothes to the consumer, have been widely researched. In general, the feature vector of a fashion item, i.e. clothes vector, obtained by CNN conveys two types of information: style and category, where the style indicates the distinctive characteristic of the clothes and the category represents the common properties of the clothes in the same class. Due to the mixed information of style and category, however, the clothes vector often recommends the unmatching clothes. To solve this problem, we propose a style feature extraction (SFE) layer, which effectively decomposes the clothes vector into style and category. Based on the characteristics that the category information has small variations in the same class while being distinguished from other classes, we extract and remove the category information from the clothes vector to obtain more accurate style information. Experimental results show that the proposed method achieves state-of-the-art results in terms of link prediction, which is a performance measure of a stylish match. In addition, as a simple CNN layer, it is expected that the proposed SFE layer is compatible with all popular CNN architectures.

*To Identify Mapping in Deep Residual Network, 2016 Cornell University.*

*Kaiming He, Xiangyu Zhang, Shaoqing Ren, Jian Sun*

A number of advances in image categorization have been made thanks to deep convolutional neural networks, including. Deep networks incorporate low, mid, and high-level features and classifiers in an end-to-end multilayer form by default, and the "levels" of features can be enhanced by the number of stacked layers (depth).

Recent research demonstrates the critical importance of network depth, and the top results on the difficult ImageNet dataset all utilise "extremely deep" models, with a depth of sixteen to thirty . When deeper networks are able to begin converging, a degradation issue is revealed: as network depth increases, accuracy becomes saturated (which may not be surprising), at which point it rapidly deteriorates. Surprisingly, such degradation is not brought on by

## 2.3 PROBLEM STATEMENT DEFINITION

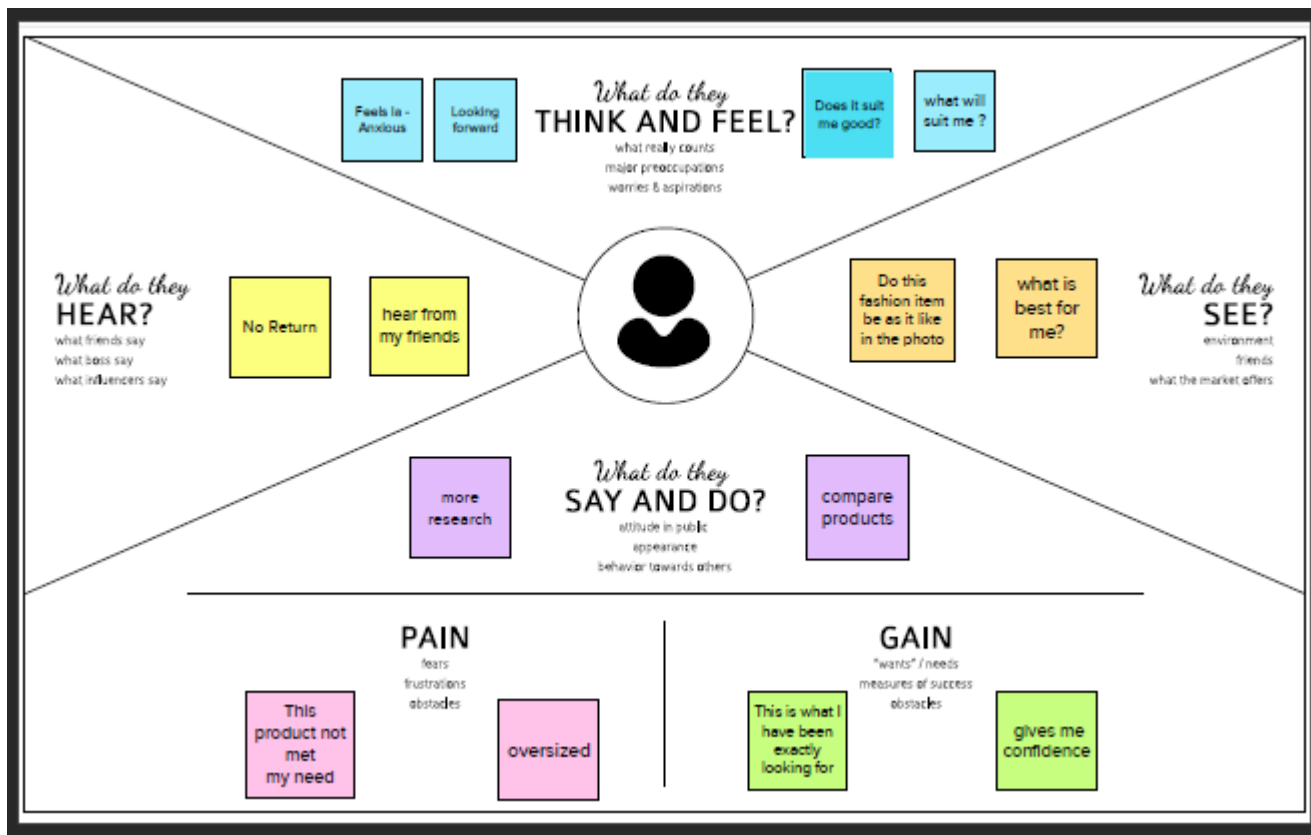
A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face. Throughout the process, you'll also be able to empathize with your customers, which helps you better understand how they perceive your product or service.

<b>I am</b>	Describe customer with 3-4 key characteristics - who are they?	Describe the customer and their attributes here
<b>I'm trying to</b>	List their outcome or "job" the user wants - what are they trying to achieve?	List the thing they are trying to achieve here
<b>but</b>	Describe what problems or barriers stand in the way - what bothers them most?	Describe the problems or barriers that get in the way here
<b>because</b>	Enter the "root cause" of why the problem or barrier exists - what needs to be solved?	Describe the reason the problems or barriers exist
<b>which makes me feel</b>	Describe the emotions from the customer's point of view - how does it impact them emotionally?	Describe the emotions the result from experiencing the problems or barriers

# CHAPTER 3

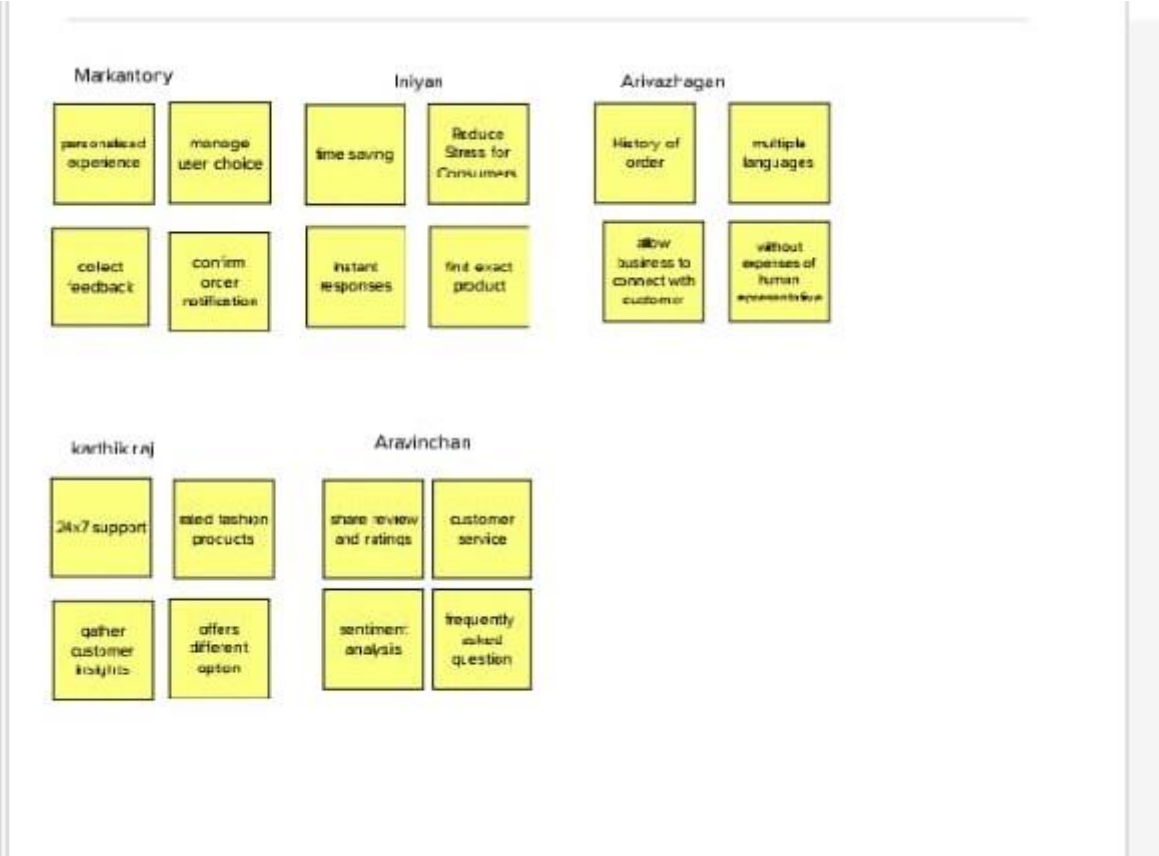
## IDEATION AND PROPOSED SOLUTION

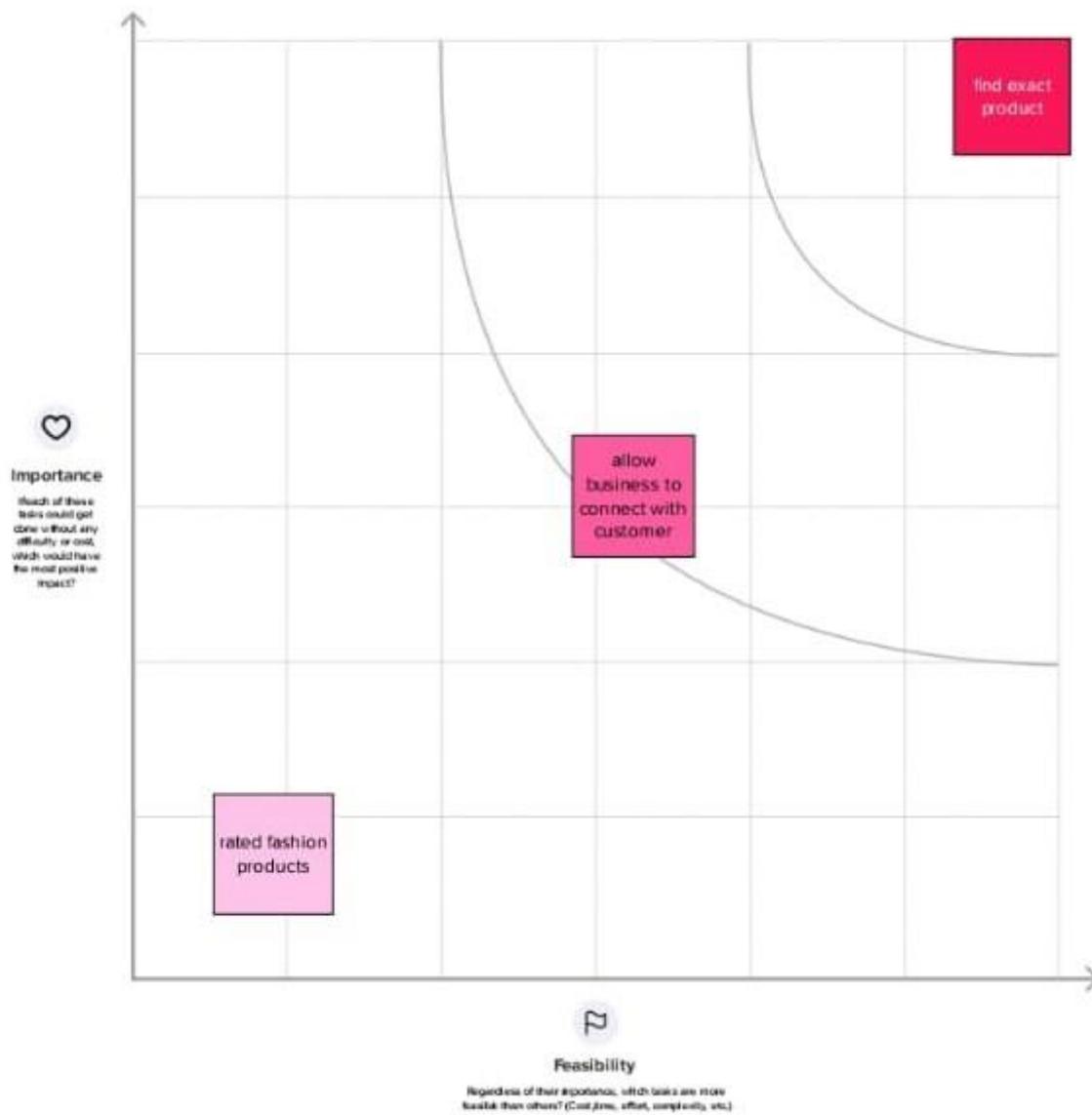
### 3.1 EMPATHY MAP CANVAS





### 3.2 IDEATION & BRAINSTORMING



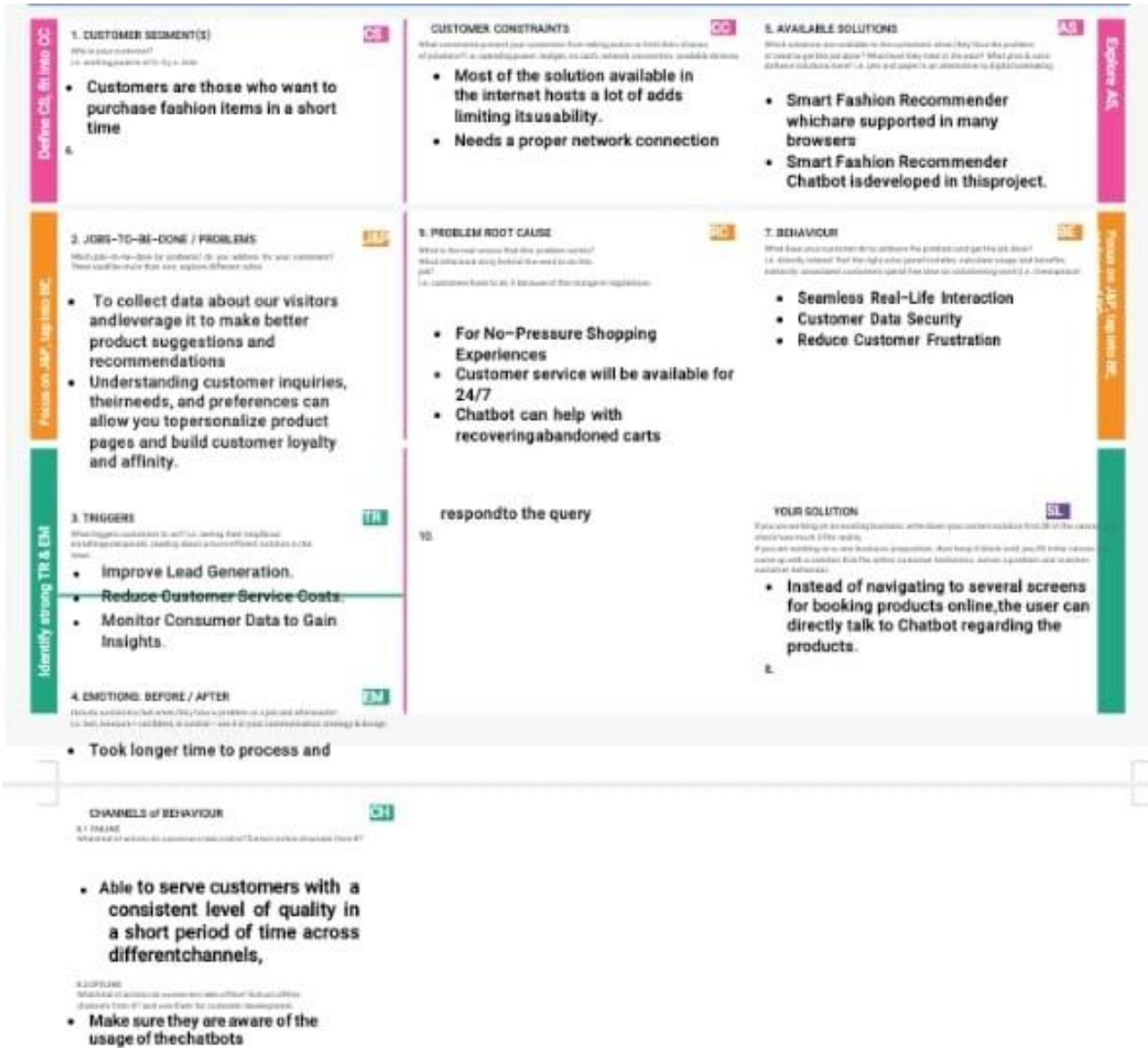


### 3.3 PROPOSED SOLUTION

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none"> <li>• Lack of interaction between application and user</li> <li>• User need to navigate across multiple pages to choose right product</li> <li>• Confusion in choosing product</li> <li>• Lack of sales</li> <li>• Complex User Interface.</li> </ul> <p>Lack of proper guidance.</p>
2.	Idea / Solution description	<p>By using Smart fashion recommender application:</p> <ul style="list-style-type: none"> <li>• Improve customer relationship, interactivity and services.</li> <li>• Effective recommendation of products.</li> <li>• Recommendation within a single page via chat-bot</li> <li>• Collect feedback instantly.</li> <li>• Reduce human error</li> </ul> <p>Proper guidance in accessing application</p>
3.	Novelty / Uniqueness	<p>Chat-bot asks and learns from user preference which recommends appropriate products to the user without making them to search through various filters. Reduces time in choosing right product thus increases sales.</p>
4.	Social Impact / Customer Satisfaction	<p>Feedback from the user at the end of session or after placing order is one of the most important factor in deriving customer satisfaction and providing better services.</p>
5.	Business Model (Revenue Model)	<p>The application can be developed at minimum cost with high performance and interactive user interface.</p>

6.	Scalability of the Solution	The solution can be made scalable by using micro service architecture provided that each server responsible for certain functionality of the application. Storing user preferences along with product in browser cookie will enable to provide response instantly and allows for fetching related products
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## PROBLEM SOLUTION FIT



# CHAPTER 4

## REQUIREMENT ANALYSIS

### 4.1 FUNCTIONAL REQUIREMENTS

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form
FR-2	User Interaction	Interact through the chatbot
FR-3	Buying Products	Thorough the chatbot recommendation
FR-4	Track products	Ask the Chat Bot to Track my Orders
FR-5	Return product	Through the chat Bot
FR-6	New Collections	Recommended from chat Bot

## 4.2 NON-FUNCTIONAL REQUIREMENTS

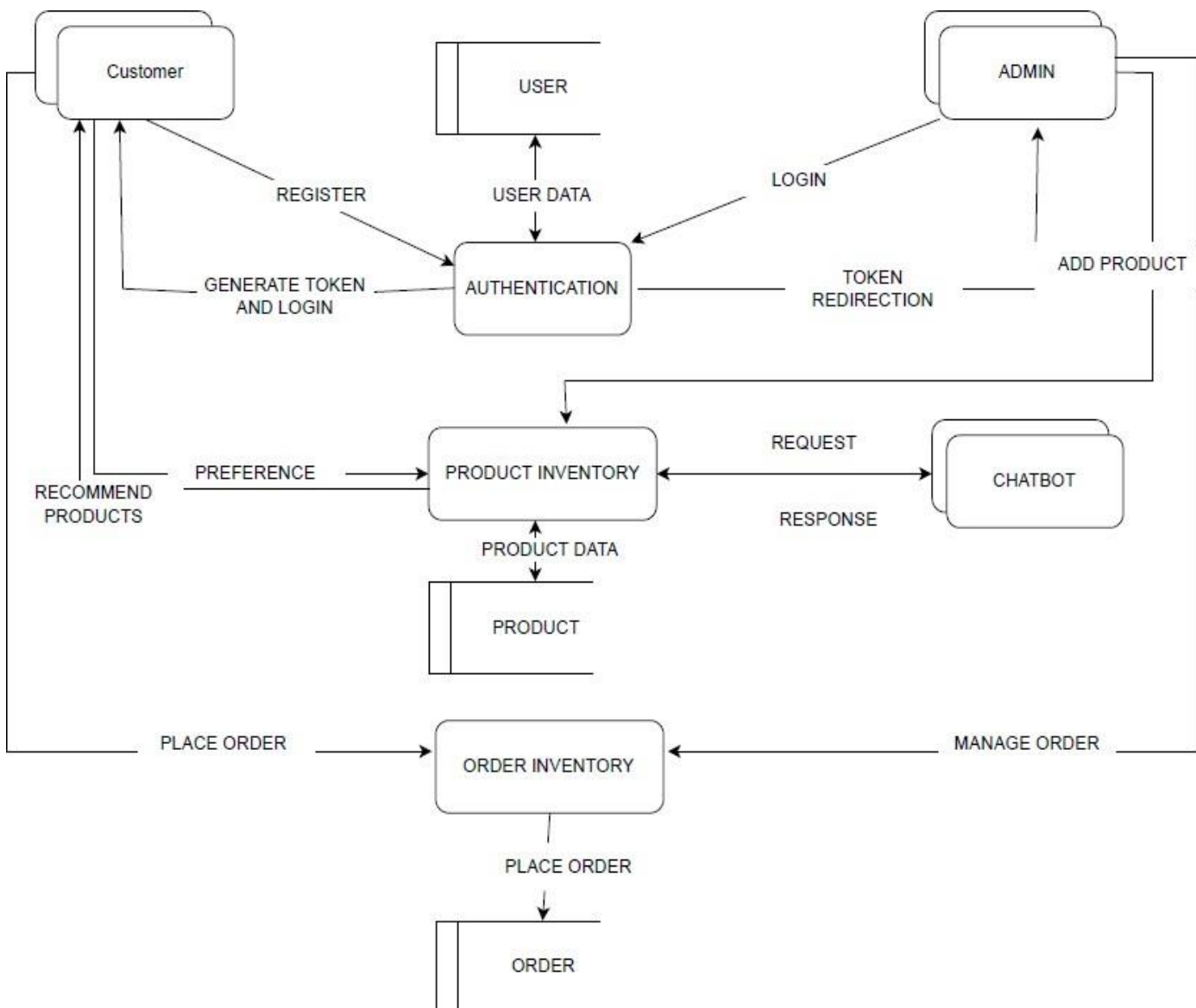
<b>FR No.</b>	<b>Non-Functional Requirement</b>	<b>Description</b>
NFR-1	<b>Usability</b>	Using Android or IOS or windows applications
NFR-2	<b>Security</b>	The user data is stored securely in IBM cloud.
NFR-3	<b>Reliability</b>	The Quality of the services are trusted.
NFR-4	<b>Performance</b>	Its Provide smooth user experience.
NFR-5	<b>Availability</b>	The services are available for 24/7.
NFR-6	<b>Scalability</b>	It's easy to scalable size of users and products.

# CHAPTER 5

## PROJECT DESIGN

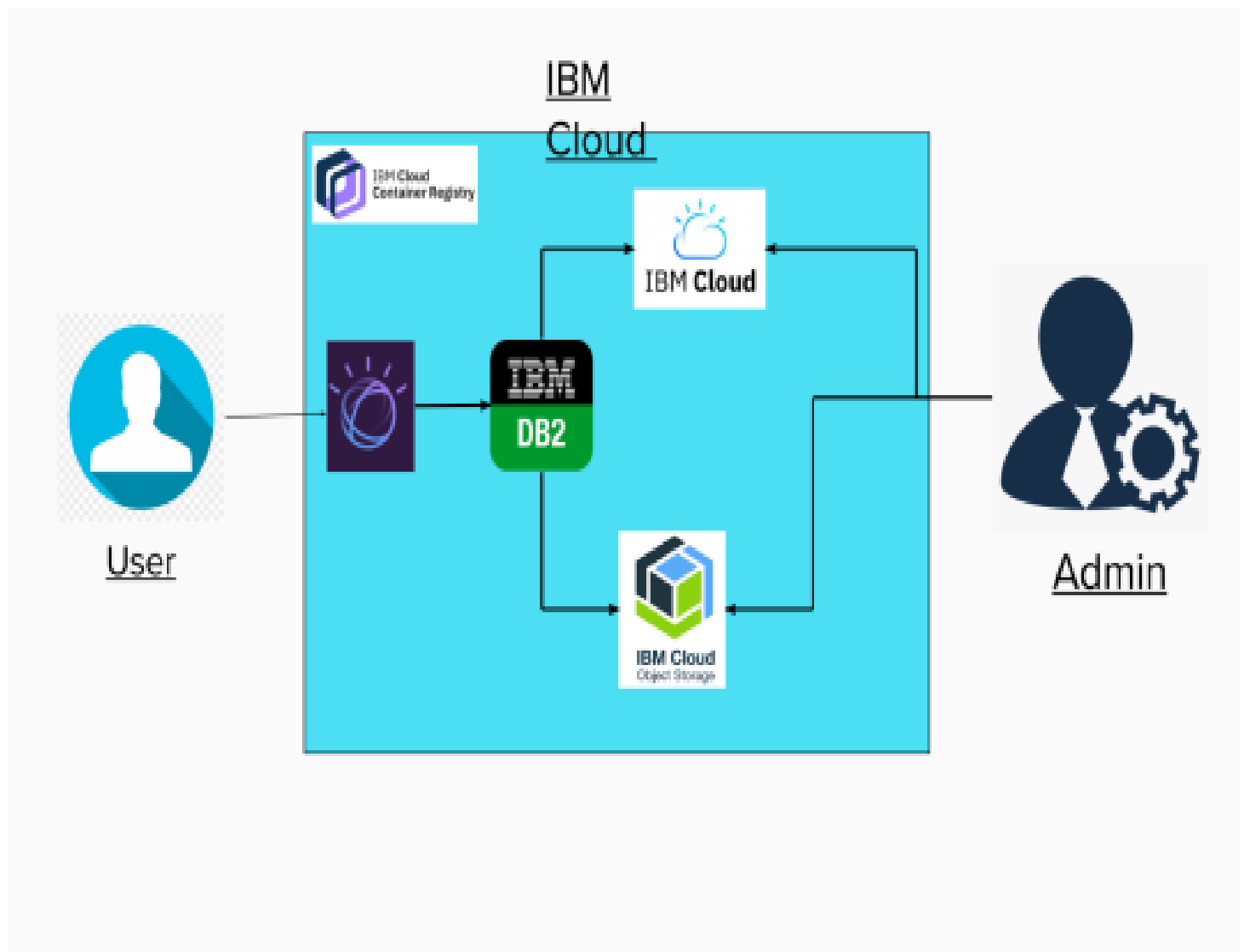
### 5.1 DATA FLOW DIAGRAM

A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.





## 5.2 SOLUTION & TECHNICAL ARCHITECTURE



### 5.3 COMPONENTS & TECHNOLOGIES:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g., Mobile Application	HTML, CSS, JavaScript
2.	Application Logic-1	Logic for a process in the application	Python
3.	Application Logic-2	Logic for a process in the application	IBM Watson STT service
4.	Application Logic-3	Logic for a process in the application	IBM Watson Assistant
5.	Database	Data Type, Configurations etc.	MySQL
6.	Cloud Database	Database Service on cloud	IBM DB2
7.	File Storage	File storage requirements	IBM Block Storage
8.	Infrastructure(server /cloud)	Application deployment on cloud Cloud server configuration : Db2/python	Kubemetes

## 5.4 USER STORIES

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority
Customer (Mobile user)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low
		USN-4	As a user, I can register for the application through Gmail		Medium
	Login	USN-5	As a user, I can log into the application by entering email & password	I can access and make purchases.	High
	Dashboard				
Customer (Webuser)	Registration	USN-1	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard	High
		USN-2	As a user, I will receive confirmation email once I have registered for the application	I can receive confirmation email & click confirm	High
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low
		USN-4	As a user, I can register for the application through Gmail		Medium

		USN-5	As a user, I can log into the application by entering email & password	I can access and make purchases.	High
Administrator	Login	USN-1	I enter my mail and password on organisation's approval	I can approve products and purchases	High

# CHAPTER 6

## PROJECT PLANNING AND SCHEDULING

### 6.1 SPRINT PLANNING AND ESTIMATION

<b>TITLE</b>	<b>DESCRIPTION</b>	<b>DATE</b>
<b>Literature Survey &amp; Information Gathering</b>	Literature survey on the selected project & gathering information by referring the, technical papers, research publications etc.	20 SEPTEMBER 2022
<b>Prepare Empathy Map</b>	Prepare Empathy Map Canvas to capture the user Pains & Gains, Prepare list of problem statements	22 SEPTEMBER 2022
<b>Ideation`</b>	List the by organizing the brainstorming session and prioritize the top 3 ideas based on the feasibility & importance.	23 SEPTEMBER 2022
<b>Proposed Solution</b>	Prepare the proposed solution document, which includes the novelty, feasibility of idea, business model, social impact, scalability of solution, etc.	18 OCTOBER 2022
<b>Problem Solution Fit</b>	Prepare problem - solution fit document.	18 OCTOBER 2022
<b>Solution Architecture</b>	Prepare solution architecture document.	18 OCTOBER 2022

## 6.2 SPRINT DELIVERY SCHEDULE

<b>Sprint</b>	<b>Functional Requirement (Epic)</b>	<b>User Story Number</b>	<b>User Story / Task</b>	<b>Story Points</b>	<b>Priority</b>	<b>Team Members</b>
Sprint-1	User Panel	USN-1	The user will login into the website and go through the products available on the website	20	High	MARK ANTONY G KARTHIK RAJ V INIYAN K ARIVAZHAGAN A ARAVINDHAN I
Sprint-2	Admin panel	USN-2	The role of the admin is to check out the database about the stock and have a track of all the things that the users are purchasing.	20	High	MARK ANTONY G KARTHIK RAJ V INIYAN K ARIVAZHAGAN A ARAVINDHAN I
Sprint-3	Chat Bot	USN-3	The user can directly talk to Chatbot regarding the products. Get the recommendations based on information provided by the user.	20	High	MARK ANTONY G KARTHIK RAJ V INIYAN K ARIVAZHAGAN A ARAVINDHAN I
Sprint-4	final delivery	USN-4	Container of applications using docker kubernetes and deployment the application. Create the documentation and final submit the application	20	High	MARK ANTONY G KARTHIK RAJ V INIYAN K ARIVAZHAGAN A ARAVINDHAN I

## 6.3 REPORT FROM JIRA

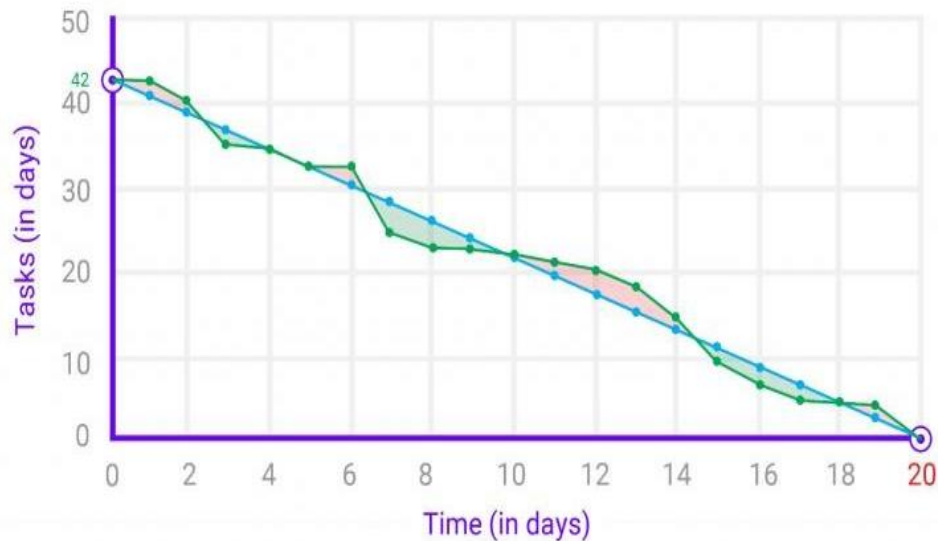
## Velocity:

Imagine we have a 10-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$\text{Average Velocity} = 20 / 6 = 3.33$$

## Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.



## CHAPTER 7

# CODING & SOLUTION

## 7.1 FEATURE 1 – SIGN UP AND REGISTRATION

```
<!DOCTYPE html>
<html lang="en" dir="ltr">
<head>
<meta charset="UTF-8">

<link rel="stylesheet" href="style2.css">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<body>

<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.14.7/dist/umd/popper.min.js"
integrity="sha384-
UO2eT0CpHqdSJQ6hJty5KVphtPhzWj9WO1clHTMGa3JDZwrnQq4sF86dIHNDz0W1"
crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/js/bootstrap.min.js"
integrity="sha384-
JjSmVgyd0p3pXB1rRibZUAYoIIy6OrQ6VrjIEaFf/nJGzIxFDsf4x0xIM+B07jRM"
crossorigin="anonymous"></script>

<div class="container">
<div class="title">Registration</div>
<div class="content">
<form name="myForm" action="" onsubmit="return validateForm()" method="post">
<div class="user-details">
<div class="input-box">
<span class="details">Full Name</span>
<input type="text" name = "fname" placeholder="Enter your name" required>
</div>
<div class="input-box">
<span class="details">Username</span>
<input type="text" name = "fname" placeholder="Enter your username" required>
</div>
```



```

<div class="input-box">
<span class="details">Email</span>
<input type="text" name = "fname" placeholder="Enter your email" required>
</div>
<div class="input-box">
<span class="details">Phone Number</span>
<input type="text" name = "fname" placeholder="Enter your number" required>
</div>
<div class="input-box">
<span class="details" >Password</span>
<input type="text" name = "fname" placeholder="Enter your password" required>
</div>
<div class="input-box">
<span class="details">Confirm Password</span>
<input type="text" name="fname" placeholder="Confirm your password" required>
</div>
</div>
<div class="gender-details">
<input type="radio" name="gender" id="dot-1">
<input type="radio" name="gender" id="dot-2">
<input type="radio" name="gender" id="dot-3">
<span class="gender-title">Gender</span>
<div class="category">
<label for="dot-1">
<span class="dot one"></span>
<span class="gender">Male</span>
</label>
<label for="dot-2">
<span class="dot two"></span>
<span class="gender">Female</span>
</label>
<label for="dot-2">
<span class="dot two"></span>
<span class="gender">Female</span>
</label>
<label for="dot-3">
<span class="dot three"></span>
<span class="gender">Prefer not to say</span>
</label>
</div>
</div>

```

```

<a href = "registration.html">
<div class="button">
<input type="submit" value="Register">
</a>
</div>
<p>Already have an account? <a href="registration.html" target="_blank">Login here</a></p>
</form>
</div>
</div>
<script src = "validation.js"></script>
</body>
</html>

```

```

<!doctype html>
<html lang="en">
<head>
<!-- Required meta tags -->
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

```

```

<!-- Bootstrap CSS -->
<link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/css/bootstrap.min.css"
integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
crossorigin="anonymous">

```

```

<title>userlogin</title>

```

```

<style>
*{
margin: 0;
padding: 0;
box-sizing: border-box;
}
body {
background-color: #42FF01;
}
.row{
background-color: white;
}
<!doctype html>

```

```

<html lang="en">
<head>
<!-- Required meta tags -->
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

<!-- Bootstrap CSS -->
<link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/css/bootstrap.min.css"
integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
crossorigin="anonymous">

<title>userlogin</title>

<style>
*{
margin: 0;
padding: 0;
box-sizing: border-box;
}
body {
background-color: #42FF01;
}
.row{
background-color: white;
border-radius: 30px;
box-shadow: 12px 12px 22px grey;
}
img{
border-top-left-radius: 30px;
border-bottom-left-radius: 30px;
}
.btn1{
border: none;
outline: none;
height: 50px;
width: 100%;
background-color: black;
color: white;
border-radius: 4px;

```

```

font-weight: bold;
}
.btn1:hover{
background-color: white;
border: 1px solid;
color : black;
}
</style>

</head>
<body>

<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
crossorigin="anonymous"></script>
<!doctype html>
<html lang="en">
<head>
<!-- Required meta tags -->
<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">

<!-- Bootstrap CSS -->
<link rel="stylesheet"
href="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/css/bootstrap.min.css"
integrity="sha384-
ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
crossorigin="anonymous">

<title>userlogin</title>

<style>
*{
margin: 0;
padding: 0;
box-sizing: border-box;
}
body {
background-color: #42FF01;
}
.row{

```

```

background-color: white;
border-radius: 30px;
box-shadow: 12px 12px 22px grey;
}
img{
border-top-left-radius: 30px;
border-bottom-left-radius: 30px;
}
.btn1{
border: none;
outline: none;
height: 50px;
width: 100%;
background-color: black;
color: white;
border-radius: 4px;
font-weight: bold;
}
.btn1:hover{
background-color: white;
border: 1px solid;
color : black;
}
</style>

```

```

</head>

```

```

<body>

```

```

<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-
q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/popper.js@1.14.7/dist/umd/popper.min.js"
integrity="sha384-
UO2eT0CpHqdSJK6hJty5KVphtPhzWj9WO1clHTMGa3JDZwrnQq4sF86dIHNDz0W1"
crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/js/bootstrap.min.js"
integrity="sha384-
JjSmVgyd0p3pXB1rRibZUAYoIIy6OrQ6VrjIEaFf/nJGzIxFDsf4x0xIM+B07jRM"
crossorigin="anonymous"></script>

```

```

<section class="Form my-4 mx-5">
<div class="container">
<div class="row no-gutters">
<div class="col-lg-5">

</div>
<div class="col-lg-7 px-5 py-5">
<h1 class = "font-weight-bold py-3">USER LOGIN PAGE</h1>
<h4>Login to your Account</h4>
<form name="myForm" action="" onsubmit="return validateForm()" method="post">
<div class="form-row">
<div class="col-lg-7">
<input type="email" name="fname" placeholder="Email Address" class="form-control
my-3 p-4" required>

</div>
</div>
<div class="form-row">
<div class="col-lg-7">
<input type="password" name="fname" placeholder="*****" class="form-control my-
3 p-4" required>

</div>
</div>
<div class="form-row">
<div class="col-lg-7">
<a href = "viewproducts.html">
<input type="submit" class="btn1 mt-3 mb-5" value = "Login"></input>
</a>
</div>
</div>
<a href="forgotpass.html" target="_blank">Forgot Password?</a>
<p>Dont have a account? <a href="signup.html"
target="_blank">Register here</a></p>
</form>
</div>
</div>
</div>
</div>

```

```
</section>
```

```
<script src = "validation.js"></script>
```

```
</body>
```

```
</html>
```

## 7.2 FEATURE 2 VALIDATION

```
function validateForm() {  
let x = document.forms["myForm"]["fname"].value;  
if (x == "") {  
alert("Please fill out all the required fields");  
return false;  
}  
}
```

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<title>Smart Fashion Recommender App</title>
```

```
<!-- owl carousel css file cdn link -->
```

```
<link rel="stylesheet"
```

```
href="https://cdnjs.cloudflare.com/ajax/libs/OwlCarousel2/2.3.4/assets/owl.carousel.min.css"  
>
```

```
<!-- font awesome cdn link -->
```

```
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-  
awesome/5.15.2/css/all.min.css">
```

```
<!-- custom css file link -->
```

```
<link rel="stylesheet" href="style3.css">
```

```
<script>
```

```
window.watsonAssistantChatOptions = {
```

```
integrationID: "d7a0676e-607a-45ba-8a0a-7bd69a5d7b26", // The ID of this integration.
```

```
region: "eu-gb", // The region your integration is hosted in.
```

serviceInstanceID: "03c025dd-26e1-4830-9e1c-bba498cb108a", // The ID of your service instance.

onLoad: function(instance) { instance.render(); }

};

setTimeout(function(){

const t=document.createElement('script');

t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +

window.watsonAssistantChatOptions.clientVersion || 'latest' ) +

"/WatsonAssistantChatEntry.js";

document.head.appendChild(t);

});

</script>

</head>

<body>

<!-- header section starts -->

<header>

<div class="header-1">

<a href="#" class="logo"> <i class="fas fa-shopping-bag"></i> Smart Fashion </a>

<div class="form-container">

<form action="">

</form>

</div>

</div>

<div class="header-2">

<div id="menu" class="fas fa-bars"></div>

<nav class="navbar">

<ul>

<li><a class="active" href="#home">HOME</a></li>

<li><a href="registration.html" target="\_blank">LOGIN</a></li>

<!DOCTYPE html>



```

<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Smart Fashion Recommender App</title>

<!-- owl carousel css file cdn link -->
<link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/OwlCarousel2/2.3.4/assets/owl.carousel.min.css
">

<!-- font awesome cdn link -->
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.2/css/all.min.css">

<!-- custom css file link -->
<link rel="stylesheet" href="style3.css">


<script>
window.watsonAssistantChatOptions = {
integrationID: "d7a0676e-607a-45ba-8a0a-7bd69a5d7b26", // The ID of this integration.
region: "eu-gb", // The region your integration is hosted in.
serviceInstanceID: "03c025dd-26e1-4830-9e1c-bba498cb108a", // The ID of your service
instance.
onLoad: function(instance) { instance.render(); }
};
setTimeout(function(){
const t=document.createElement('script');
t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') +
"/WatsonAssistantChatEntry.js";
document.head.appendChild(t);
});
</script>

</head>
<body>

```

<!-- header section starts -->

<header>

<div class="header-1">

<a href="#" class="logo"> <i class="fas fa-shopping-bag"></i> Smart Fashion </a>

<div class="form-container">

<form action="">

</form>

</div>

</div>

<div class="header-2">

<div id="menu" class="fas fa-bars"></div>

<nav class="navbar">

<ul>

<li><a class="active" href="#home">HOME</a></li>

<li><a href="registration.html" target="\_blank">LOGIN</a></li>

<li><a href="signup.html" target="\_blank">SIGNUP</a></li>

</nav>

<!-- <div class="icons">

<a href="#" class="fas fa-heart"></a>

<a href="#" class="fas fa-shopping-cart"></a>

<a href="registration.html" class="fas fa-user"></a>

</div> -->

</div>

</header>

<!-- header section ends -->

<!-- home section starts -->

```
<section class="home" id="home">
```

```
<div class="home-slider owl-carousel">
```

```
<div class="item">
```

```

```

```
<div class="content">
```

```
<h3>Products for women</h3>
```

```
<p>On Sale </p>
```

```
<a href="#"><button class="btn">Discover</button></a>
```

```
</div>
```

```
</div>
```

```
<div class="item">
```

```

```

```
<!DOCTYPE html>
```

```
<html lang="en">
```

```
<head>
```

```
<meta charset="UTF-8">
```

```
<meta name="viewport" content="width=device-width, initial-scale=1.0">
```

```
<title>Smart Fashion Recommender App</title>
```

```
<!-- owl carousel css file cdn link -->
```

```
<link rel="stylesheet"
```

```
href="https://cdnjs.cloudflare.com/ajax/libs/OwlCarousel2/2.3.4/assets/owl.carousel.min.css"
```

```
<!-- font awesome cdn link -->
```

```
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/5.15.2/css/all.min.css">
```

```
<!-- custom css file link -->
```

```
<link rel="stylesheet" href="style3.css">
```

```
<script>
```

```
window.watsonAssistantChatOptions = {
```

```
integrationID: "d7a0676e-607a-45ba-8a0a-7bd69a5d7b26", // The ID of this integration.
```

```
region: "eu-gb", // The region your integration is hosted in.
```

```
serviceInstanceID: "03c025dd-26e1-4830-9e1c-bba498cb108a", // The ID of your service
```

```

instance.
onLoad: function(instance) { instance.render(); }
};
setTimeout(function(){
const t=document.createElement('script');
t.src='https://web-chat.global.assistant.watson.appdomain.cloud/versions/' +
(window.watsonAssistantChatOptions.clientVersion || 'latest') +
'/WatsonAssistantChatEntry.js';
document.head.appendChild(t);
});
</script>

</head>
<body>

<!-- header section starts -->

<header>

<div class="header-1">
<a href="#" class="logo"> <i class="fas fa-shopping-bag"></i> Smart Fashion </a>

<div class="form-container">
<form action="">

</form>
</div>

</div>

<div class="header-2">

<div id="menu" class="fas fa-bars"></div>

<nav class="navbar">
<ul>
<li><a class="active" href="#home">HOME</a></li>
<li><a href="registration.html" target="_blank">LOGIN</a></li>
<li><a href="signup.html" target="_blank">SIGNUP</a></li>

```

</nav>

```
<!-- <div class="icons">
<a href="#" class="fas fa-heart"></a>
<a href="#" class="fas fa-shopping-cart"></a>
<a href="registration.html" class="fas fa-user"></a>
</div> -->
```

</div>

</header>

<!-- header section ends -->

<!-- home section starts -->

<section class="home" id="home">

<div class="home-slider owl-carousel">

```
<div class="item">

<div class="content">
<h3>Products for women</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```

```
<div class="item">

<div class="content">
<h3>Products for men</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```

```
<div class="item">

<div class="content">
```

```
<h3>trending shoes</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```

```
<div class="item">

<div class="content">
<h3>Products for kids</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```

```
</div>
```

```
</section><!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>Smart Fashion Recommender App</title>
```

```
<!-- owl carousel css file cdn link -->
<link rel="stylesheet"
href="https://cdnjs.cloudflare.com/ajax/libs/OwlCarousel2/2.3.4/assets/owl.carousel.min.css
">
```

```
<!-- font awesome cdn link -->
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-
awesome/5.15.2/css/all.min.css">
```

```
<!-- custom css file link -->
<link rel="stylesheet" href="style3.css">
```

```
<script>
window.watsonAssistantChatOptions = {
```

```

integrationID: "d7a0676e-607a-45ba-8a0a-7bd69a5d7b26", // The ID of this integration.
region: "eu-gb", // The region your integration is hosted in.
serviceInstanceID: "03c025dd-26e1-4830-9e1c-bba498cb108a", // The ID of your service
instance.
onLoad: function(instance) { instance.render(); }
};
setTimeout(function(){
const t=document.createElement('script');
t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') +
"/WatsonAssistantChatEntry.js";
document.head.appendChild(t);
});
</script>

```

```

</head>

```

```

<body>

```

```

<!-- header section starts -->

```

```

<header>

```

```

<div class="header-1">

```

```

<a href="#" class="logo"> <i class="fas fa-shopping-bag"></i> Smart Fashion </a>

```

```

<div class="form-container">

```

```

<form action="">

```

```

</form>

```

```

</div>

```

```

</div>

```

```

<div class="header-2">

```

```

<div id="menu" class="fas fa-bars"></div>

```

```

<nav class="navbar">

```

```

<ul>

```

```

<li><a class="active" href="#home">HOME</a></li>

```

```
<li><a href="registration.html" target="_blank">LOGIN</a></li>
<li><a href="signup.html" target="_blank">SIGNUP</a></li>
```

```
</nav>
```

```
<!-- <div class="icons">
<a href="#" class="fas fa-heart"></a>
<a href="#" class="fas fa-shopping-cart"></a>
<a href="registration.html" class="fas fa-user"></a>
</div> -->
```

```
</div>
```

```
</header>
```

```
<!-- header section ends -->
```

```
<!-- home section starts -->
```

```
<section class="home" id="home">
```

```
<div class="home-slider owl-carousel">
```

```
<div class="item">

<div class="content">
<h3>Products for women</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```

```
<div class="item">

<div class="content">
<h3>Products for men</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```



```
<div class="item">

<div class="content">
<h3>trending shoes</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```

```
<div class="item">

<div class="content">
<h3>Products for kids</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```

```
</div>
```

```
</section>
```

```
<!-- home section ends -->
```

```
<!-- arrival section starts -->
```

```
<section class="arrival" id="arrival">
```

```
<h1 class="heading"> <span>new arrivals</span> </h1>
```

```
<div class="box-container">
```

```
<div class="box">
```

```
<div class="image">
```

```

```

```

</div>
<div class="info">
<h3>branded jeans</h3>
<div class="subInfo">
<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>

```

```

<div class="box">
<div class="image">

</div>
<div class="info">
<h3>t-shirts</h3>
<div class="subInfo">
<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>

```

```
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>
```

```
<div class="box">
<div class="image">

</div>
<div class="info">
<h3>latest shoes</h3>
<div class="subInfo">
<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>
```

```
<div class="box">
<div class="image">

</div>
<div class="info">
<h3>sweat-shirts</h3>
<div class="subInfo">
<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
```

```

<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>

<div class="box">
<div class="image">

</div>
<div class="info">
<h3>traditional wears</h3>
<div class="subInfo">
<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>

<div class="box">

```

```

<div class="image">

</div>
<div class="info">
<h3>women's fashion</h3>
<div class="subInfo">
<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>

</div>

</section>

<!-- arrival section ends -->

<!-- featured section starts -->
<!--
<section class="feature" id="featured">
<h1 class="heading"> <span> featured product </span> </h1>
<div class="row">
<div class="image-container">
<div class="big-image">

</div>
<div class="small-image">


```

```




</div>
</div>
<div class="content">
<h3>smart watches</h3>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<span>(500+) reviews</span>
</div>
<p></p>
<strong class="price">₹1000 <span>₹1500</span> </strong>
<a href="#"><button class="btn">buy now</button></a>
</div>
</div>
</section>
<!-- featured section ends -->

<!-- gallery section starts -->

<!-- <section class="gallery" id="gallery">
<h1 class="heading"> <span> product gallery </span> </h1>
<ul class="controls">
<li class="btn button-active" data-filter="all">all</li>
<li class="btn" data-filter="phone">phone</li>
<li class="btn" data-filter="laptop">laptop</li>
<li class="btn" data-filter="headphone">headphone</li>
<li class="btn" data-filter="shoes">shoes</li>
</ul>
<div class="image-container">
<div class="box phone">
<div class="image">

</div>
<div class="info">
<h3>smartphones</h3>

```

```

<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box phone">
<div class="image">

</div>
<div class="info">
<h3>smartphones</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box laptop">
<div class="image">

</div>
<div class="info">
<h3>laptop</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>

```

```

<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box shoes">
<div class="image">

</div>
<div class="info">
<h3>shoes</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
</div>
</div>
</div>
</div>
<div class="box laptop">
<div class="image">

</div>
<div class="info">
<h3>laptop</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box headphone">
<div class="image">

```



```


</div>
<div class="info">
<h3>headphone</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box shoes">
<div class="image">

</div>
<div class="info">
<h3>shoes</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box headphone">
<div class="image">

</div>
<div class="info">
<h3>headphone</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>

```

```

<div class="stars">
  <i class="fas fa-star"></i>
  <i class="fas fa-star"></i>
  <i class="fas fa-star"></i>
  <i class="fas fa-star"></i>
  <i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
</div>
</section> -->

```

```

<!-- gallery section ends -->

```

```

<!-- deal section starts -->

```

```

<!-- <section class="deal" id="deal">
<h1 class="heading"> <span> best deals </span> </h1>
<div class="box-container">
  <div class="box">
    
    <div class="content">
      <h3>latest laptop</h3>
      <p>upto 25% off on first purchase</p>
      <a href="#"><button class="btn">explore</button></a>
    </div>
  </div>
  <div class="box">
    
    <div class="content">
      <h3>new headphone</h3>
      <p>upto 25% off on first purchase</p>
      <a href="#"><button class="btn">explore</button></a>
    </div>
  </div>
  </div>
  <div class="icons-container">
    <div class="icons">
      <i class="fas fa-shipping-fast"></i>
      <h3>fast delivery</h3>
    </div>
  </div>
</section>

```

```

<p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Animi, molestiae?</p>
</div>
<div class="icons">
<i class="fas fa-user-clock"></i>
<h3>24 x 7 support</h3>
<p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Animi, molestiae?</p>
</div>
<div class="icons">
<i class="fas fa-money-check-alt"></i>
<h3>easy payments</h3>
<p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Animi, molestiae?</p>
</div>
<div class="icons">
<i class="fas fa-box"></i>
<h3>10 days replacements</h3>
<p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Animi, molestiae?</p>
</div>
</div>
</section> -->
<!-- deal section ends -->

<!-- newsletter section starts -->

<section class="newsletter">

<h1>Smart Fashion</h1>
<p>get in touch for more fashion recommendations</p>
<form action="">
<input type="email" placeholder="enter your email">
<input type="submit" class="btn">
</form>

</section>

<!-- newsletter section ends -->

<!-- footer section starts -->

<section class="footer">

<div class="box-container">

```

```
<div class="box">
<a href="#" class="logo"> <i class="fas fa-shopping-bag"></i> Smart Fashion </a>
```

```
</div>
```

```
<div class="box">
<h3>links</h3>
<a href="#">home</a>
<a href="#">arrival</a>
<a href="#">featured</a>
<a href="#">gallery</a>
<a href="#">deal</a>
</div>
```

```
<div class="box">
<h3>contact us</h3>
<p> <i class="fas fa-home"></i>
chennai, tamilnadu
</p>
<p> <i class="fas fa-phone"></i>
+910000000
</p>
<p> <i class="fas fa-globe"></i>
madhan1330x2@gmail.com
</p>
</div>
```

```
</div>
```

```
</section>
```

```
<!-- footer section ends -->
```

```
<!-- jquery cdn link -->
```

```
<script src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
```

```
<!-- owl carousel js file cdn link -->
```

```
<script
src="https://cdnjs.cloudflare.com/ajax/libs/OwlCarousel2/2.3.4/owl.carousel.min.js"></scrip
t>
```

```
<!-- custom js file link -->
<script src="vp.js"></script>
```

```
</body>
</html>
```

### 7.3 FEATURE 3 – BACK END CONNECTION

```
import ibm_db
dsn_hostname = "54a2f15b-5c0f-46df-8954-
7e38e612c2bd.c1ogj3sd0tgu0lqde00.databases.appdomain.cloud"
dsn_uid = "tzc17937"
dsn_pwd = "RxjZkDB5SpKoGhvS"
dsn_driver = "{IBMDB2CL1}"
dsn_database = "bludb"
dsn_port = "32459"
dsn_protocol = "TCPIP"          # i.e. "TCPIP"
dsn_security = "SSL"           #i.e. "SSL"
dsn_cert="DigiCertGlobalRootCA.crt"
dsn = (
"DRIVER={0};"
"DATABASE={1};"
"HOSTNAME={2};"
"PORT={3};"
"PROTOCOL={4};"
"UID={5};"
"PWD={6};"
"SECURITY={7};"
"SSLServerCertificate={8};").format(dsn_driver, dsn_database, dsn_hostname, dsn_port,
dsn_protocol, dsn_uid, dsn_pwd,dsn_security,dsn_cert)
try:
conn = ibm_db.connect(dsn, "", "")
print("Connected to database: ", dsn_database, "as user: ", dsn_uid, "on host: ",
dsn_hostname)
except:
print("Unable to connect: ", ibm_db.conn_errormsg())
```

```

# sql = "insert into user values('105','19it26@kcgcollege.com','1234','markantony')"
# ibm_db.exec_immediate(conn, sql)
print(dsn)

from connect import *
from flask import *
import datetime

def fetchapi(category):
    api=""
    if(category == 'Women'):
        api='https://s3.jp-tok.cloud-object-
storage.appdomain.cloud/raspberryibmsfrappbucket/'
    elif (category == 'Men'):
        api = 'https://s3.jp-tok.cloud-object-storage.appdomain.cloud/iraash/'
    elif (category == 'Accessories'):
        api = 'https://s3.jp-tok.cloud-object-storage.appdomain.cloud/104084smartfashion/'
    elif (category == 'Kids'):
        api = 'https://s3.jp-tok.cloud-object-storage.appdomain.cloud/iraash/'
    elif (category == 'Footwears'):
        api = 'https://s3.jp-tok.cloud-object-storage.appdomain.cloud/smartfashion2001/'
    return api

def insert_intocart(arr,prodid,category,userid,type):

    if (type == 'Dresses' or type == 'Kurtis' or type == 'Palazzo' or type == 'Western' or
category == 'Men' or category == 'Kids' or category == 'Footwears'):
        size = request.form['sizeval']
    else:
        size = "nil"
    flag = 0

    for cartitems in arr:
        if (cartitems[6] == prodid and cartitems[3]==size):
            flag = 1
            updatequery = "UPDATE cart set quantity=quantity+1 where prodid='" + prodid +
,,,,
            ibm_db.exec_immediate(conn, updatequery)
            break

```

```

if (flag != 1):
    querycart = "insert into cart (userid,prodid,size,quantity) values('" + userid + "','" +
prodid + "','" + size + "',1)"
    ibm_db.exec_immediate(conn, querycart)

def fetch_cartarr(userid):
    arr=[]
    query = "select
o.prodname,o.price,p.pic1,c.size,o.category,o.type,o.prodid,o.offer,c.quantity from outfit o
inner join picture p on o.prodid=p.prodid INNER join cart c on c.prodid=p.prodid where
userid='"+userid+"'"
    stmt = ibm_db.exec_immediate(conn, query)
    row = ibm_db.fetch_tuple(stmt)
    while (row):
        arr.append(row) # appending all dictionaries in arr
        row = ibm_db.fetch_tuple(stmt) # incrementing that is to next row
    for i in range(0, len(arr)):
        arr[i] = list(arr[i])
    for j in range(0, len(arr)):
        imageapi = fetchapi(arr[j][4])
        arr[j][2] = imageapi + arr[j][2]
    constlen = len(arr)
    sunquery = "select
o.prodname,o.price,p.pic1,c.size,o.category,o.type,o.prodid,o.offer,c.quantity from sunglasses
o inner join picture p on o.prodid=p.prodid INNER join cart c on c.prodid=p.prodid where
userid='"+userid+"'"
    sunstmt = ibm_db.exec_immediate(conn, sunquery)
    sunrow = ibm_db.fetch_tuple(sunstmt)
    while (sunrow):
        arr.append(sunrow) # appending all dictionaries in arr
        sunrow = ibm_db.fetch_tuple(sunstmt) # incrementing that is to next row
    for i in range(constlen, len(arr)):
        arr[i] = list(arr[i])
    for j in range(constlen, len(arr)):
        imageapi2 = fetchapi(arr[j][4])
        arr[j][2] = imageapi2 + arr[j][2]
    return arr

def totamtcalculation(arr):
    totcost = 0
    totdis = 0

```

```
amtarr=[]  
for k in range(0, len(arr)):  
    totcost = totcost + (arr[k][1] * arr[k][8])  
    temp = (arr[k][1] * arr[k][8] * arr[k][7]) / 100  
    totdis = totdis + round(temp)  
netamt = totcost - totdis  
taxcalcnetamt = netamt + (netamt * 12) / 100  
amtarr.append(int(totcost))  
amtarr.append(int(totdis))  
amtarr.append(int(taxcalcnetamt))  
return amtarr
```



# CHAPTER 9

## RESULTS

### 9.1 PERFORMANCE METRICS

NFT – Risk Assessment						
S.No	Project Name	Scope/feature	Functional Changes	Hardware Changes	Software Changes	
1	Smart Fashion Recommender Application	New	Low	No Changes	Moderate	

NFT – Detailed Test Plan			
S.No	Project Overview	NFT Test approach	Ass
1	Smart Fashion Recommender Application	Manual testing	laptop

End Of Test Report					
S.No	Project Overview	NFT Test approach	NFR – Met	Test Outcome	GO/NO–GO decision

1 Smart Fashion Recommender Application  
expected

Defects

Manule  
Use Laptop / desktop Mode

Mark Antony

Worked as we  
No

# **CHAPTER 10**

## **ADVANTAGES & DISADVANTAGES**

### **ADVANTAGES**

#### **1. They help you get to know your customers**

Conversational Chatbots can help you get to know your customers even more. They let you figure out what their questions and needs are, plus the products or services they're interested in, and help you make strategic decisions to improve the experience.

#### **2. They're a selling machine**

Your Chatbot can be the perfect partner to promote new products and send proactive notifications. They can also offer immediate assistance to your potential customers and help speed up the purchase decision process.

#### **3. Customer service at any time**

One of the greatest advantages is that Chatbots are available 24/7 to help customers. Plus, they respond quickly to every question they receive. This guarantees your customers will always be able to solve their problems, no matter what time of day.

#### **4. They help optimize costs**

Imagine your agents spending more time answering just the queries that require a human being. Implementing a Chatbot with conversational AI is a great way to automate customer service and improve the service provided by agents, leading to cost optimization in the medium term.

#### **5. They improve customer satisfaction**

People are all different, and so is the way they communicate. That's why it's important to offer the appropriate and empathic answer to each query. For example, our conversational AI can understand informal language and regionalisms, improve conversations with plug-ins, and recognize the intent behind each interaction.

## **DISADVANTAGES**

### **1.They need maintenance**

Chatbots need constant revision, maintenance and optimization in terms of their knowledge base and the way they're supposed to communicate with customers. You have to feed the Chatbot with new and meaningful data (content) that can answer customer questions and queries.

### **2. A Chatbot is not a person**

Yes, this is obvious. But you have to remember it. A conversational Chatbot isn't the same as a human agent, so it doesn't always understand a query or its selection of answers may be limited. This makes it sound “robotic.”

### **3.They need maintenance**

Chatbots need constant revision, maintenance and optimization in terms of their knowledge base and the way they're supposed to communicate with customers. You have to feed the Chatbot with new and meaningful data (content) that can answer customer questions and que

# **CHAPTER 11**

## **CONCLUSION**

Recommendation systems have the potential to explore new opportunities for retailers by enabling them to provide customized recommendations to consumers based on information retrieved from the Internet. They help consumers to instantly find the products and services that closely match with their choices. Moreover, different state-of-the-art algorithms have been developed to recommend products based on users' interactions with their social groups.

Therefore, research on embedding social media images within fashion recommendation systems has gained huge popularity in recent times. This paper presented a review of the fashion recommendation systems, algorithmic models and filtering techniques based on the academic articles related to this topic. The technical aspects, strengths and weaknesses of the filtering techniques have been discussed elaborately, which will help future researchers gain an in-depth understanding of fashion recommender systems. However, the proposed prototypes should be tested in commercial applications to understand their feasibility and accuracy in the retail market, because inaccurate recommendations can produce a negative impact on a customer. Moreover, future research should concentrate on including time series analysis and accurate categorization of product images based on the variation in color, trend and clothing style in order to develop an effective recommendation system.

# **CHAPTER 12**

## **FUTURE SCOPE**

Online selling and purchasing offer innumerable benefits to both sellers and buyers, and these advantages are also the reasons for the rising scope of e Commerce Well, to put it bluntly, the scope of e-business in the near future looks to be ever-increasing and growing, because the trend has really caught on here. E-commerce giant Amazon is keen to conquer the Indian market and has already invested a great deal, especially with its 49% stake in the Future Group.

Indian online retail giant Flipkart has already opened a few fine stores and plans more stores in smaller cities. They plan to combine online and fine stores to maximize their selling potential. Google and Tata Trust have launched a joint program 'Saathi' to increase internet and mobile penetrate on among rural women .The Government of India is also making a huge push for Ecommerce by providing numerous sops to startups, cyberparks, and so on through its Digital India program .As of now, there are close to 20,000 E-commerce companies in India, with many more expected to join the bandwagon every month.

# APPENDIX

## SOURCE CODE

fashion.html

```
<!DO  
CTYP  
E  
html>
```

```
<html lang="en">  
<head>  
<meta charset="UTF-8">  
<meta name="viewport" content="width=device-width, initial-scale=1.0">  
<title>Smart Fashion Recommender App</title>
```

```
<!-- owl carousel css file cdn link -->  
<link rel="stylesheet"  
href="https://cdnjs.cloudflare.com/ajax/libs/OwlCarousel2/2.3.4/assets/owl.carousel.m  
in.css">
```

```
<!-- font awesome cdn link -->  
<link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-  
awesome/5.15.2/css/all.min.css">
```

```
<!-- custom css file link -->  
<link rel="stylesheet" href="style3.css">
```

```
<script>  
window.watsonAssistantChatOptions = {  
integrationID: "d7a0676e-607a-45ba-8a0a-7bd69a5d7b26", // The ID of this  
integration.
```

```

region: "eu-gb", // The region your integration is hosted in.
serviceInstanceID: "03c025dd-26e1-4830-9e1c-bba498cb108a", // The ID of your
service instance.
onLoad: function(instance) { instance.render(); }
};
setTimeout(function(){
const t=document.createElement('script');
t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" +
(window.watsonAssistantChatOptions.clientVersion || 'latest') +
"/WatsonAssistantChatEntry.js";
document.head.appendChild(t);
});
</script>

```

```

</head>
<body>

```

```

<!-- header section starts -->

```

```

<header>

```

```

<div class="header-1">
<a href="#" class="logo"> <i class="fas fa-shopping-bag"></i> Smart Fashion </a>

```

```

<div class="form-container">
<form action="">
</form>
</div>

```

```

</div>

```

```

<div class="header-2">

```

```
<div id="menu" class="fas fa-bars"></div>
```

```
<nav class="navbar">
```

```
<ul>
```

```
<li><a class="active" href="#home">HOME</a></li>
```

```
<li><a href="registration.html" target="_blank">LOGIN</a></li>
```

```
<li><a href="signup.html" target="_blank">SIGNUP</a></li>
```

```
</nav>
```

```
<!-- <div class="icons">
```

```
<a href="#" class="fas fa-heart"></a>
```

```
<a href="#" class="fas fa-shopping-cart"></a>
```

```
<a href="registration.html" class="fas fa-user"></a>
```

```
</div> -->
```

```
</div>
```

```
</header>
```

```
<!-- header section ends -->
```

```
<!-- home section starts -->
```

```
<section class="home" id="home">
```

```
<div class="home-slider owl-carousel">
```

```
<div class="item">
```

```

```

```
<div class="content">
```



```
<h3>Products for women</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```

```
<div class="item">

<div class="content">
<h3>Products for men</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```

```
<div class="item">

<div class="content">
<h3>trending shoes</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```

```
<div class="item">

<div class="content">
<h3>Products for kids</h3>
<p>On Sale </p>
<a href="#"><button class="btn">Discover</button></a>
</div>
</div>
```

```
</div>
```

</section>

<!-- home section ends -->

<!-- arrival section starts -->

<section class="arrival" id="arrival">

<h1 class="heading"> <span>new arrivals</span> </h1>

<div class="box-container">

<div class="box">

<div class="image">



</div>

<div class="info">

<h3>branded jeans</h3>

<div class="subInfo">

<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>

<div class="stars">

<i class="fas fa-star"></i>

<i class="fas fa-star"></i>

<i class="fas fa-star"></i>

<i class="fas fa-star"></i>

<i class="fas fa-star-half"></i>

</div>

```

</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>

```

```

<div class="box">
<div class="image">

</div>
<div class="info">
<h3>t-shirts</h3>
<div class="subInfo">
<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>

```

```

<div class="box">
<div class="image">


```

```

</div>
<div class="info">
<h3>latest shoes</h3>
<div class="subInfo">
<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>

```

```

<div class="box">
<div class="image">

</div>
<div class="info">
<h3>sweat-shirts</h3>
<div class="subInfo">
<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>

```

```
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>
```

```
<div class="box">
<div class="image">

</div>
<div class="info">
<h3>traditional wears</h3>
<div class="subInfo">
<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>
```

```
<div class="box">
<div class="image">

</div>
<div class="info">
<h3>women's fashion</h3>
```

```

<div class="subInfo">
<strong class="price"> ₹1000/- <span>₹1500/-</span> </strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
<div class="overlay">
<a href="#" style="--i:1;" class="fas fa-heart"></a>
<a href="#" style="--i:2;" class="fas fa-shopping-cart"></a>
<a href="#" style="--i:3;" class="fas fa-search"></a>
</div>
</div>

```

```

</div>

```

```

</section>

```

```

<!-- arrival section ends -->

```

```

<!-- featured section starts -->
<!--
<section class="feature" id="featured">
<h1 class="heading"> <span> featured product </span> </h1>
<div class="row">
<div class="image-container">
<div class="big-image">

</div>
<div class="small-image">




```

```


</div>
</div>
<div class="content">
<h3>smart watches</h3>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<span>(500+) reviews</span>
</div>
<p></p>
<strong class="price">₹1000 <span>₹1500</span> </strong>
<a href="#"><button class="btn">buy now</button></a>
</div>
</div>
</section>
<!-- featured section ends -->

```

```

<!-- gallery section starts -->

```

```

<!-- <section class="gallery" id="gallery">
<h1 class="heading"> <span> product gallery </span> </h1>
<ul class="controls">
<li class="btn button-active" data-filter="all">all</li>
<li class="btn" data-filter="phone">phone</li>
<li class="btn" data-filter="laptop">laptop</li>
<li class="btn" data-filter="headphone">headphone</li>
<li class="btn" data-filter="shoes">shoes</li>
</ul>
<div class="image-container">
<div class="box phone">
<div class="image">

</div>
<div class="info">
<h3>smartphones</h3>

```

```

<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box phone">
<div class="image">

</div>
<div class="info">
<h3>smartphones</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box laptop">
<div class="image">

</div>
<div class="info">
<h3>laptop</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>

```



```

<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box shoes">
<div class="image">

</div>
<div class="info">
<h3>shoes</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box laptop">
<div class="image">

</div>
<div class="info">
<h3>laptop</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>

```

```

</div>
</div>
<div class="box headphone">
<div class="image">

</div>
<div class="info">
<h3>headphone</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box shoes">
<div class="image">

</div>
<div class="info">
<h3>shoes</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box headphone">
<div class="image">


```

```

</div>
<div class="info">
<h3>headphone</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
<div class="box headphone">
<div class="image">

</div>
<div class="info">
<h3>headphone</h3>
<div class="subInfo">
<strong class="price">₹1000</strong>
<div class="stars">
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star"></i>
<i class="fas fa-star-half"></i>
</div>
</div>
</div>
</div>
</div>
</div>
</section> -->

```

```

<!-- gallery section ends -->

```

```

<!-- deal section starts -->

```

```

<!-- <section class="deal" id="deal">
<h1 class="heading"> <span> best deals </span> </h1>
<div class="box-container">
<div class="box">

<div class="content">
<h3>latest laptop</h3>
<p>upto 25% off on first purchase</p>
<a href="#"><button class="btn">explore</button></a>
</div>
</div>
<div class="box">

<div class="content">
<h3>new headphone</h3>
<p>upto 25% off on first purchase</p>
<a href="#"><button class="btn">explore</button></a>
</div>
</div>
</div>
<div class="icons-container">
<div class="icons">
<i class="fas fa-shipping-fast"></i>
<h3>fast delivery</h3>
<p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Animi, molestiae?</p>
</div>
<div class="icons">
<i class="fas fa-user-clock"></i>
<h3>24 x 7 support</h3>
<p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Animi, molestiae?</p>
</div>
<div class="icons">
<i class="fas fa-money-check-alt"></i>
<h3>easy payments</h3>
<p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Animi, molestiae?</p>
</div>
<div class="icons">
<i class="fas fa-box"></i>
<h3>10 days replacements</h3>

```

```
<p>Lorem ipsum dolor sit, amet consectetur adipisicing elit. Animi, molestiae?</p>
</div>
</div>
</section> -->
```

```
<!-- deal section ends -->
```

```
<!-- newsletter section starts -->
```

```
<section class="newsletter">
```

```
<h1>Smart Fashion</h1>
<p>get in touch for more fashion recommendations</p>
<form action="">
<input type="email" placeholder="enter your email">
<input type="submit" class="btn">
</form>
```

```
</section>
```

```
<!-- newsletter section ends -->
```

```
<!-- footer section starts -->
```

```
<section class="footer">
```

```
<div class="box-container">
```

```
<div class="box">
<a href="#" class="logo"> <i class="fas fa-shopping-bag"></i> Smart Fashion </a>
</div>
```

```
<div class="box">
<h3>links</h3>
<a href="#">home</a>
<a href="#">arrival</a>
<a href="#">featured</a>
<a href="#">gallery</a>
<a href="#">deal</a>
</div>
```

```
<div class="box">
<h3>contact us</h3>
<p> <i class="fas fa-home"></i>
chennai, tamilnadu
</p>
<p> <i class="fas fa-phone"></i>
+910000000
</p>
<p> <i class="fas fa-globe"></i>
madhan1330x2@gmail.com
</p>
</div>
```

```
</div>
```

```
</section>
```

```
<!-- footer section ends -->
```

```
<!-- jquery cdn link -->
<script
src="https://cdnjs.cloudflare.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
```

```
<!-- owl carousel js file cdn link -->
<script
src="https://cdnjs.cloudflare.com/ajax/libs/OwlCarousel2/2.3.4/owl.carousel.min.js">
</script>
```

```
<!-- custom js file link -->
<script src="vp.js"></script>
</body>
</html>
```

## STYLE.CSS

```
@import url('https://fonts.googleapis.com/css2?family=Poppins:wght@200;300;400;500;600;700&display=swap');
*{
margin: 0;
padding: 0;
box-sizing: border-box;
font-family: 'Poppins',sans-serif;
}
body{
height: 100vh;
```

```

display: flex;
justify-content: center;
align-items: center;
padding: 10px;
background-color: #42FF01;
}
.container{
max-width: 700px;
width: 100%;
background-color: #fff;
padding: 25px 30px;
border-radius: 5px;
box-shadow: 0 5px 10px rgba(0,0,0,0.15);
}
.container .title{
font-size: 25px;
font-weight: 500;
position: relative;
}
.container .title::before{
content: "";
position: absolute;
left: 0;
bottom: 0;
height: 3px;
width: 30px;
border-radius: 5px;
background: linear-gradient(135deg, #71b7e6, #9b59b6);
}
.content form .user-details{
display: flex;
flex-wrap: wrap;
justify-content: space-between;
margin: 20px 0 12px 0;
}
form .user-details .input-box{
margin-bottom: 15px;
width: calc(100% / 2 - 20px);
}
form .input-box span.details{
display: block;

```



```

font-weight: 500;
margin-bottom: 5px;
}
.user-details .input-box input{
height: 45px;
width: 100%;
outline: none;
font-size: 16px;
border-radius: 5px;
padding-left: 15px;
border: 1px solid #ccc;
border-bottom-width: 2px;
transition: all 0.3s ease;
}
.user-details .input-box input:focus,
.user-details .input-box input:valid{
border-color: #9b59b6;
}
form .gender-details .gender-title{
font-size: 20px;
font-weight: 500;
}
form .category{
display: flex;
width: 80%;
margin: 14px 0 ;
justify-content: space-between;
}
form .category label{
display: flex;
align-items: center;
cursor: pointer;
}
form .category label .dot{
height: 18px;
width: 18px;
border-radius: 50%;
margin-right: 10px;
background: #d9d9d9;
border: 5px solid transparent;
transition: all 0.3s ease;
}

```

```

}
#dot-1:checked ~ .category label .one,
#dot-2:checked ~ .category label .two,
#dot-3:checked ~ .category label .three{
background: #9b59b6;
border-color: #d9d9d9;
}
form input[type="radio"]{
display: none;
}
form .button{
height: 45px;
margin: 35px 0
}
form .button input{
height: 100%;
width: 100%;
border-radius: 5px;
border: none;

font-size: 18px;
font-weight: 500;
letter-spacing: 1px;
cursor: pointer;
transition: all 0.3s ease;

}
form .button input:hover{
/* transform: scale(0.99); */
background: linear-gradient(-135deg, #71b7e6, #9b59b6);
}
@media(max-width: 584px){
.container{
max-width: 100%;
}
form .user-details .input-box{
margin-bottom: 15px;
width: 100%;
}
form .category{
width: 100%;

```

```

}
.content form .user-details{
max-height: 300px;
overflow-y: scroll;
}
.user-details::-webkit-scrollbar{
width: 5px;
}
}
@media(max-width: 459px){
.container .content .category{
flex-direction: column;
}
}
.button{
border: none;
outline: none;
height: 50px;
width: 100%;
background-color: black;
color: white;
border-radius: 4px;
font-weight: bold;
}
.button:hover{
background-color: white;
border: 1px solid;
color : black;
}

```

## VALIDATION.JS:

```

function validateForm() {
let x = document.forms["myForm"]["fname"].value;
if (x == "") {
alert("Please fill out all the required fields");
return false;
}
}

```

VP.JS:

```
$(document).ready(function(){

$('#menu').click(function(){
$(this).toggleClass('fa-times');
$('.navbar').toggleClass('nav-toggle');
});

$(window).on('scroll load',function(){

$('#menu').removeClass('fa-times');
$('.navbar').removeClass('nav-toggle');

if($(window).scrollTop() > 68){
$('header .header-2').addClass('header-active');
}else{
$('header .header-2').removeClass('header-active');
}

$('.section').each(function(){

let height = $(this).height();
let offset = $(this).offset().top - 200;
let top = $(window).scrollTop();
let id = $(this).attr('id');

if(top >= offset && top < offset + height){
$('.navbar ul li a').removeClass('active');
$('.navbar').find('[href="#${id}"]').addClass('active');
}

});

});

$('.home-slider').owlCarousel({
items:1,
nav:true,
dots:false,
autoplay:true,
autoplayTimeout:8000,
```

```

loop:true
});

$('.small-image img').click(function(){

$(this).addClass('image-active').siblings().removeClass('image-active');
let image = $(this).attr('src');
$('.big-image img').attr('src', image);

});

$('.gallery .btn').click(function(){

let filter = $(this).attr('data-filter');
if(filter == 'all'){
$('.gallery .box').show(400);
}else{
$('.gallery .box').not('.'+filter).hide(200);
$('.gallery .box').filter('.'+filter).show(400);
}

$(this).addClass('button-active').siblings().removeClass('button-active');

});

});

```

## SIGNUP.HTML:

!DOCTYPE

E html>

```

<html lang="en" dir="ltr">
<head>
<meta charset="UTF-8">
<link rel="stylesheet" href="style2.css">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
</head>
<body>

```

```

<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-

```

```

q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jiz
o" crossorigin="anonymous"></script>
<script
src="https://cdn.jsdelivr.net/npm/popper.js@1.14.7/dist/umd/popper.min.js"
integrity="sha384-
UO2eT0CpHqdSJQ6hJty5KVphtPhzWj9WO1clHTMGa3JDZwrnQq4sF86dIHN
Dz0W1" crossorigin="anonymous"></script>
<script src="https://cdn.jsdelivr.net/npm/bootstrap@4.3.1/dist/js/bootstrap.min.js"
integrity="sha384-
JjSmVgyd0p3pXB1rRibZUAYoIIy6OrQ6VrjIEaFf/nJGzIxFDsf4x0xIM+B07jR
M" crossorigin="anonymous"></script>

```

```

<div class="container">
<div class="title">Registration</div>
<div class="content">
<form name="myForm" action="" onsubmit="return validateForm()"
method="post">
<div class="user-details">
<div class="input-box">
<span class="details">Full Name</span>
<input type="text" name = "fname" placeholder="Enter your name" required>
</div>
<div class="input-box">
<span class="details">Username</span>
<input type="text" name = "fname" placeholder="Enter your username"
required>
</div>
<div class="input-box">
<span class="details">Email</span>
<input type="text" name = "fname" placeholder="Enter your email" required>
</div>
<div class="input-box">
<span class="details">Phone Number</span>
<input type="text" name = "fname" placeholder="Enter your number" required>
</div>
<div class="input-box">
<span class="details">Password</span>
<input type="text" name = "fname" placeholder="Enter your password" required>

```

```

</div>
<div class="input-box">
<span class="details">Confirm Password</span>
<input type="text" name="fname" placeholder="Confirm your password"
required>
</div>
</div>
<div class="gender-details">
<input type="radio" name="gender" id="dot-1">
<input type="radio" name="gender" id="dot-2">
<input type="radio" name="gender" id="dot-3">
<span class="gender-title">Gender</span>
<div class="category">
<label for="dot-1">
<span class="dot one"></span>
<span class="gender">Male</span>
</label>
<label for="dot-2">
<span class="dot two"></span>
<span class="gender">Female</span>
</label>
<label for="dot-3">
<span class="dot three"></span>
<span class="gender">Prefer not to say</span>
</label>
</div>
</div>
<a href = "registration.html">
<div class="button">
<input type="submit" value="Register">
</a>
</div>
<p>Already have an account? <a href="registration.html" target="_blank">Login
here</a></p>
</form>
</div>
</div>
<script src = "validation.js"></script>
</body>
</html>

```

## **GITHUB LINK:**

<https://github.com/IBM-EPBL/IBM-Project-21525-1659782780>



DEMO VIDEO LINK:

[https://drive.google.com/file/d/17cPR8\\_y58a99nK4KBXFWrgXhc83-G3cT/view?usp=sharing](https://drive.google.com/file/d/17cPR8_y58a99nK4KBXFWrgXhc83-G3cT/view?usp=sharing)