

SMART FASHION RECOMMENDER APPLICATION

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1. INTRODUCTION

1.1 PROJECT OVERVIEW

In recent years, the textile and fashion industries have witnessed an enormous amount of growth in fast fashion. On e-commerce platforms, where numerous choices are available, an efficient recommendation system is required to sort, order, and efficiently convey relevant product content or information to users. Image-based fashion recommendation systems (FRSs) have attracted a huge amount of attention from fast fashion retailers as they provide a personalized shopping experience to consumers. With the technological advancements, this branch of artificial intelligence exhibits a tremendous amount of potential in image processing, parsing, classification, and segmentation. Despite its huge potential, the number of academic articles on this topic is limited. The available studies do not provide a rigorous review of fashion recommendation systems and the corresponding filtering techniques. To the best of the authors' knowledge, this is the first scholarly article to review the state-of-the-art fashion recommendation systems and the corresponding filtering techniques. In addition, this review also explores various potential models that could be implemented to develop fashion recommendation systems in the future. This paper will help researchers, academics, and practitioners who are interested in machine learning, computer vision, and fashion retailing to understand the characteristics of the different fashion recommendation systems.

1.2 PURPOSE

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 . Recent technological advancements have enabled consumers to track current fashion trends around the globe, which influence their choices . The fashion choices of consumers depend on many factors, such as demographics, geographic location, individual preferences, interpersonal influences, age, gender, season, and culture .

Moreover, previous fashion recommendation research shows that fashion preferences vary not only from country to country but also from city to city . The combination of fashion preferences and the abovementioned factors associated with clothing choices could transmit the image features for a better understanding of consumers' preferences The study of the existing literature revealed that fashion recommendation systems have a huge impact on consumers' buying decisions. Hence, fashion retailers and researchers are exploring and developing state-of-the-art recommendation models to improve the accessibility, navigability and consumers' overall purchasing experience. One of the prime elements that has been continuously researched in these articles was the improvement of existing and the development of new algorithms relevant to the filtering techniques . This review paper has identified state-of-the art algorithms and filtering techniques that have high potential to become more popular in the future. The sections of this paper are arranged in the order of the important FRS components, so that the reader can gain a substantial understanding of components such as algorithmic models before moving to other important components such as filtering techniques. This review paper will guide future aspirants to conduct further in-depth and innovative empirical research on fashion recommendation systems.

2. LITERATURE SURVEY

2.1 EXISTING PROBLEM

In the online internet era, the idea of Recommendation technology was initially introduced in the mid-90s. Proposed CRESA that combined visual features, textual attributes and visual attention of the user to build the clothes profile and generate recommendations. Utilized fashion magazines photographs to generate recommendations. Multiple features from the images were extracted to learn the contents like fabric, collar, sleeves, etc., to produce recommendations. In order to meet the diverse needs of different users, an intelligent Fashion recommender system is studied based on the principles of fashion and aesthetics. To generate garment recommendations, customer ratings and clothing were utilized in The history of clothes and accessories, weather conditions were considered in to generate recommendations.

2.2 REFERENCES

1. GloablInfoResearch: Global Fast Fashion Apparel Market 2021 by Key Countries, Companies, Type and Application. GloablInfoResearch, HongKong, 2021.

2. Hou, M., Wu, L., Chen, E., Li, Z., Zheng, V. W., & Liu, Q.: Explainable fashion recommendation: A semantic attribute region guided approach. In Proceedings of the 28th Twenty-Eighth International Joint Conference on Artificial Intelligence, 2019; pp. 4681- 4688.
 3. Hidayati, S. C., Hsu, C. C., Chang, Y. T., Hua, K. L., Fu, J., & Cheng, W. H.: What Dress Fits Me Best? Fashion Recommendation on the Clothing Style for Personal Body Shape. In Proceedings of the 26th ACM International Conference on Multimedia (MM '18). Association for Computing Machinery, New York, NY, USA, 2018; pp. 438-446.
 4. Wang, H., Wang, N., & Yeung, D. Y.: Collaborative Deep Learning for Recommender Systems. In Proceedings of the 21th CM SIGKDD International Conference on Knowledge Discovery and Data Mining, New York, 2015; pp. 1235- 1244.
- McAuley, J., Targett, C., Shi, Q., & Van Den Hengel, A.: Image-based Recommendations on Styles and Substitutes. In Proceedings of the 38th International ACM SIGIR Conference on Research and Development in Information Retrieval, 2015; pp. 43-52.

2.3 PROBLEM STATEMENT DEFINITION

In this project, we propose a model that uses Convolutional Neural Network and the Nearest neighbour backed recommender. As shown in the figure Initially, the neural networks are trained and then an inventory is selected for generating recommendations and a database is created for the items in inventory. The nearest neighbour's algorithm is used to find the most relevant products based on the input image and recommendations are generated. The system comprises of the Client tire,

which is the front end or View mode, middle tier which is the system controller and the backend tier which is the model. The client side is where the users/customers log in in the system, browse for the system interface, provide input query image to the system, and get recommendation according to the input query. The middle tier is responsible for communication between the front end and the back end. It receives user requests and sends them to the back end and in turn accepts responses from the back end and sends them to the user.

3. IDEATION & PROPOSED SOLUTION

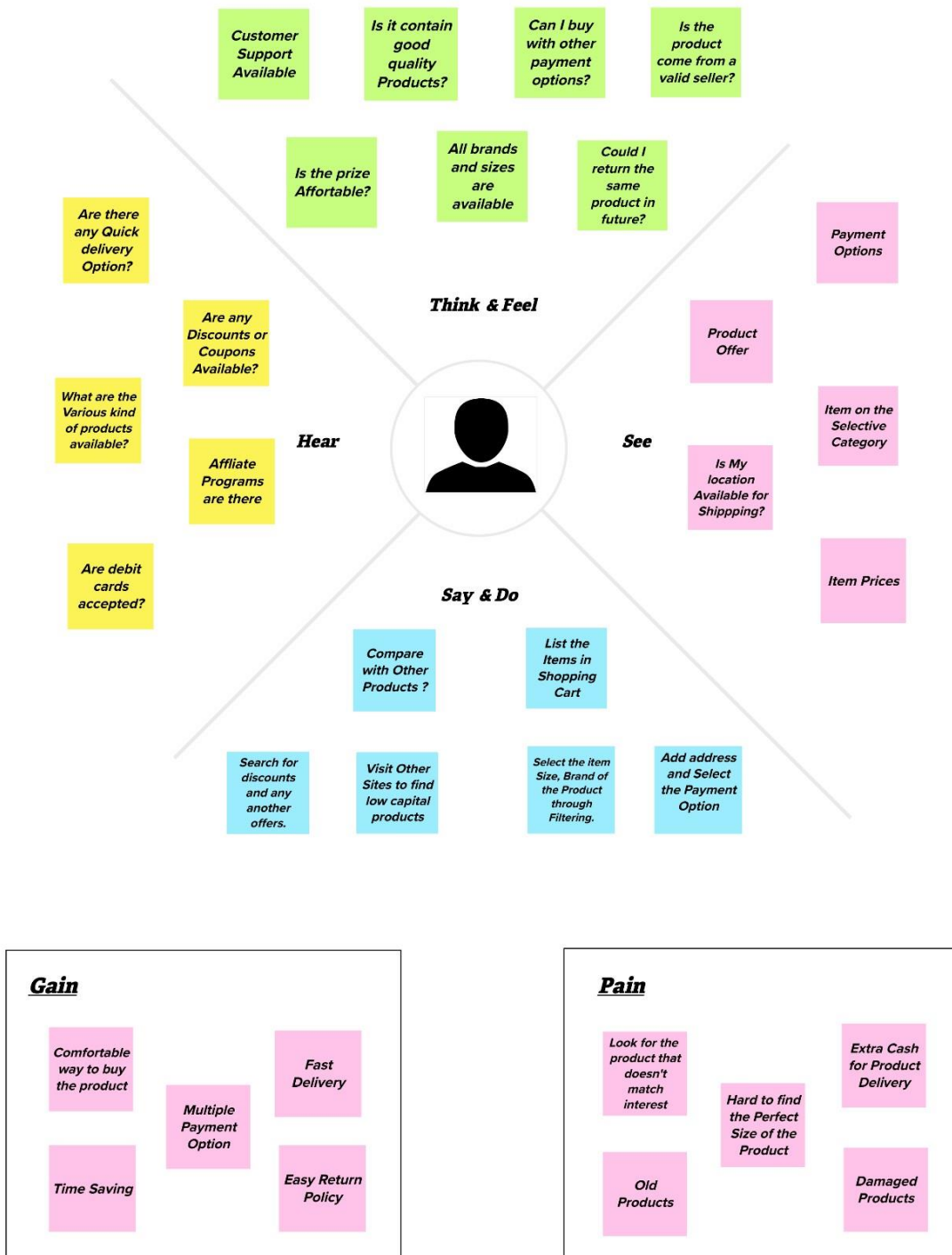
3.1 EMPATHY MAP CANVAS

A Customer Empathy Map is a tool used when collecting data about customers to better understand your target customer base. They allow you to visualize customer needs, condense customer data into a clear, simple chart, and help you see what customers want — not what you think they want. By following this map, you can systematically find answers, without playing a guessing game.

When we look at empathy from a marketing perspective, we're talking about putting ourselves into our customers shoes, to be able to understand their needs and wants better. And thus, deliver a product or service that not only meets but exceeds their expectations!

There are six key steps in a Customer Empathy Map that will allow you to collect important information about your ideal customer to be able to really understand them.

Smart Fashion Recommender System



3.2 IDEATION & BRAINSTROMING

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions.

Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room.

Step-1: Team Gathering, Collaboration and Select the Problem Statement

Step-2: Brainstorm, Idea Listing and Grouping

Step-3: Ideation phase

3.3 PROPOSED SOLUTION

Project team shall fill in the following information in the proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<ul style="list-style-type: none">● Absence of interaction between the client and app● User required to navigate across multiple pages to choose the desired product.● Confusion in choosing a correct product● Complex User Interface.● Lack of Customer Support
2.	Idea / Solution Description	By using the Smart fashion recommender application: <ul style="list-style-type: none">● Enhance customer interaction and services.● Effective recommendation of products.● Recommendation within a single page via chatbot● Reduce Customer error● Proper guidance to access the application

3.	Novelty / Uniqueness	<ul style="list-style-type: none"> ● In order to enhance the user experience, the Chatbot asks and learns from user preferences which recommends appropriate products to the customer without making them search through various filters and unwanted navigations. Reduces time in choosing the right product thus increasing product sales.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> ● To know Customer Satisfaction, we ought to collect Satisfaction points, and based on the points we could understand Customer Satisfaction easily.
5.	Business Model (Revenue Model)	<ul style="list-style-type: none"> ● The application can be developed at minimum cost with high performance and interactive user interface.
6.	Scalability of the Solution	<ul style="list-style-type: none"> ● The solution can be made scalable by using microservice architecture provided that each server is responsible for certain functionality of the application. Storing user preferences along with the product in the browser cookie will enable you to provide a response instantly.

3.4 PROBLEM SOLUTION FIT

Project Title: Smart Fashion Recommender Application

Project Design Phase-I – Problem Solution Fit Template

Team ID: PNT2022TMID49171

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) Who is your customer? Ex: Working parents of 10-15 yr. kids.	6. CUSTOMER CONSTRAINTS What constraints prevent us as customers from taking action to fill the need? (money, if customer is in: spending power, budget, no time, lack of information, no access to phone)	5. AVAILABLE SOLUTIONS What solutions are available to the customer when they face the problem? Ex: Need to get the shirt done? What have they tried in the past? What pros & cons do these solutions have? (a) go and have a shirt done to a regular tailor (b) go online	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS Which jobs for the customer problem do you address for your customers? There could be more than one, explore different jobs.	9. PROBLEM ROOT CAUSE What is the root cause that the job can't be done? What is the basic story behind the need to do this job? Ex: Customers have to do it because of the change in requirements.	7. BEHAVIOUR When does your customer do it with the problem and get the job done? Ex: Directly related and not related to the problem, outside usage and benefits, indirectly associated, customers used to do it once a week (a) a day (b) a month	
Focus on AS, fit into BE, understand RC	3. TRIGGERS What triggers customer to start looking for the solution? (problem, when parents realize that a new shirt is needed and they need it)	10. YOUR SOLUTION If you are working on an existing business, what does your customer believe that, it is the reason, and work from inside of it. If you are working on a new business proposition, then keep it simple and possible in the current and come up with a solution that fits with the customer behaviour, solves a problem and enables customer behaviour.	8. CHANNELS OF BEHAVIOUR 3.1 ONLINE What kind of website should we take online? (Ex: a) online channels (b) a)	Focus on AS, fit into BE, understand RC
	4. EMOTIONS: BEFORE / AFTER How does customer feel when they face a problem or a job that is not done? Ex: (a) feeling frustrated, (b) feeling confident, (c) feeling happy, (d) feeling sad, (e) feeling angry, (f) feeling calm, (g) feeling relaxed, (h) feeling stressed, (i) feeling happy, (j) feeling sad, (k) feeling angry, (l) feeling calm, (m) feeling relaxed, (n) feeling stressed, (o) feeling happy, (p) feeling sad, (q) feeling angry, (r) feeling calm, (s) feeling relaxed, (t) feeling stressed, (u) feeling happy, (v) feeling sad, (w) feeling angry, (x) feeling calm, (y) feeling relaxed, (z) feeling stressed.	11. OFFLINE What kind of offline channels should we take offline? (Ex: a) offline channels (b) a)		
Identify strong TR & EM	1. CUSTOMER SEGMENT(S) Our customers are children and adults.	6. CUSTOMER CONSTRAINTS As much as service providers make the needs of their customers, it is just as important for them to satisfy their customers.	5. AVAILABLE SOLUTIONS Online shopping gives new collections. The pros are easy to use. The cons are customer confused when have lost of collections.	Identify strong TR & EM
	2. JOBS-TO-BE-DONE / PROBLEMS From the customer can easily to choose a best out fitting product. And to even manage time in effective way.	9. PROBLEM ROOT CAUSE Customers need to be with new fashions for current trends. Lot of time is wasted and an best product of his/her outfits not selected.	7. BEHAVIOUR Customer experience, content performance, and perfection in the product review, spend time to find new clothes.	
Identify strong TR & EM	3. TRIGGERS This software like as a merchant. It can access the customer location and give the related identification.	10. YOUR SOLUTION Make the Chat bot Assistant for shopping with customers and send notifications when new collections arrived.	8. CHANNELS OF BEHAVIOUR 3.1 ONLINE This application depends upon the internet connectivity, because we use the API and data connection through internet.	Identify strong TR & EM
	4. EMOTIONS: BEFORE / AFTER Feeling sad and frustration > Self-confident	11. OFFLINE This is not applicable in offline mode.		

4. REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT

Functional Requirements:

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form or directly login through google API
FR-2	User Interaction	Interact through the IBM Watson Chat Bot

FR-3	Buying Products	Through the chat Bot Recommendation and custom filters
FR-4	Track Products	Separate page to keep Track my Orders
FR-5	Return Products	Through the chat Bot and separate page will be available for this operation.
FR_6	New Collections	Always getting recommendation from chat Bot

4.2 NON-FUNCTIONAL REQUIREMENT

Non-functional Requirements:

Following are the non-functional requirements of the proposed solution.

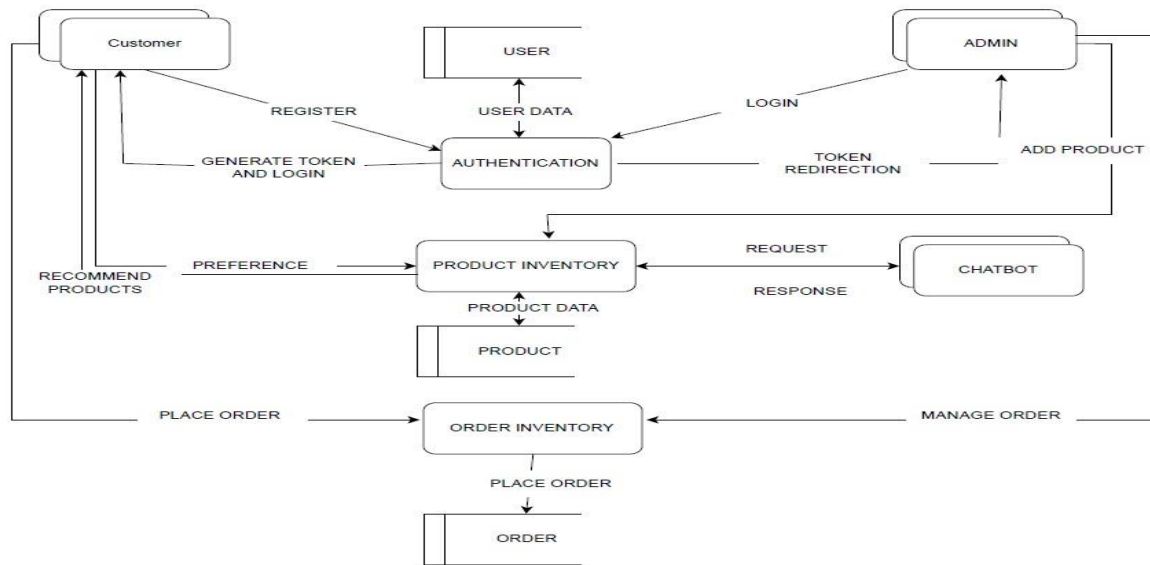
FR No.	Non-Functional Requirement	Description
NFR-1	Usability	Using any kind of web browsers , you could easily interact with this webapp
NFR-2	Security	The user data is stored securely in IBM cloud.
NFR-3	Reliability	The Quality of the services are trusted.
NFR-4	Performance	Its Provide smooth user experience.
NFR-5	Availability	The services are available for 24/7.

5. PROJECT DESIGN

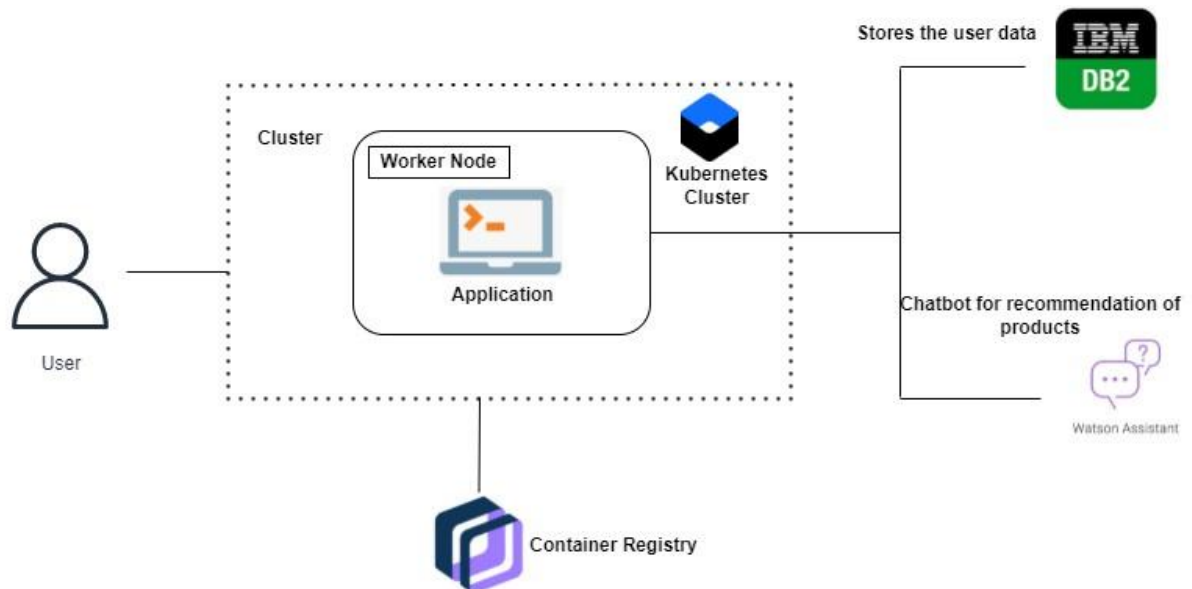
5.1 DATA FLOW DIAGRAM

Data Flow Diagrams:

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 AND TECHNICAL ARCHITECTURE



5.3 USER STORIES

Use the below template to list all the user stories for the product.

User Type	Functional Requirement (Epic)	User Story Number	User Story / Task	Acceptance criteria	Priority	Release
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	Sprint-1
		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	Sprint-1
		USN-3	As a user, I can register for the application through Facebook	I can register & access the dashboard with Facebook Login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail		Medium	Sprint-1
	Login	USN-5	As a user, I can log into the application by entering email & password	I can access my data by login	High	Sprint-1
	Dashboard	USN-6	As a user, I can view the dashboard and by products		High	Sprint -2
Customer (Web user)	Registration / Login	USN-7	As a user, I can register for the application by entering my email, password, and confirming my password.	I can access my account / dashboard		Sprint -1
Customer Care Executive	Contact with Customers	USN-8	As a Customer care executive, I solve the customer Requirements and feedback	I can receive calls from customers	High	Sprint-1
Administrator	Check stock and Price, orders	USN_9	As a Administrator, I can Check the database And stock details and buying and selling prices	I am the administrator of the company	High	Sprint-2

6.PROJECT PLANING & SCHEDULING

6.1 SPRINT PLANNING & ESTIMATION

Milestones	Activities	Description
Project Development Phase	Delivery of Sprint – 1,2,3,4	To develop the code and submit the developed code by testing it
Setting up App environment	Create IBM Cloud account	Signup for an IBM Cloud account
	Create flask project	Getting started with Flask to create project
	Install IBM Cloud CLI	Install IBM Command LineInterface
	Docker CLI Installation	Installing Docker CLI on laptop
	Create an account in send grid	Create an account in sendgrid. Use the service as email integration to our application for sending emails
Implementing web Application	Create UI to interact with Application	Create UI <ul style="list-style-type: none"> Registration page Login page View products page Add products page
	Create IBM DB2 & connect with python	Create IBM DB2 service in IBM Cloud and connect with python code with DB
Integrating sendgrid service	Sendgrid integration with python	To send emails form the application we need to integrate the Sendgrid service
Developing a chatbot	Building a chatbot and Integrate to application	Build the chatbot and Integrate it to the flask application
Deployment of App in IBMCloud	Containerize the App	Create a docker image of your application and push it to the IBM container registry
	Upload image to IBM container registry	Upload the image to IBM container registry
	Deploy in kubernetes cluster	Once the image is uploaded to IBM Container registry deploy the image to IBM Kubernetes cluster
Ideation Phase	Literature Survey	Literature survey on the selected project & information gathering
	Empathy Map	Prepare Empathy map to capture the user Panis & Gains, prepare list of problem statement
	Ideation	Organizing the brainstorming session and priorities the top 3 ideas based on feasibility & Importance
Project Design Phase I	Proposed Solution	Prepare proposed solution document which includes novelty, feasibility of ideas, business model, social impact, Scalability of solution
	Problem Solution Fit	Prepare problem solution fit document
	Solution Architecture	Prepare solution architecture document
Project Design Phase II	Customer Journey	Prepare customer journey map to understand the user interactions & experience with the application
	Functional requirement	Prepare functional & non functional requirement document
	Data Flow Diagram	Prepare Data Flow Diagramand user stories
	Technology architecture	Draw the technology architecture diagram
Project Planning Phase	Milestones & Activity list	Prepare milestones and activity list of the project
	Sprint Delivery Plan	Prepare sprint delivery plan

6.2 SPRINT DELIVERY SCHEDULE

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story points	Priority	Team Members
Sprint-1	Setting up App environment	USN-1	As a user, I can register in ICTA Academy and create IBM cloud account.	2	High	Ramya P Shanthini S
Sprint-1		USN-2	As a user, I will create a flask project	1	Low	Paranikumar B Karthika T
Sprint-1		USN-3	As a user, I will install IBM Cloud CLI	2	Medium	Ramya P Karthika T
Sprint-2	Setting up App environment	USN-4	As a user, I can install Docker CLI	1	Low	Paranikumar B Shanthini S
Sprint-2		USN-5	As a user, I will Create an account in sendgrid	2	Medium	Ramya P Paranikumar B

Sprint-3	Implementing web application	USN-6	As a user, I Create UI to interact with the application	1	High	Karthika T Ramya P
Sprint-3		USN-7	As a user, I Create IBM DB2 and connect with Python	3	High	Shanthini S
Sprint-3	Integrating Sendgrid Service	USN-8	As a user, I will integrating sendgrid with python code	2	High	Ramya P
Sprint-3	Developing a chatbot	USN-9	As a user, I have to build a chatbot and Integrate to application	1	Medium	Shanthini S
Sprint-4	Development of App in IBM Cloud	USN-10	As a user, I will Containerize the App	1	Low	Karthika T
Sprint-4		USN-11	As a user, I will upload image to IBM Container registry	2	Medium	Paranikumar B
Sprint-4		USN-12	As a user, I will deploy App in Kubernetes cluster	3	High	Ramya P
Sprint-4	User panel		As a user <ul style="list-style-type: none"> • Register, Login, Email, Verification • Manual Search • Order placement, Order Details 	3	High	Ramya P Karthika T Shanthini S Paranikumar B

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date(Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date(Actual)
Sprint-1	20	6 Days	24 Oct 2022	29 Oct 2022	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

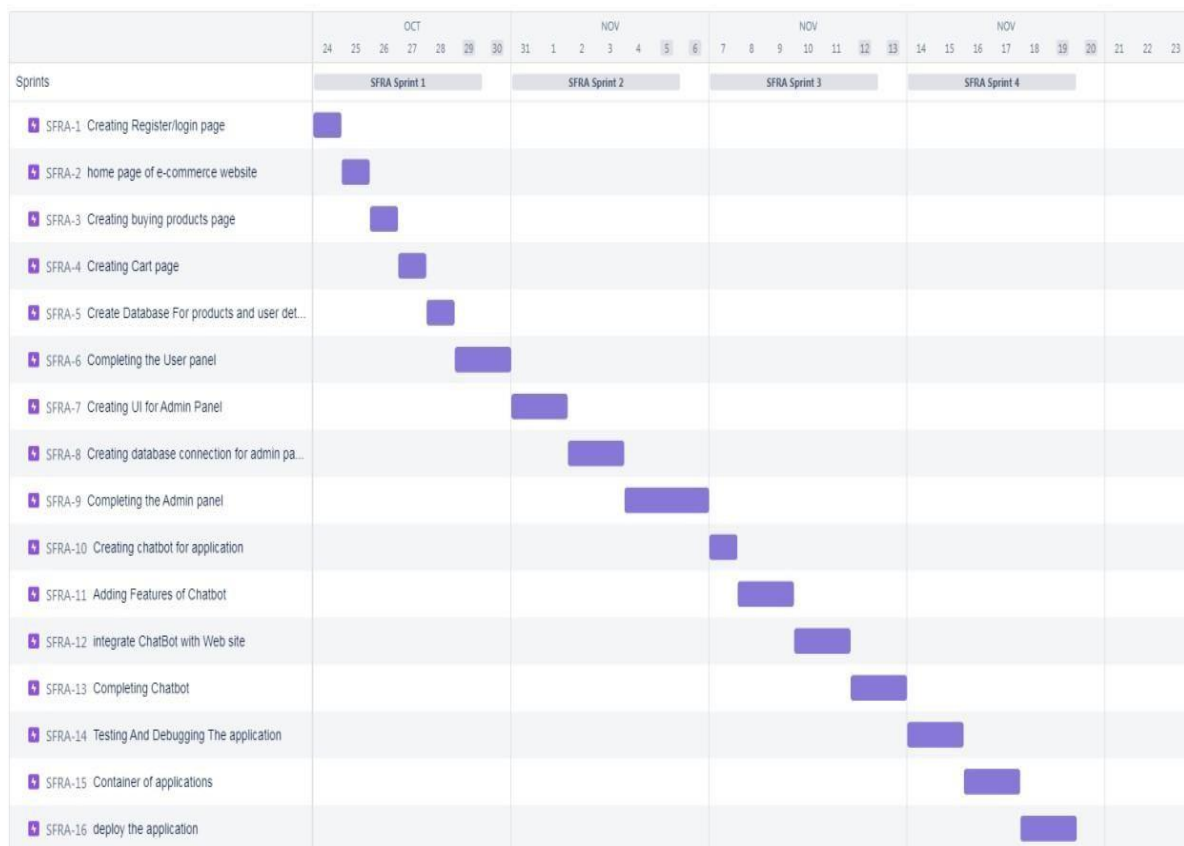
Velocity:

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)

$$AV = \frac{\text{sprint duration}}{\text{velocity}} = \frac{20}{10} = 2$$

6.3 REPORTS FROM JIRA

Burndown Chart:



7.CODING & SOLUTIONING

7.1 FEATURES 1

login.html

```
<!DOCTYPE html>
```

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

```
<head>
```

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

```
<meta http-equiv="X-UA-Compatible" content="IE=edge">
```

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

```
<title>FashionWorld | LOGIN</title>
```

```
<style>
```

```
*{
```

```
margin: 0;
```

```
padding: 0;
```

```
}  
body{  
    background-image: url(/images/fash6.jpeg);  
    background-repeat: no-repeat;  
    background-size: 100%;  
}
```

```
.container{  
    width: 100%;  
    height: 100vh;  
    font-family: sans_serif;  
    color: rgb(248, 245, 245);  
    display: flex;  
    align-items:center;  
    justify-content:center;  
}
```

```
.login-form{  
    position:absolute;  
    width: 25%;  
    height: 75%;  
    transform: translate(-45%,12%);  
    background-position: center;  
    background-size: cover ;  
    box-sizing: border-box;  
    text-align: center;  
}
```

```
legend{  
    font-size: 35px;  
    font-weight: bolder;  
    color:RGB(247, 202, 201);  
}
```

```
.input-box{  
    width: 75%;  
    background: transparent ;  
    border:2px solid rgb(255, 255, 255);
```



```

margin: 0 4px;
height: 25px;
border-radius: 30px;
padding: 0 25px;
box-sizing: border-box;
outline: none;
text-align: center;
color:rgb(255, 255, 255);
}
::placeholder{
color: rgb(255, 255, 255);
font-size: 15px;
}
button{
width: 50%;
background: linear-gradient(290deg, rgb(103, 99, 99), rgba(213, 199, 139, 0.707),rgb(55, 80, 8));
margin:35px 0 15px;
height: 32px;
font-size: 12px;
border-radius:20px;
padding: 0 10px;
box-sizing: border-box;
outline: none;
color: rgb(8, 8, 8);
cursor: pointer;
}
fieldset {
margin-top: 100px;
background: rgba(42, 52, 52, 0.3);
box-shadow: 0 5px 30px black;
margin-left: 3px;
margin-right: 3px;
padding-top: 0.35em;
padding-bottom: 0.625em;

```

```

padding-left: 0.75em;
padding-right: 0.75em;
border: 2px groove (internal value);
}

a:visited {
    color: rgb(28, 27, 27);
    background-color: transparent;
}

a:link{
    color: white;
    background-color: transparent;
}

a:active{
    color: rgb(255, 255, 255);
    background-color: transparent;
}

</style>
</head>
<body>
<div class="container">
    <div class="login-form">
        <form action="/Login" method="post">
            <fieldset>
                <legend>LOGIN</legend><br><br>
                <label>UserId :</label>
                <input type="Userid" class="input-box" name="username" placeholder=" Enter UserId"
required><br><br>
                <label>Password :</label>
                <input type="Password" class="input-box" name="password" placeholder=" Enter Password"
required>
                <br>
                <button type="submit" class="submit-btn" ><a href="/templates/home.html">Login</a></button>
                <br><br>
                <input type="checkbox"><span>Remember Me</span>

```

```

        <br><br>

        New here ?<span> </span><a href="/templates/register.html">Hit me</a> to get access for the
        world of Fashion <br><br>

        <a href="">Forgot Password</a>

    </fieldset>

</form>

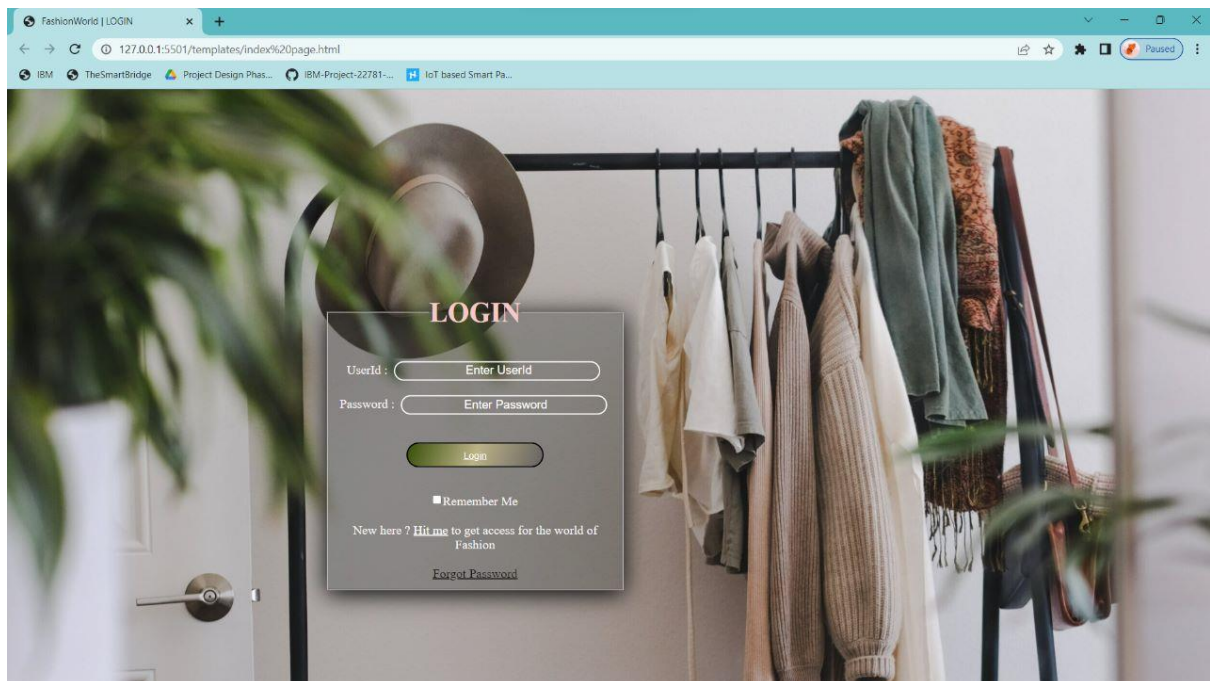
</div>

</div>

</body>

</html>

```



register.html

```

<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

    <title>Welcome to the wolrd of Fashion</title>

    <style>

        *{

```

```
margin: 0;
padding: 0;
}
body{
background-image: url(/images/fash4.jpg);
background-repeat: no-repeat;
background-size: 100%;
}
.container{
width: 100%;
height: 100vh;
font-family: sans_serif;
color: rgb(248, 245, 245);
display: flex;
align-items:center;
justify-content:center;
}
.login-form{
position:absolute;
width: 30%;
height: 75%;
transform: translate(-110%);
background-position: center;
background-size: cover ;
box-sizing: border-box;
text-align: center;
}
legend{
font-size: 35px;
font-weight: bolder;
color:#EFE1CE;
}
.input-box{
width: 75%;
```

```
background: transparent;
border: 1px solid rgb(255, 255, 255);
margin: 0 4px;
height: 25px;
border-radius: 30px;
padding: 0 25px;
box-sizing: border-box;
outline: none;
text-align: center;
color: rgb(255, 255, 255);
}
::placeholder{
    color: rgb(255, 255, 255);
    font-size: 15px;
}
button{
    width: 50%;
    background: linear-gradient(190deg, rgb(11, 11, 11), rgb(164, 167, 167), rgba(255, 255, 255, 0.581));
    margin: 35px 0 15px;
    height: 32px;
    font-size: 12px;
    border-radius: 20px;
    padding: 0 10px;
    box-sizing: border-box;
    outline: none;
    cursor: pointer;
}
fieldset {
    margin-top: 100px;
    background: rgba(42, 52, 52, 0.3);
    box-shadow: 0 5px 30px rgb(126, 126, 126);
    margin-left: 3px;
    margin-right: 3px;
    padding-top: 0.35em;
```

```

padding-bottom: 0.625em;
padding-left: 0.75em;
padding-right: 0.75em;
border: 2px groove (internal value);
}
a:hover{
    color: white;
    text-decoration: none;
}
a:visited {
    color: rgba(181, 181, 176, 0.734);
    background-color: transparent;
}
a:link{
    color: rgb(132, 5, 5);
    background-color: transparent;
}
a:active{
    color: rgb(222, 255, 10);
    background-color: transparent;
}
</style>
</head>
<body>
<div class="container">
<div class="login-form">
<form action="/Register" method="post">
<fieldset>
<legend>REGISTER</legend><br><br>
<label>Full Name :</label>
<input type="name" class="input-box" name="name" placeholder=" Enter your name"
required><br><br>
<label>E-mail :</label>
<input type="Email" class="input-box" name="Email" placeholder=" Enter mail-id" required>
<br><br>

```

```

<label>UserId :</label>

<input type="Userid" class="input-box" name="username" placeholder=" Enter UserId"
required><br><br>

<label>Password :</label>

<input type="Password" class="input-box" name="password" placeholder=" Enter Password"
required>

<br>

<button type="submit" class="submit-btn" ><a
href="/templates/home.html">Register</a></button>

<br><br>

<input type="checkbox"><span>Terms & Conditions</span>

<br><br>

Have access !<span> </span><a href="/templates/login.html">Dive into</a> the world of Fashion
<br><br>

<a href="">Forgot Password</a>

</fieldset>

</form>

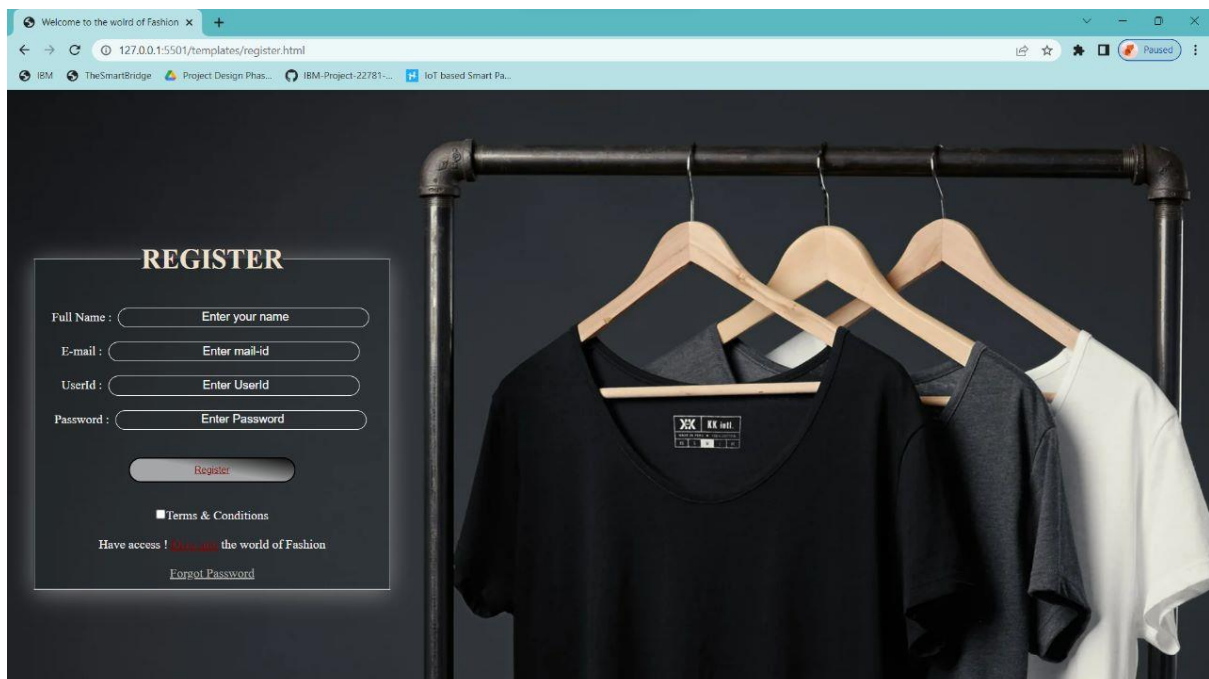
</div>

</div>

</body>

</html>

```



7.2 FEATURES 2

Home.html

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta http-equiv="X-UA-Compatible" content="IE=edge">

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

  <link rel="stylesheet" href="/static/home.css">

  <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.2.0/css/all.min.css">

  <link href="//maxcdn.bootstrapcdn.com/font-awesome/4.1.0/css/font-awesome.min.css" rel="stylesheet">

  <link rel="stylesheet" href="https://fonts.googleapis.com/css?family=Roboto&display=swap">

  <link rel="stylesheet" href="https://use.fontawesome.com/releases/v5.15.0/css/all.css">

  <script defer src="https://use.fontawesome.com/releases/v5.15.0/js/all.js"></script>

  <title>Home</title>

  <script>

    window.watsonAssistantChatOptions = {

      integrationID: "e39c6f9f-46b6-430a-b0b7-2ee7110cc096", // The ID of this integration.

      region: "au-syd", // The region your integration is hosted in.

      serviceInstanceID: "dd6273a7-70d2-4b96-8476-e8a2bf3a6067", // 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>

  <style>

    @import url("https://fonts.googleapis.com/css?family=Nunito&display=swap");

  body {

    background-color: rgb(14, 0, 0);

  }

}
```



```
.box1 {  
    border: 1px solid black;  
    background-color: black;  
    height: 50px;  
    width: 100%;  
    margin-top: -10px;  
    position: sticky;  
}  
  
ul {  
    float: left;  
    color: white;  
}  
  
ul li {  
    margin-top: -10x;  
    float: left;  
    position: relative;  
    left: 1000px;  
    width: 100px;  
    font-size: 14px;  
    font-family: "Segoe UI", Tahoma, Geneva, Verdana, sans-serif;  
    list-style-type: none;  
}  
  
ul li a {  
    text-decoration: none;  
    color: white;  
}  
  
ul li a:hover {  
    border-bottom: 2.5px solid red;  
    transform: scale(2.5);  
}  
  
ul li i {  
    padding-left: 5px;  
}  
  
h5 {
```

```
font-size: larger;
margin-top: -12x;
float: right;
position: relative;
color: white;
right: 90px;
margin: 1px;
margin-left: -150px;
text-transform: uppercase;
}

.sub-box {
border: 1px solid transparent;
background-color: whitesmoke;
height: 50px;
}

ol {
float: left;
}

ol li {
float: left;
width: 100px;
position: relative;
left: -10%;
list-style-type: none;
font-family: condensed, sans-serif;
font-size: 15px;
font-weight: bolder;
}

ol li a {
text-decoration: none;
color: black;
}

ol li a:hover {
border-bottom: 4px solid rgba(46, 160, 216, 0.822);
```

```
}  
.fa-search {  
  position: absolute;  
  left: 85%;  
  top: 10%;  
  color: black;  
}  
.fa-search:hover {  
  transform: scale(1.2);  
}  
.fa-user {  
  position: absolute;  
  left: 88%;  
  top: 10%;  
  color: black;  
}  
.fa-user:hover {  
  transform: scale(1.2);  
}  
.fa-shopping-cart {  
  position: absolute;  
  left: 91%;  
  top: 10%;  
  color: black;  
}  
.fa-shopping-cart:hover {  
  transform: scale(1.2);  
}  
h2 {  
  position: absolute;  
  font-family: "Courier New", Courier, monospace;  
  font-style: italic;  
  font-weight: 5000;  
  text-transform: uppercase;
```

```
margin-top: -40px;
margin-left: 10%;
color: black;
background: linear-gradient(150deg red);
}
font {
margin-left: 8px;
color: red;
}
.logo {
position: absolute;
margin: -50px 20px;
}
.social-media {
position: absolute;
height: 1654px;
width: 70px;
display: flex;
flex-direction: column;
align-items: center;
justify-content: center;
}
.social-media::before {
margin-left: 2850px;
border: 2px solid white;
content: "";
position: absolute;
width: 2px;
height: 35%;
background: white;
top: 2%;
}
.social-media::after {
margin-left: 2850px;
```

```
border: 2px solid white;
content: "";
position: absolute;
width: 2px;
height: 35%;
background: white;
bottom: 2%;
}
.fa-facebook-f {
margin-left: 2850px;
margin-bottom: 20px;
padding-bottom: 50px;
}
.fa-twitter {
margin-left: 2850px;
margin-bottom: 20px;
padding-bottom: 50px;
}
.fa-instagram {
margin-left: 2850px;
margin-bottom: 20px;
padding-bottom: 50px;
}
.fa-youtube {
margin-left: 2850px;
padding-bottom: 15px;
}
i {
padding: 10px;
}
.fa-instagram:hover {
color: rgb(213, 59, 203);
transform: scale(2);
}
```

```
.fa-facebook-f:hover {  
  color: #3b5998;  
  transform: scale(2);  
}  
.fa-twitter:hover {  
  color: #00aace;  
  transform: scale(2);  
}  
.fa-youtube:hover {  
  color: #c4302b;  
  transform: scale(2);  
}  
.p {  
  font-size: larger;  
  font-weight: 30px;  
}  
.wrapper {  
  width: 100%;  
  margin: 5px auto;  
}  
h4 {  
  text-align: center;  
}  
.cards_wrap {  
  display: flex;  
  flex-wrap: wrap;  
}  
  
.cards_wrap .card_item {  
  width: 30%;  
  padding: 10px;  
}  
  
.cards_wrap .card_inner {
```

```
background: linear-gradient(110deg,#ff99ff, #33ccff);  
border: 3px solid whitesmoke;  
}
```

```
.cards_wrap .card_top {  
width: 100%;  
height: auto;  
padding: 10px;  
padding-bottom: 0;  
}
```

```
.cards_wrap .card_bottom {  
padding: 15px;  
}
```

```
.cards_wrap .card_bottom .card_category {  
text-transform: uppercase;  
text-align: center;  
}
```

```
.cards_wrap .card_bottom .card_info {  
padding: 15px;  
margin: 10px 0;  
border: 1px solid#000000;  
}
```

```
.cards_wrap .card_bottom .card_info .title {  
color: #070707e3;  
text-transform: uppercase;  
font-size: 23px;  
margin-bottom: 2px;  
margin-top: -3px;  
}
```

```
.cards_wrap .card_bottom {
```

```

    text-align: center;
}

.submit-btn{
    color: #fff;
    height: 40px;
    width: 200px;
    text-decoration: none;
    border-radius: 20px;
    border: 2px currentColor rgba(193, 182, 197, 0.211);
    background-image: #fff;
    background-size: 500px;
    background-repeat: no-repeat;
    background-position: 0%;
    -webkit-transition: background 300ms ease-in-out;
    transition: background 300ms ease-in-out;
}

.submit-btn:hover{
    background: linear-gradient(140deg, #ccffff, #ffcccc);
    color: #050801;
    box-shadow: 0 0 5px #ccffff,
                0 0 10px #ccffff,
                0 0 20px #ffcccc,
                0 0 40px #ffcccc;
}

@media (max-width: 1024px) {
    .cards_wrap .card_item {
        width: 33.3%;
    }
}

@media (max-width: 768px) {
    .cards_wrap .card_item {
        width: 50%;
    }
}

```



```
}  
}
```

```
@media (max-width: 528px) {  
  .cards_wrap .card_item {  
    width: 100%;  
  }  
}
```

```
</style>  
</head>  
<body>  
  <div class="box1">  
    <ul>  
      <li><a href="#">India </a><i class="fa fa-angle-down" aria-hidden="true"></i></li>  
      <li><a href="#">English </a><i class="fa fa-angle-down" aria-hidden="true"></i></li>  
      <li><a href="#">Messages </a><i class="fa fa-angle-down" aria-hidden="true"></i></li>  
      <h5>Free shipping on order above 1499</h5>  
    </ul>  
  </div>  
  <div class="sub-box">  
    <ol>  
      <li><a href="#">Home</a></li>  
      <li><a href="#">Shop</a></li>  
      <li><a href="#">Promotions</a></li>  
      <li><a href="#"> Offerzone </a></li>  
      <li><a href="#"> Contact </a></li>  
    </ol>  
  </div>  
  <div class="icons">  
    <h2>Fashion<font>World</font></h2>  
    <a href="#"><i class="fa fa-search" aria-hidden="true"></i></a>  
    <a href="#"><i class="fa fa-user" aria-hidden="true"></i></a>  
    <a href="#"><i class="fa fa-shopping-cart" aria-hidden="true"></i></a>
```

```
<div class="logo">



</div>

</div>
```

```
<div class="social-media">

  <a href="#" class="fb" style="color:white"><i class="fa-brands fa-facebook-f fa-xl"></i></a>

  <a href="#" class="tw" style="color:white"><i class="fa-brands fa-twitter fa-xl"></i></a>

  <a href="#" class="in" style="color:white"><i class="fa-brands fa-instagram fa-xl"></i></a>

  <a href="#" class="yt" style="color:white"><i class="fa-brands fa-youtube fa-xl"></i></a>

</div>
```

```
<div class="wrapper">

  <div class="cards_wrap">

    <div class="card_item">

      <div class="card_inner">

        <div class="card_top">

        </div>

        <div class="card_bottom">

          <div class="card_info" style="text-align:center">

            <h4 class="title">Mens Fashion</h4>

            <p>

              Keep it simple but significant.

            </p><br>

            <button type="submit" class="submit-btn" ><a href="#" style="font-size:16px">Shop with Chat-
bot</a></button>

          </div>

        </div>

      </div>

    </div>

  </div>

</div>

<div class="card_item">

  <div class="card_inner">

    <div class="card_top">
```

```

</div>
<div class="card_bottom">
  <div class="card_info">
    <h4 class="title">Womens Fashion</h4>
    <p>
      Life is a party ,dress like it.
    </p><br>
    <button type="submit" class="submit-btn" ><a href="#" style="font-size:16px">Shop with Chat-
bot</a></button>
  </div>
</div>
</div>
</div>
```

```
<div class="card_item" >
  <div class="card_inner">
    <div class="card_top" >
      
    </div>
    <div class="card_bottom">
      <div class="card_info">
        <h4 class="title">Kids Fashion</h4>
        <p>
          Let our future be stylish.
        </p><br>
        <button type="submit" class="submit-btn" ><a href="#" style="font-size:16px">Shop with Chat-
bot</a></button>
      </div>
    </div>
  </div>
</div>
</div>
```

```
<div class="card_item">
  <div class="card_inner">
```

```

<div class="card_top">
  
</div>
<div class="card_bottom">
  <div class="card_info">
    <h4 class="title">Just born</h4>
    <p>
      Baby cloths make everything perfect.
    </p><br>
    <button type="submit" class="submit-btn" ><a class="bot" href="#" style="font-size:16px">Shop
with Chat-bot</a></button>
  </div>
</div>
</div>
</div>
<div class="card_item">
  <div class="card_inner">
    <div class="card_top">
      
    </div>
    <div class="card_bottom">
      <div class="card_info">
        <h4 class="title">Fashion Accessories</h4>
        <p>
          Styling is all about accessories.
        </p><br>
        <button type="submit" class="submit-btn" ><a href="#" style="font-size:16px">Shop with Chat-
bot</a></button>
      </div>
    </div>
  </div>
</div>
<div class="card_item">
  <div class="card_inner">
    <div class="card_top">

```

```

        
    </div>

    <div class="card_bottom">

        <div class="card_info">

            <h4 class="title">Summer wear</h4>

            <p>

                Dress up for a party called " SUMMER"!

            </p><br>

            <button type="submit" class="submit-btn" ><a href="#" style="font-size:16px">Shop with Chat-
bot</a></button>

        </div>

    </div>

</div>

<div class="card_item">

    <div class="card_inner">

        <div class="card_top">

        </div>

        <div class="card_bottom">

            <div class="card_info">

                <h4 class="title">Winter wear</h4>

                <p>

                    Hating the cold,but loving the winter clothes.

                </p><br>

                <button type="submit" class="submit-btn" ><a href="#" style="font-size:16px">Shop with Chat-
bot</a></button>

            </div>

        </div>

    </div>

</div>

<div class="card_item">

    <div class="card_inner">

        <div class="card_top">

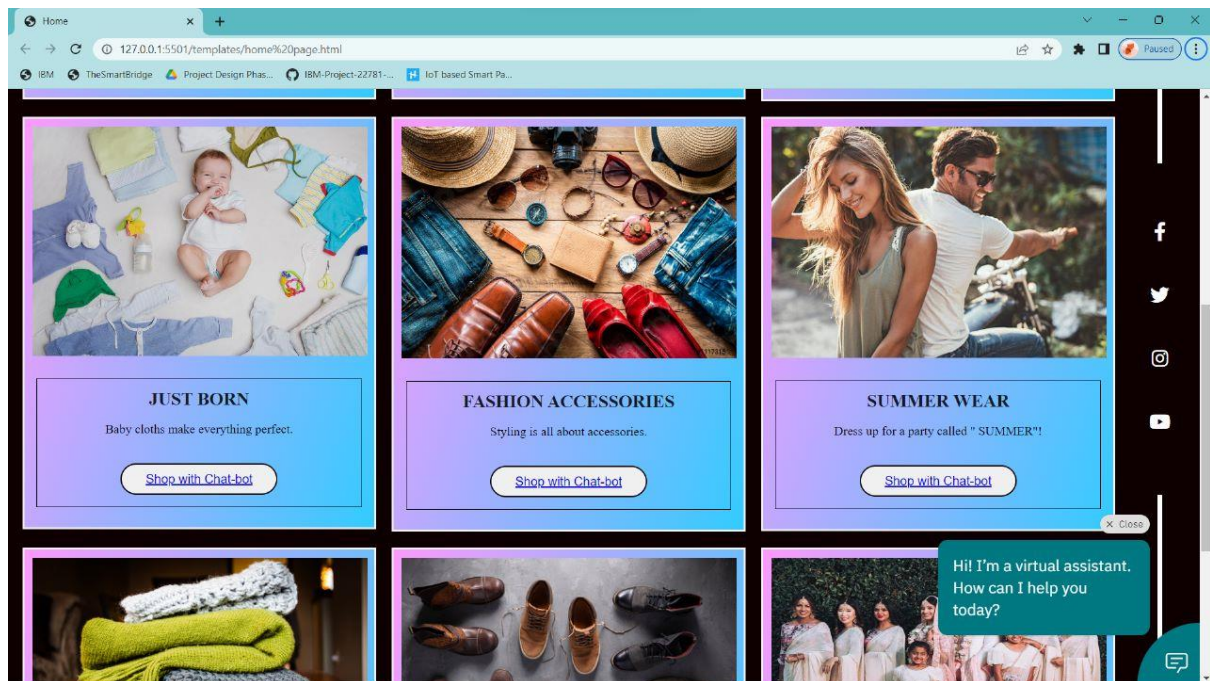
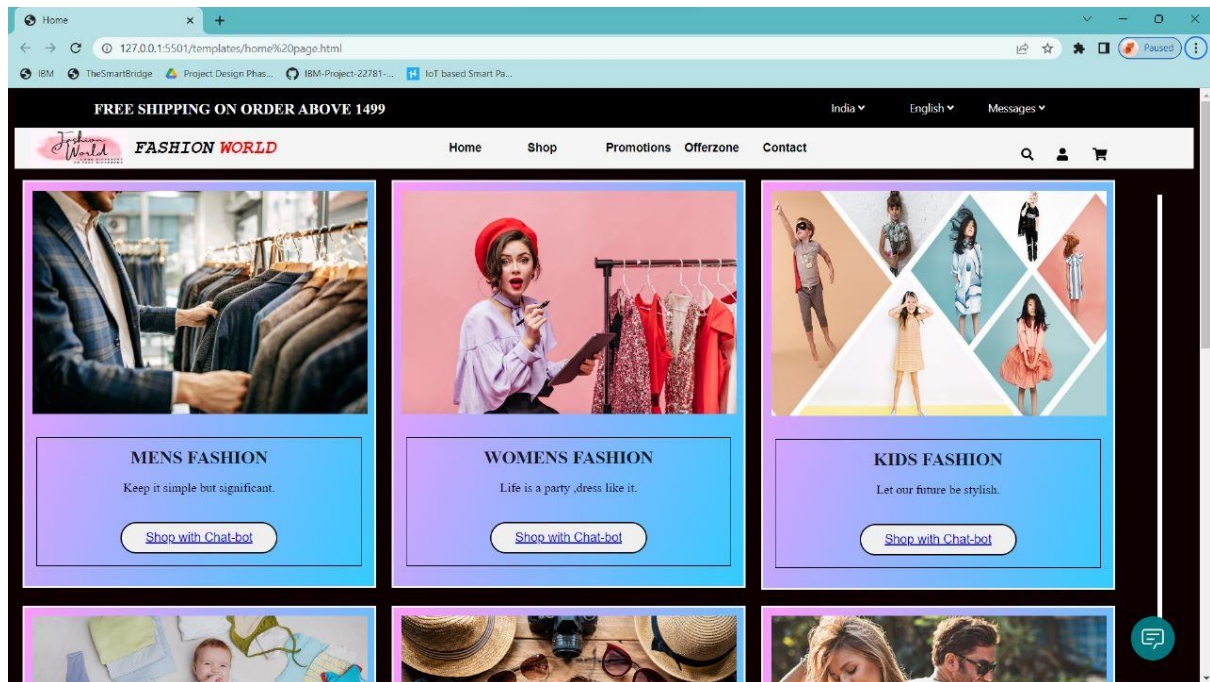
```

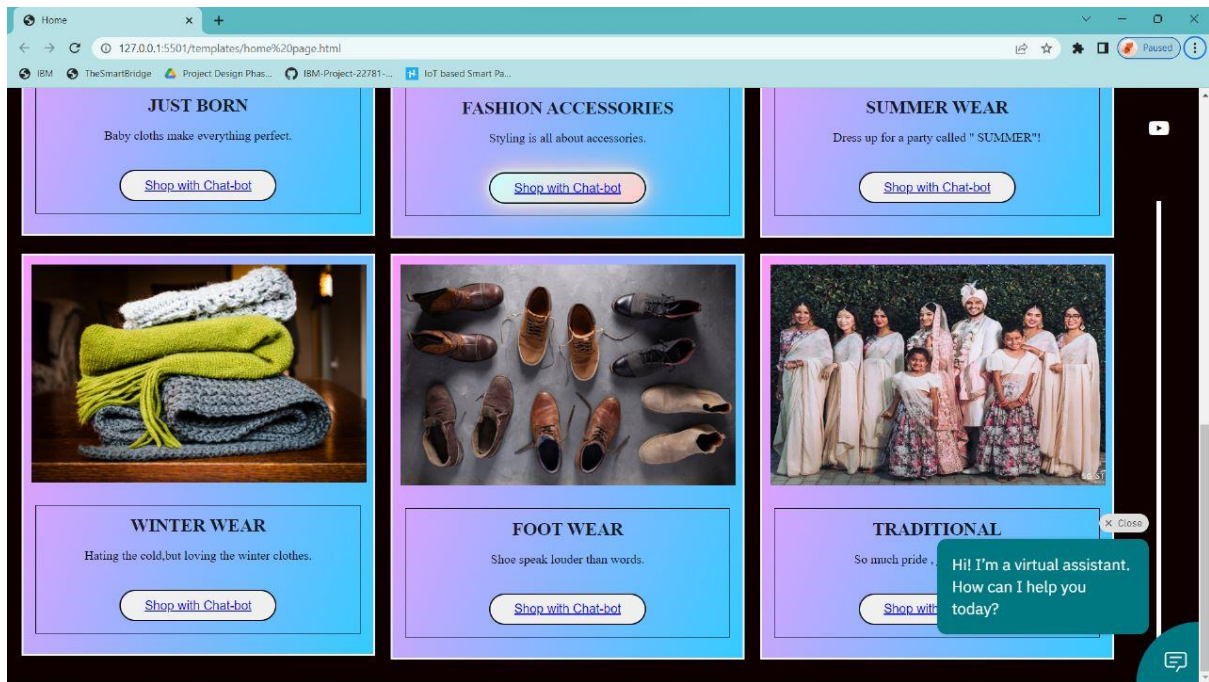
```

</div>
<div class="card_bottom">
  <div class="card_info">
    <h4 class="title">Foot wear</h4>
    <p>
      Shoe speak louder than words.
    </p><br>
    <button type="submit" class="submit-btn" ><a href="#" style="font-size:16px">Shop with Chat-
bot</a></button>
  </div>
</div>
</div>
</div>
<div class="card_item">
  <div class="card_inner">
    <div class="card_top">
      
    </div>
    <div class="card_bottom">
      <div class="card_info">
        <h4 class="title">Traditional</h4>
        <p>
          So much pride , joy and comfort.
        </p><br>
        <button type="submit" class="submit-btn" ><a href="#" style="font-size:16px">Shop with Chat-
bot</a></button>
      </div>
    </div>
  </div>
</div>
</div>
</div>
</div>
```

</body>

</html>





7.3 DATABASE SCHEMA

```
from flask import Flask, render_template, request, redirect, url_for, session
```

```
import ibm_db
```

```
import re
```

```
from pymysql import MySQLError
```

```
app = Flask(__name__)
```

```
app.secret_key = 'a'
```

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=ba99a9e6-d59e-4883-8fc0-  
d6a8c9f7a08f.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=  
31321;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=sbl81896;PWD=zMJ6nuNzX  
6VFYm2V", "", "")
```

```
@app.route('/')
```

```
def homer():
```

```
    return render_template("index page.html")
```



```

@app.route('/Login',methods=['GET', 'POST'])
def login():
    global userid
    msg = ""

    if request.method == 'POST' :
        username = request.form['username']
        password = request.form['password']
        sql = "SELECT * FROM users WHERE username=? AND password=?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt,1,username)
        ibm_db.bind_param(stmt,2,password)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print (account)
        if account:
            session['loggedin'] = True
            session['id'] = account['USERNAME']
            userid= account['USERNAME']
            session['username'] = account['USERNAME']
            msg = 'Logged in successfully !'

            msg = 'Logged in successfully !'
            return render_template('home page.html', msg = msg)
        else:
            msg = 'Incorrect username / password !'
    return render_template('index page.html', msg = msg)

```

```

@app.route('/Register', methods=['GET', 'POST'])
def registet():

```

```

msg = "
if request.method == 'POST' :
    username = request.form['username']
    email = request.form['email']
    password = request.form['password']
    sql = "SELECT * FROM users WHERE username =?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt,1,username)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    print(account)
    if account:
        msg = 'Account already exists !'
    elif not re.match(r'^[^\@]+\.[^\@]+\.[^\@]+', email):
        msg = 'Invalid email address !'
    elif not re.match(r'[A-Za-z0-9]+', username):
        msg = 'name must contain only characters and numbers !'
    else:
        insert_sql = "INSERT INTO users VALUES (?, ?, ?)"
        prep_stmt = ibm_db.prepare(conn, insert_sql)
        ibm_db.bind_param(prepare_stmt, 1, username)
        ibm_db.bind_param(prepare_stmt, 2, email)
        ibm_db.bind_param(prepare_stmt, 3, password)
        ibm_db.execute(prepare_stmt)
        msg = 'You have successfully registered !'
elif request.method == 'POST':
    msg = 'Please fill out the form !'
return render_template('reg.html', msg = msg)

@app.route('/Homepage')
def dash():

    return render_template('home page.html')

```

```

@app.route('/apply', methods = ['GET', 'POST'])
def apply():
    msg = "

    if request.method == 'POST' :

        username = request.form['username']
        email = request.form['email']


        qualification= request.form['qualification']
        skills = request.form['skills']
        jobs = request.form['s']

        sql = "SELECT * FROM users WHERE username =?"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt,1,username)
        ibm_db.execute(stmt)
        account = ibm_db.fetch_assoc(stmt)
        print(account)
        if account:

            msg = 'there is only 1 job position! for you'
            return render_template('apply.html', msg = msg)


        insert_sql = "INSERT INTO job VALUES (?, ?, ?, ?, ?)"
        prep_stmt = ibm_db.prepare(conn, insert_sql)
        ibm_db.bind_param(prepare_stmt, 1, username)
        ibm_db.bind_param(prepare_stmt, 2, email)
        ibm_db.bind_param(prepare_stmt, 3, qualification)
        ibm_db.bind_param(prepare_stmt, 4, skills)
        ibm_db.bind_param(prepare_stmt, 5, jobs)
        ibm_db.execute(prepare_stmt)
        msg = 'You have successfully applied for job !'
        session['loggedin'] = True
        TEXT = "Hello,a new application for job position " +jobs+"is requested"

```

```

elif request.method == 'POST':

    msg = 'Please fill out the form !'

    return render_template('apply.html', msg = msg)


@app.route('/display')
def display():

    print(session["username"],session['id'])


    cursor = MySQLError.connection.cursor()

    cursor.execute('SELECT * FROM job WHERE userid = % s', (session['id'],))

    account = cursor.fetchone()

    print("accountdisplay",account)


    return render_template('display.html',account = account)


@app.route('/logout')


def logout():

    session.pop('loggedin', None)

    session.pop('id', None)

    session.pop('username', None)

    return render_template('home.html')

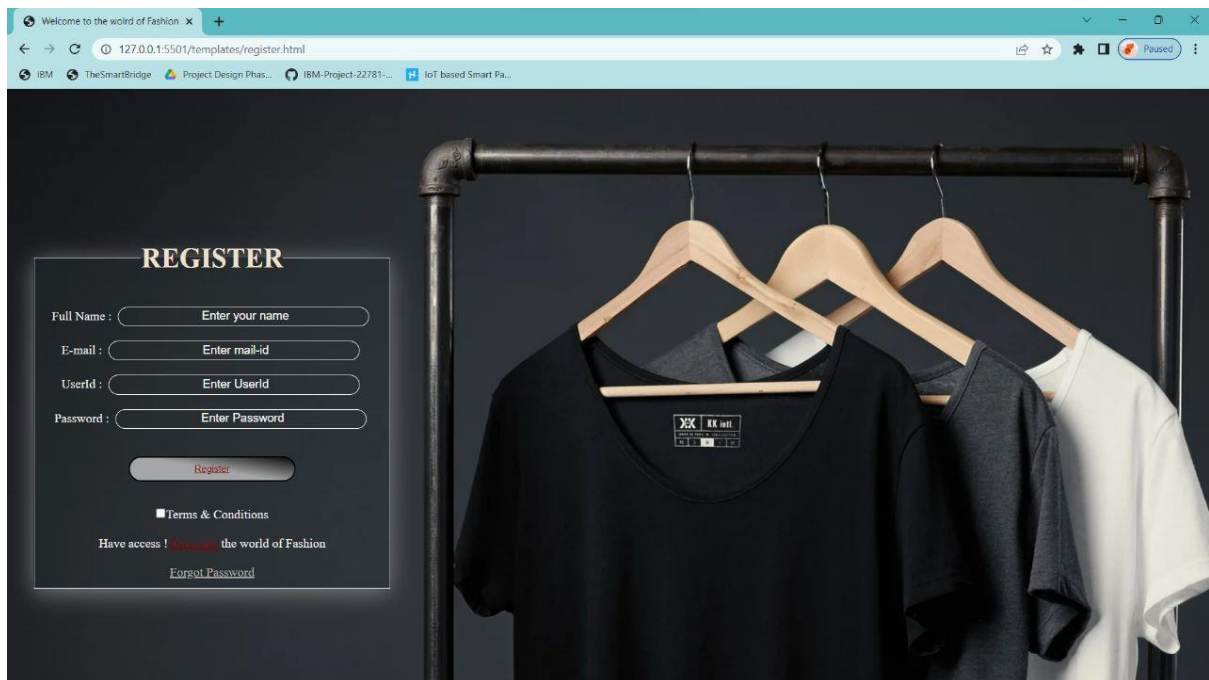
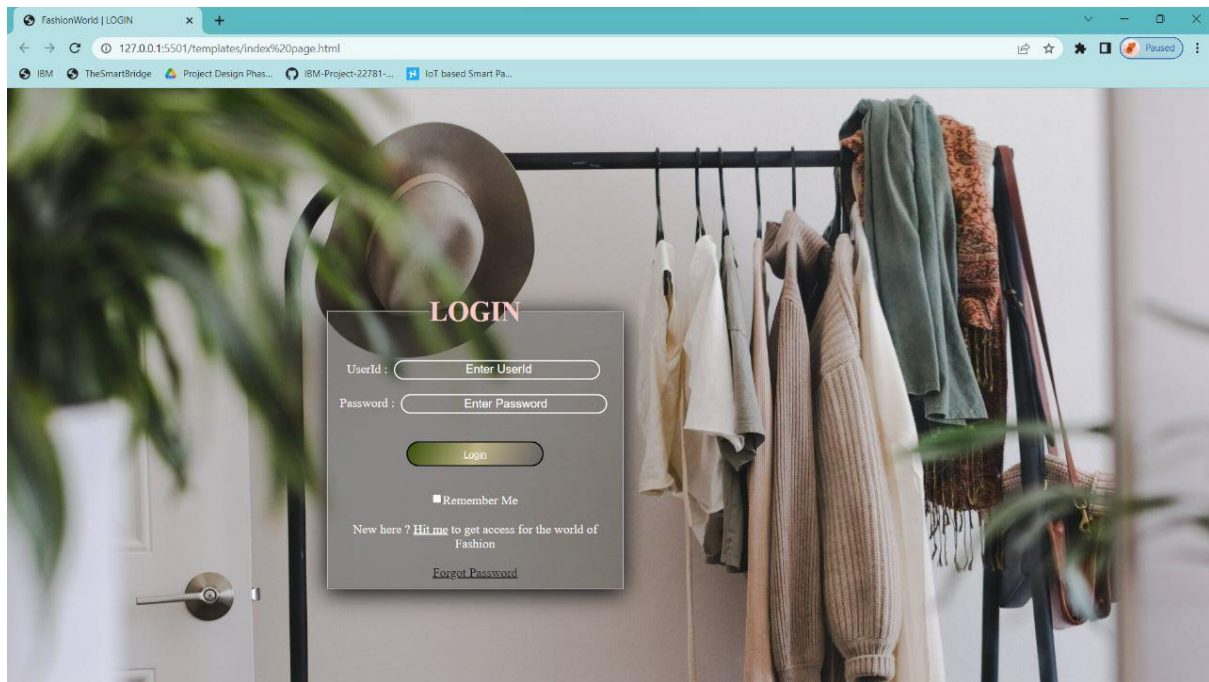

if __name__ == '__main__':

    app.run(host='0.0.0.0')

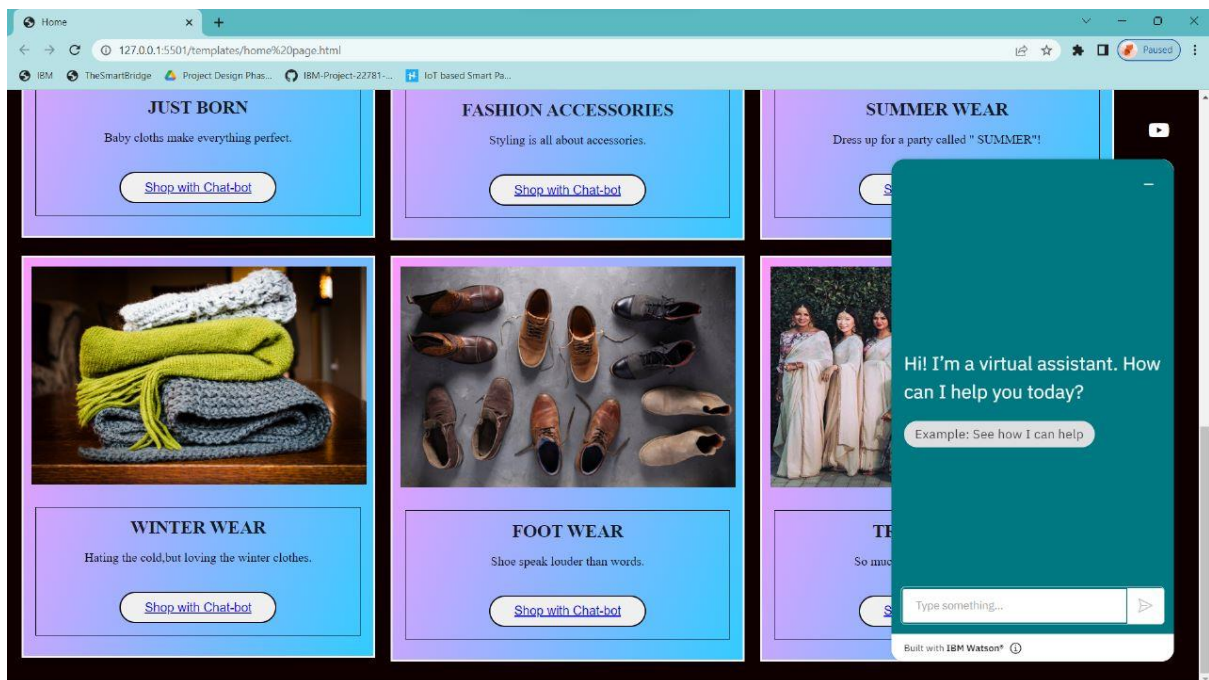
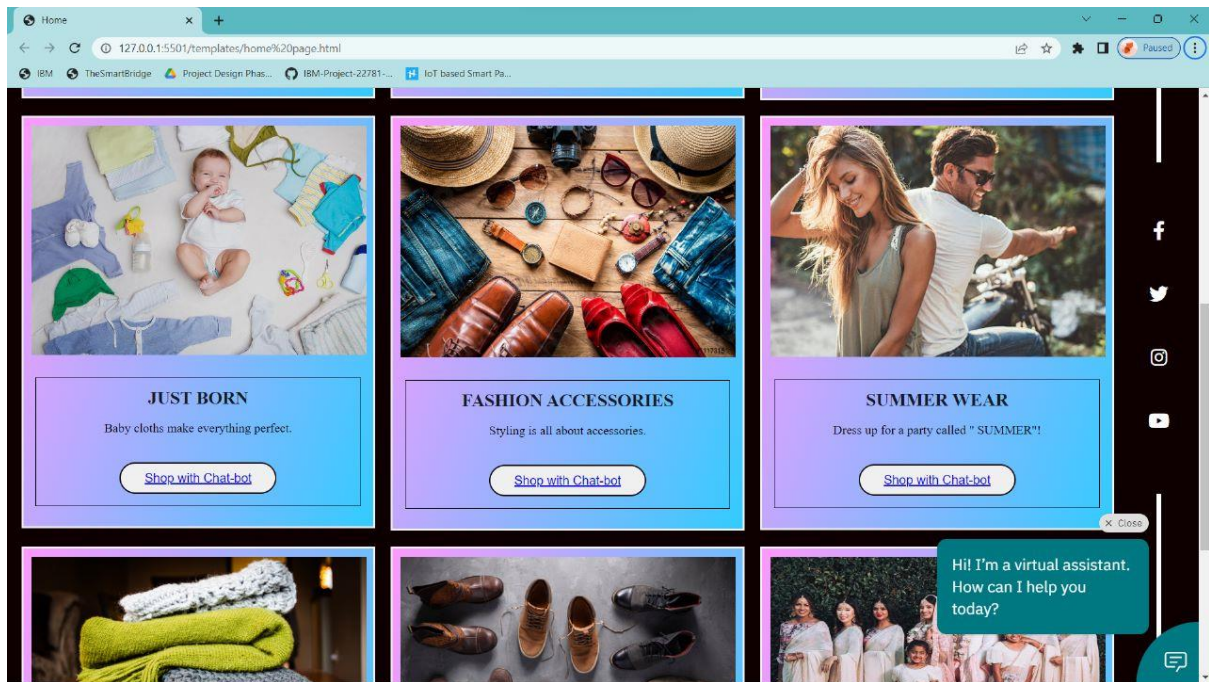
```

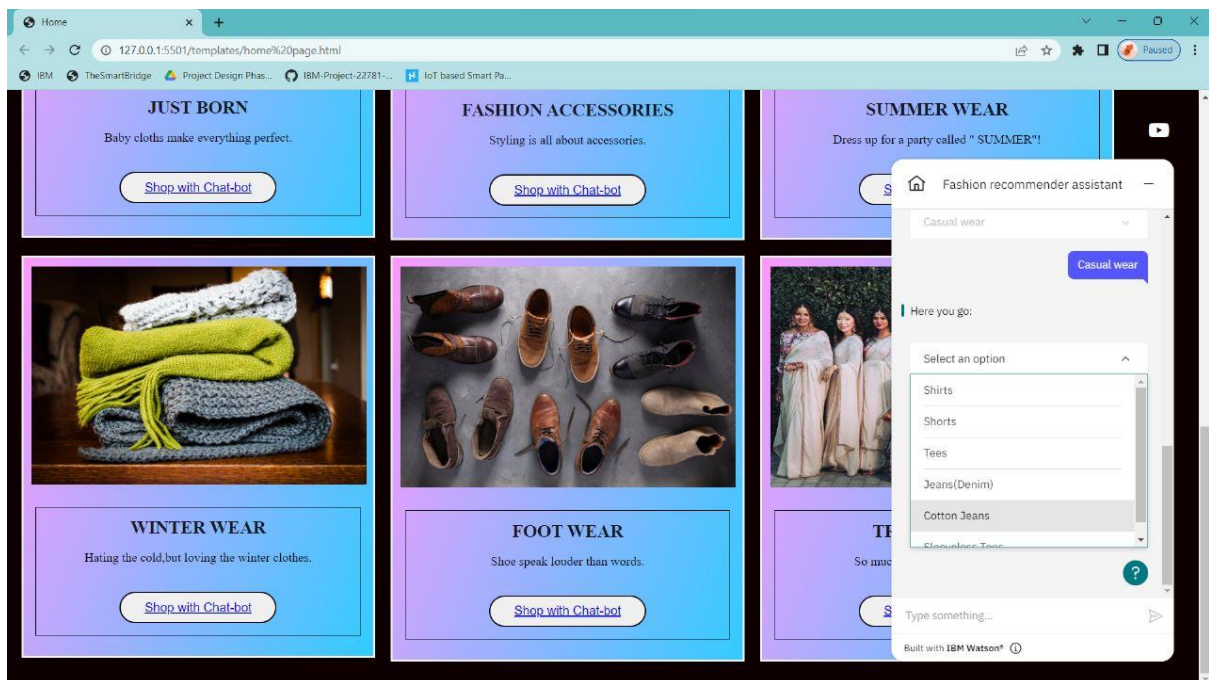
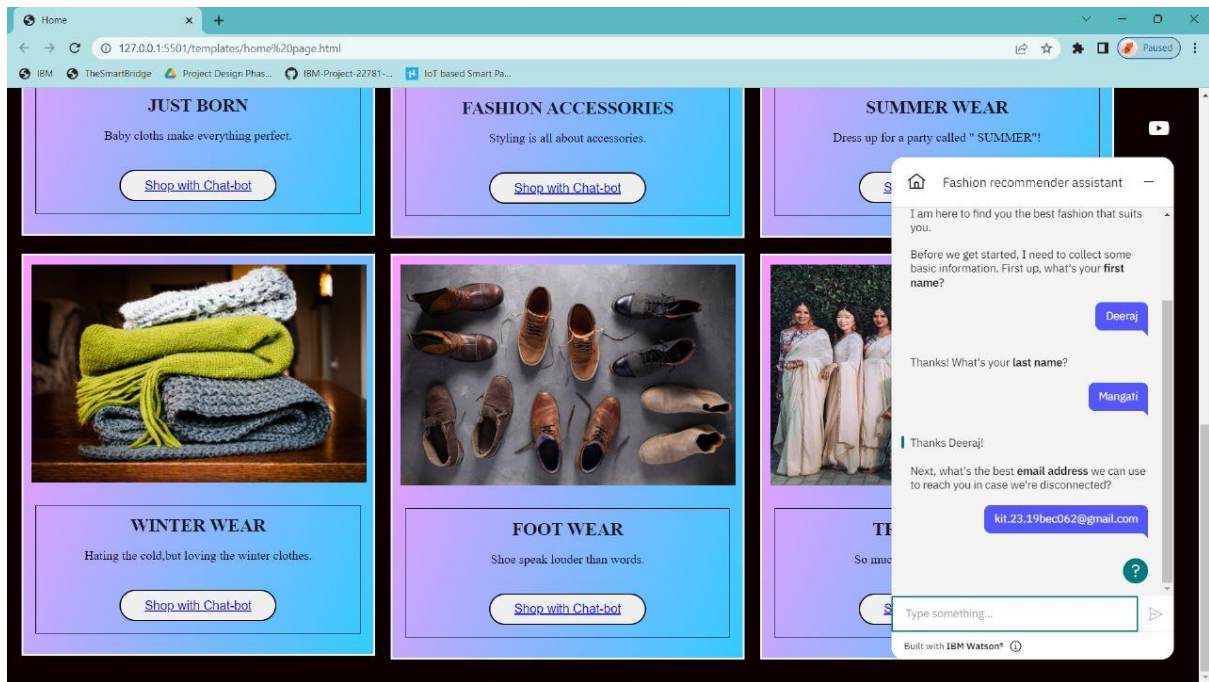
8.TESTING

8.1 TEST CASES



8.2 USER ACCEPTANCE TESTING





9.RESULTS

9.1 PERFORMANCE METRICS

The performance of a recommendation algorithm is evaluated by using some specific metrics that indicate the accuracy of the system. The type of metric used depends on the type of filtering technique. Root Mean Square Error (RMSE), Receiver Operating Characteristics (ROC), Area Under Cover (AUC), Precision, Recall and F1

score is generally used to evaluate the performance or accuracy of the recommendation algorithms.

Root-mean square error (RMSE). RMSE is widely used in evaluating and comparing the performance of a recommendation system model compared to other models. A lower RMSE value indicates higher performance by the recommendation model. RMSE, as mentioned by, can be as represented as follows:

$$RMSE = \sqrt{\frac{1}{N_p} \sum_{u,i} (p_{ui} - r_{ui})^2} \quad (1)$$

where, N_p is the total number of predictions, p_{ui} is the predicted rating that a user u will select an item i and r_{ui} is the real rating.

Precision. Precision can be defined as the fraction of correct recommendations or predictions (known as True Positive) to the total number of recommendations provided, which can be as represented as follows:

$$Precision = \frac{True\ Positive\ (TP)}{True\ Positive\ (TP) + False\ Positive\ (FP)} \quad (2)$$

It is also defined as the ratio of the number of relevant recommended items to the number of recommended items expressed as percentages.

Recall. Recall can be defined as the fraction of correct recommendations or predictions (known as True Positive) to the total number of correct relevant recommendations provided, which can be as represented as follows:

$$Recall = \frac{True\ Positive\ (TP)}{True\ Positive\ (TP) + False\ Negative\ (FN)} \quad (3)$$

It is also defined as the ratio of the number of relevant recommended items to the total number of relevant items expressed as percentages.

F1 Score. F1 score is an indicator of the accuracy of the model and ranges from 0 to 1, where a value close to 1 represents higher recommendation or prediction accuracy. It represents precision and recall as a single metric and can be as represented as follows:

$$F1\ score = 2 \times \frac{Precision * Recall}{Precision + Recall} \quad (4)$$

Coverage. Coverage is used to measure the percentage of items which are recommended by the algorithm among all of the items.

Accuracy. Accuracy can be defined as the ratio of the number of total correct recommendations to the total recommendations provided.

10.ADVANTAGES & DISADVANTAGES

ADVANTAGES

- Smart fashion recommender application is the user friendly.
- With the help of chatbot user can find the products very easily.
- This application used to discover the product based on the user's choice, very easily and quickly.
- It has the ability to reduce transaction costs for consumers, and increase revenue for retailers.

DISADVANTAGES

- It needs active internet connection.
- Privacy concerns.
- Too many choices.
- Cold-start problem.

11.CONCLUSION

The present paper presents the development of a system that recognizes fashion similar images. We accomplish this by implementing an already existing CNN model with transfer learning for cloth image recognition using different libraries. For this purpose, we created a plan for collecting data and for developing the steps needed for preprocessing and cleaning up the data. We took into account features like patterns, machine, fabric, style etc. After extensive preprocessing and cleaning of data in a dataset, we constructed the

model of stacked CNN to predict the features specific to these attributes and to train the models with the dataset to generate accurate predictions regarding almost all forms of images. A stacked CNN was used and implemented, with the help of this algorithm through which the system can recommend similar images This is the last test to assess if deep learning for style recovery is at a high development and can be utilized in making fashion choices.

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 eCommerceWell, 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 of fine stores and plans more stores in smaller cities. They plan to combine online and offline stores to maximize their selling potential. Google and Tata Trust have launched a joint program 'Saathi' to increase internet and mobile penetration 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.

13.APPENDIX

SOURCE CODE:login.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>FashionWorld | LOGIN</title>
```

```
<style>

*{

    margin: 0;

    padding: 0;

}

body{

    background-image: url(/images/fash6.jpeg);

    background-repeat: no-repeat;

    background-size: 100%;

}

.container{

    width: 100%;

    height: 100vh;

    font-family: sans_serif;

    color: rgb(248, 245, 245);

    display: flex;

    align-items:center;

    justify-content:center;

}

.login-form{

    position:absolute;

    width: 25%;

    height: 75%;

    transform: translate(-45%,12%);

    background-position: center;

    background-size: cover ;

    box-sizing: border-box;

    text-align: center;

}

legend{

    font-size: 35px;

    font-weight: bolder;

    color:RGB(247, 202, 201);

}
```

```
.input-box{
    width: 75%;
    background: transparent ;
    border:2px solid rgb(255, 255, 255);
    margin: 0 4px;
    height: 25px;
    border-radius: 30px;
    padding: 0 25px;
    box-sizing: border-box;
    outline: none;
    text-align: center;
    color:rgb(255, 255, 255);
}

::placeholder{
    color: rgb(255, 255, 255);
    font-size: 15px;
}

button{
    width: 50%;
    background: linear-gradient(290deg, rgb(103, 99, 99), rgba(213, 199, 139, 0.707),rgb(55, 80, 8));
    margin:35px 0 15px;
    height: 32px;
    font-size: 12px;
    border-radius:20px;
    padding: 0 10px;
    box-sizing: border-box;
    outline: none;
    color: rgb(8, 8, 8);
    cursor: pointer;
}

fieldset {
    margin-top: 100px;
    background: rgba(42, 52, 52, 0.3);
    box-shadow: 0 5px 30px black;
```

```
margin-left: 3px;
margin-right: 3px;
padding-top: 0.35em;
padding-bottom: 0.625em;
padding-left: 0.75em;
padding-right: 0.75em;
border: 2px groove (internal value);
}
```

```
a:visited {
    color: rgb(28, 27, 27);
    background-color: transparent;
}
```

```
a:link{
    color: white;
    background-color: transparent;
}
```

```
a:active{
    color: rgb(255, 255, 255);
    background-color: transparent;
}
```

```
</style>
```

```
</head>
```

```
<body>
```

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

```
<div class="login-form">
```

```
<form action="/Login" method="post">
```

```
<fieldset>
```

```
<legend>LOGIN</legend><br><br>
```

```
<label>UserId :</label>
```

```
<input type="Userid" class="input-box" name="username" placeholder=" Enter UserId"
required><br><br>
```

```
<label>Password :</label>
```

```
<input type="Password" class="input-box" name="password" placeholder=" Enter Password"
required>
```

```

        <br>

        <button type="submit" class="submit-btn" ><a href="/templates/home.html">Login</a></button>

        <br><br>

        <input type="checkbox"><span>Remember Me</span>

        <br><br>

        New here ?<span> </span><a href="/templates/register.html">Hit me</a> to get access for the
world of Fashion <br><br>

        <a href="">Forgot Password</a>

    </fieldset>

</form>

</div>

</div>

</body>

</html>

```

INTEGRATING APPLICATION WITH CHATBOT USING WATSON ASSISTANT :

```

<script>

    window.watsonAssistantChatOptions = {

        integrationID: "e39c6f9f-46b6-430a-b0b7-2ee7110cc096", // The ID of this integration.

        region: "au-syd", // The region your integration is hosted in.

        serviceInstanceID: "dd6273a7-70d2-4b96-8476-e8a2bf3a6067", // 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>

```

GITHUB & PROJECT DEMO LINK

GITHUB LINK: <https://github.com/IBM-EPBL/IBM-Project-22121-1659805496/tree/main/Final%20Code>

VIDEO LINK: