# SMART FASHION RECOMMENDER APPLICATION A PROJECT REPORT

Submitted by

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### 1. INTRODUCTION

### 1.1 Project Overview

The increasing popularity of online fashion and online retail platforms is having a visible impact on the shopping experience of billions of customers, making millions of products available in online catalogs thus eliminating the need for physical visits to various stores and for waiting in long queues or trying on clothes in dressing rooms by providing personalized and affordable deliveries.

This in turn has created novel challenges for platform providers, within which proper understanding of fashion choices of shoppers plays a crucial role.

Shoppers tend to feel overwhelmed by the sheer choice of the assortment and brands, not being able to receive effective suggestions matching their style preferences as well as not being able to spot the right size and fit during the shopping experience.

As a result, recommender systems are gaining momentum by mining through large and diverse silos of product catalogs as well as customer datasets in order to provide personalized recommendations of outfits, complimenting the shopping session with similar and relevant products, understanding and suggesting the correct size and fit for shoppers, recommending with personalized styles and leveraging the social influence affecting the choice of style and buying behavior of new generations of shoppers. To this end, within this chapter we aim to present a state of the art view of the advancements within the field of recommendation systems in the domain of fashion. In this project We have come up with a new innovative solution through which you can directly do your online shopping based on your choice without any search. It can be done by using the chatbot.

### 1.2 Purpose

- a) Using chatbot we can manage user's choices and orders.
- b) The chatbot can give recommendations to the users based on their interests.
- c) It can promote the best deals and offers on that day.
- d) It will store the customer's details and orders in the database.
- e) The chatbot will send a notification to customers if the order is confirmed.
- f) Chatbots can also help in collecting customer feedback.

### 2.LITERATURE SURVEY

### 2.1 Existing Problem

Customers buy products and order them, If they want to know further details, while they cant find them in websites, They keep step backward to buy their desired product. If the has any queries in the product or how to process to get the product, they wait for the seller to explain it. Although using chatbots may provide faster customer service overall, they aren't perfect. Simple ones may have only limited responses for customers. Therefore, not all customers will get the answers they are searching for.

Only 34% of respondents stated they would be comfortable using chatbots in an online retail situation. Most customers don't want chatbots.

Chatbots were created to respond to simple questions that can be answered with facts. Chatbots have limited responses, so they're not often able to answer multi-part questions or questions that require decisions. This often means your customers are left without a solution, and have to go through more steps to contact your support team.

### 2.2 References

- [1] E. Turban, D. King, J. Lee, and D. Viehland, Electronic Commerce: A Managerial Perspective. Upper Saddle River, NJ, USA: Prentice-Hall, 2002. [2] R. T. Wigand, 'Electronic commerce: Definition, theory, and context,' Inf. Soc., vol. 13, no. 1, pp. 1–16, Mar. 1997.
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### 2.3 Problem Statement Definition

Problem Statement 1:

The User Needs a way to Find Trending Fashion Clothes so that Here find the All Collections.

### Problem Statement 2:

The User Needs a way to Find Offers and Discounts so that Here User easy to find Daily Offers.

### Problem Statement 3:

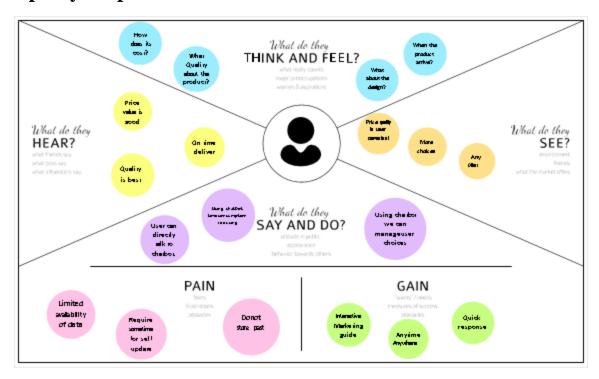
The User Needs a way to Assistant for finding Clothes so that Here User got the Chat Bot assistant.

### Problem Statement 4:

The Sellers Needs a way to struggling to sells products offline so that Here Sellers will Sell Products via our application.

### 3. IDEATION & PROPOSED SOLUTION

## 3.1 Empathy Map Canvas



# 3.2 Ideation & Brainstorming





#### SMART FASHION RECOMMNDER APPLICATION

Fashion applications have seen tremendous growth and are now one of the most used programs in the e-commerce field. The needs of people are continuously evolving, creating a room for innovation among the applications. Having an All program that understands the algorithm of a specific application can be of great aid. We are implementing such a chatbot, Which is fed with the knowledge of the application's algorithm and helps the user completely from finding their needs to processing the payment and initiating delivery.



#### Before you collaborate

A little bit of preparation goes a long way with this session. Here's what you need to do to get going.

10 minutes

- Team gathering
  Define who should participate in the session and send an invite. Share relevant information or pre-work sheed.
- Set the goal
   Think about the problem you'll be focusing on solving in the brainstorming session.
- Use the Facilitation tools
  Use the Facilitation Superpowers to run a happy and productive session.

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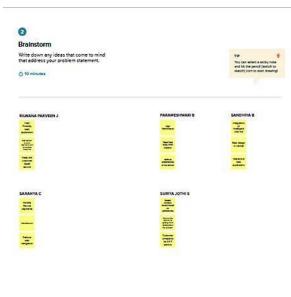


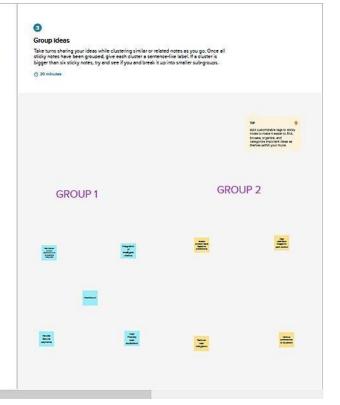
#### Define your problem statement

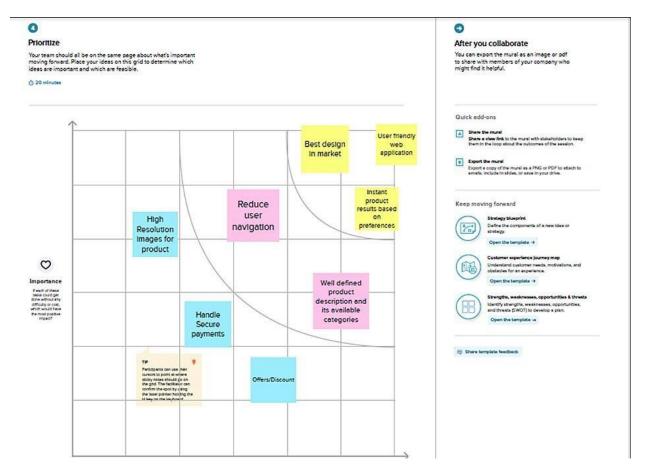
Unavailability of chatbots that are interactive enough to navigate the user to do whatever they want. The amount of toil a user has to go through to look for a product they desire for Need for a more User-finedly interface. The fiblal main of the project is to develop a smart chatbot that is able to understand the needs of the user and recommend products of desire.

How might we [your problem statement]?









# 3.3 Proposed Solution

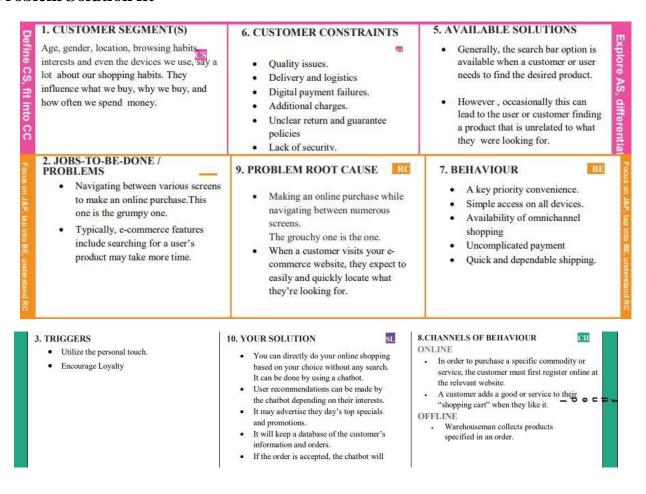
S.No.	Parameter	Description
1.	Problem Statement (Problem	A new innovative solution through
	to be solved)	which users can directly do online
		shopping based on the choice without

		any search.
		It can be done using a chatbot.
		Modules Used:
		1. Admin
		The role of the admin is to check out the
		database about the stock and have a
		track of all the things that the user are
		purchasing.
		1. User
		The user will login into the website and
		go through the products available on the
		website .Instead of navigating to several
		screens for booking products online ,The
		user can directly talk to the chatbot
		regarding the product
2.	Idea / Solution description	The idea mainly focus on the designing
		the chatbot using AI algorithms like
		NLP(Natural Language Processing)
		which makes the user friendly
		environment instead of searching the
		product.The Chatbot gives
		recommendation of the user's product
	I	1

		and suggests available offers of the product.  The introduction of chatbot makes an interactive website and boosts the productivity of the product.
3.	Novelty / Uniqueness	Many online shopping application is mainly based on the search engine while this project make use of interactive chatbot like alexa, siri etc
4.	Social Impact / Customer Satisfaction	This project uses chatbots that converse with the users and ask questions that encourage them to make a purchase. If a customer is searching for a product, they need not leave the website to know more about it. Chatbots pop up and deliver the information to the users effortlessly.
5.	Business Model (Revenue Model)	There are many systesm available in the recommendation systems.Our Project will focus on improving customer

		experience in online shopping by			
		embedding an interactive chatbot in it			
		which will improve the productivity and			
		boosts the economy			
6.	Scalability of the Solution	Our project solution is platform			
		independent.In future various machine			
		learning algorithms can be applied on			
		the chatbot and UI interfaces of webapp			
		can be developed and modified.			

#### 3.4 Problem Solution fit



4. EMOTIONS: BEFORE / AFTER	notify the customer.	
BEFORE		
The search bar option is available when a		
customer or user needs to find the desired product.		
AFTER		
Chatbot is like talking to a human which may		
make it easier for people to find the product.		

# 4. REQUIREMENT ANALYSIS

# **4.1 Functional requirement**

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub- Task)		
FR-1	User Registration / Sign up	Registration through Form Registration through Gmail Registration through LinkedIN		
FR-2	User Verification	Confirmation via Email Confirmation via OTP		
FR-3	Sign In / Login	Login by using Mobile Number or Email		
FR-4	Profile Details	Update the Information about Customer  Example :- Name Gender Age Mobile number Address		
FR-5	Chatbot (Watson Assistant)	Get the Information about  Search Products  View Offers  Discounts		

		Stock Availability User Personal Information (FR-4)
FR-6	Advance Search Capabilities	Sorting and filtering options
FR-7	Shopping Cart	My Cart Button Add-To-Cart- Button Remove-From-Cart- Button
FR-8	Checking Item Availability	Item Availability in rural and urban Locations
FR-9	Checking The Shipping Status / Tracking The Order Product	Easily Checking Status availability of ordered Items
FR-10	Logout	After the Purchase, user can Logout Or close the application When customer needs

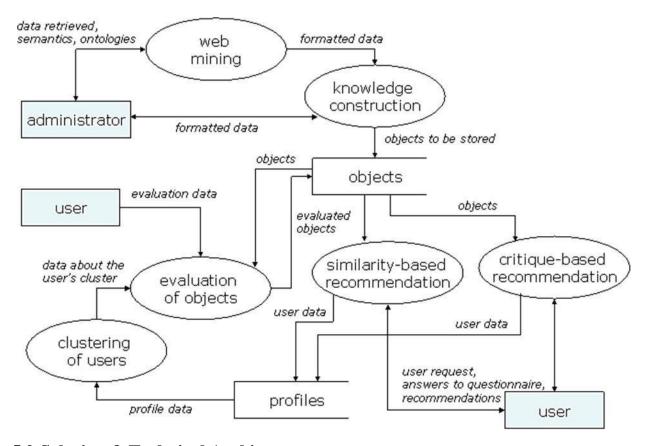
# **4.2 Non-Functional requirements**

NFR No.	Non-Functional Requirement (Epic)	Description
NFR-1	usability	The application will be designed for making Good HUMAN — COMPUTER Interaction in such a way,  Any user can easily navigate User Can easily View and understandable  Comfort while making Place order  Comfort with tracking facilities Easy and Compact design These all are about to achieve a defined goal Effectively, Efficiently and Satisfactorily.
NFR-2	Security	The application will be Using of  "Secure Socket Layer" (SSL)  Certificate will provide a More security of the Project and This

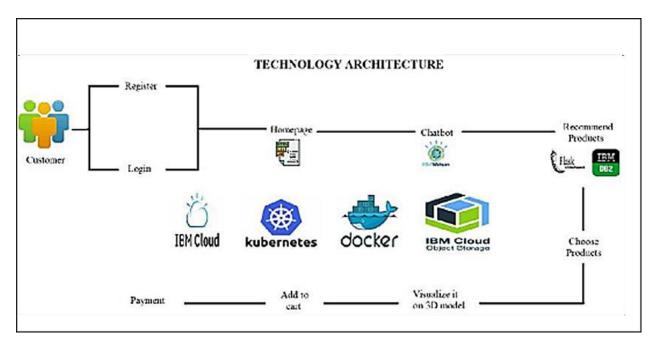
		process will happen while Python Flask to Cloud Connect. This makes user private Information like Baking, Shipping/Home
		address, email, Phone number etc., will be kept as more secure.
NFR-3	Reliability	Ability of software to perform critical tasks like Collection and Securing customer Data, Providing Gateway Payment to function correctly in a given Environment, for a Particular amount of time.
NFR-4	Performance	It Focus on the loading application as quickly as possible irrespective of the number of user traffic
NFR-5	Availability	The Application will be Available to all users at any given point of time. User can access the chatbot for raising any queries.
NFR-6	Scalability	Chatbot can be very useful to know about offers and discounts. It will be helpful whenever we make online shopping

### **PROJECT DESIGN**

### **5.1 Data Flow Diagrams**



5.2 Solution & Technical Architecture



### **5.3 User Stories**

User Type	Functional Requireme nt (Epic)	User Story Number	User Story / Task	Accepta nce criteria	Priority	Release
Custo mer (Mobi le user)	Registration	USN-1	As a user, I can register for the application by entering my email, password,	I can access my account / dashboa rd	High	Sprint-1

USN-2	and confirming my password.  As a user, I will receive confirmati on email once I have registered for the application	I can receive confirm ation email & click confirm	High	Sprint-1
USN-3	As a user, I can register for the	I can register &access	Low	Sprint-2

		application  through Facebook	the dashboa rd with Gmail login		
	USN-4	As a user, I can register for the application through Gmail	I can register &access the dashboa rd with Gmail login	Medium	Sprint-1
Login	USN-5	As a user, I can log into the application by entering email & password	I can login into the applicati on with Gmail login	High	Sprint-1
Dashboard	USN-5	As a user ,I can log access the	I can access	High	Sprint-1

da	ashboard	the	<del>-</del>
	of	dashboa	
	the	rd by	
ap	plication	logging	
by	y logging	into	
	into the oplication	the applicati	
		on	

## 6. PROJECT PLANNING & SCHEDULING

## **6.1 Sprint Planning & Estimation**

MILESTONES	ACTIVITY	DESCRIPTION
Project development phase	Delivery of Sprint-1,2, 3, 4	To develop the code and submit the develop the code after completion of testing
Setting-up app environment	Create IBM cloud account	Sign up IBM cloud account
	Create flask project	Getting started with the flask to create project
	Install IBM cloud CLI	Install IBM command line interface (CLI)
	Docker CLI installation	Installing docker CLI
	Create an account in sendgrid	Create an account in sendgrid Use service as e-mail integration to the application for sending emails
Implementing web application	Create UI to interact with the application	Create UI  registration page login page view products page add products page
	Create IBM DB2 and connect with the Python	Create IBM DB2 in IBM cloud and link with the Python
Integrating sendgrid service	Sendgrid integration with the Python	To send emails from the application we need to integrate the sendgrid services
Developing a chat bot	Building a chat bot and integrate with the application	Build the chat bot and integrate it to the flask application
Deployment of app in IBM cloud	Containerise the app	Create a docker image of the application in addition to push it to the IBM container registry
	Upload image to IBM container registry	Upload the image to IBM container registry
	Deploy in in kubernetes cluster	Once the image is uploaded to IBM container registry deploy the image toward IBM kubernetes cluster

MILESTONES	ACTIVITY	DESCRIPTION
Ideation phase	Literature survey	Literature survey on the selected project and information gathering
	Empathy map	Prepare empathy map to capture the user pains and gains, prepare a list of problem statement
	Ideation	Organising the brainstorming session and prioritise the top three ideas based on feasibility hand importance
Project design phase 1	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 documents
	Solution architecture	Prepare solution architecture document
Project design phase 2	Customer journey map	Prepare customer journey map to understand the user interactions and experience with the application
	Functional requirements	Prepare functional and non- functional necessity document
	Data flow diagram	Prepare data flow diagram and user stories
	Technology architecture	Draw technology architecture diagram
Project planning phase	Milestones and activity list	Prepare milestones and activity list of the project
	Sprint delivery plan	Prepare spring 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 cloudaccount.	2	High	S.Parameshwari B.Sandhiya C.Saranya
Sprint-1		USN-2	As a user, I will create a flaskproject	1	Low	J.Rilwana Parveen S.Suriya Jothi
Sprint-1		USN-3	As a user, I will install IBM CloudCLI	2	Medium	S.Parameshwari B.Sandhiya C.Saranya
Sprint-2	Setting up App environment	USN-4	As a user, I can install Docker CLI	1	Low	J.Rilwana Parveen S.Suriya Jothi
Sprint-2		USN-5	As a user, I will Create an accountin sendgrid	2	Medium	S.Parameshwari B.Sandhiya C.Saranya

Sprint-3	Implementing web application	USN-6	As a user, I Create UI to interact with the application	1	High	J.Rilwana Parveen S.Suriya Jothi
Sprint-3	3	USN-7	As a user, I Create IBM DB2 and connect with Python	3	High	S.Parameshwari B.Sandhiya C.Saranya
Sprint-3	Integrating sendgrid service	USN-8	As a user, I will be integrating sendgridwith python code	2	High	J.Rilwana Parveen S.Suriya Jothi
Sprint-3	Developing a chatbot	USN-9	As a user, I must build a chatbot and integrate to application	1	Medium	S.Parameshwari B.Sandhiya C.Saranya
Sprint-4	Development of App in IBM Cloud	USN-10	As a user, I will Containerize the App	1	Low	J.Rilwana Parveen S.Suriya Jothi
Sprint-4		USN-11	As a user, I will upload image to IBM Container registry	2	Medium	S.Parameshwari B.Sandhiya C.Saranya
Sprint-4	3	USN-12	As a user, I will deploy App in Kubernetes cluster	3	High	J.Rilwana Parveen S.Suriya Jothi
Sprint-4	User panel		As a user  • Register, Login, Email, Verification • Manual Search • Order placement, Order Details	3	High	J.Rilwana Parveen S.Suriya Jothi S.Parameshwari B.Sandhiya C.Saranya

# **Project Tracker, Velocity & Burndown Chart**

### Project Tracker, Velocity & Burndown Chart

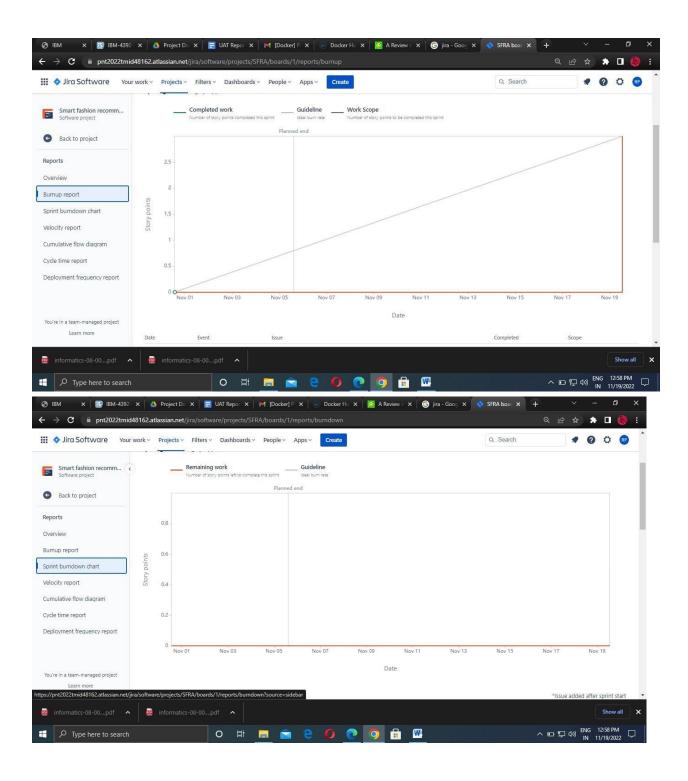
Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	18	6 Days	24 Oct 2022	29 Oct 2022	24	29 Oct 2022
Sprint-2	18	6 Days	31 Oct 2022	05 Nov 2022	24	05 Nov 2022
Sprint-3	18	6 Days	07 Nov 2022	12 Nov 2022	24	12 Nov 2022
Sprint-4	18	6 Days	14 Nov 2022	19 Nov 2022	24	19 Nov 2022

#### Velocity

Imagine we have a 6-day sprint duration, and the velocity of the team is 18(points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = 24/6 = 4$$

### 6.3 Reports from JIRA



### 7. CODING & SOLUTIONING

#### **7.1 Feature 1**

```
User can view the product on home page
<!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>Smart Fashion Recommender Application</title>
  <link rel="stylesheet" href="static/css/home.css">
</head>
<body>
  <nav class="navbar">
  </nav>
  <!-- hero section -->
<header class="hero-section">
  <div class="content">
    <img src="static/img/light-logo.png" class="logo" alt="">
```

```
best fashion collection of all time
  </div>
</header>
<section class="product">
  <h2 class="product-category">best selling</h2>
  <button class="pre-btn"><img src="static/img/arrow.png" alt=""></button>
<button class="nxt-btn"><img src="static/img/arrow.png" alt=""></button>
  <div class="product-container">
    <div class="product-card">
      <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card1.png" class="product-thumb" alt="">
         <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card2.png" class="product-thumb" alt="">
         <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
```

```
a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    <img src="static/img/card3.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    <img src="static/img/card4.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
```

```
<h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    <img src="static/img/card5.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    <img src="static/img/card6.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
```

```
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    <img src="static/img/card7.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    <img src="static/img/card8.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
```

```
</div>
    </div>
  </div>
</section>
<!-- collections -->
<section class="collection-container">
  <a href="#" class="collection">
    <img src="static/img/women-collection.png" alt="">
    women <br>> apparels
  </a>
  <a href="#" class="collection">
    <img src="static/img/men-collection.png" alt="">
    men <br>> apparels
  </a>
  <a href="#" class="collection">
    <img src="static/img/accessories-collection.png" alt="">
    accessories
  </a>
</section>
<section class="product">
  <h2 class="product-category">shirts</h2>
  <button class="pre-btn"><img src="static/img/arrow.png" alt=""></button>
<button class="nxt-btn"><img src="static/img/arrow.png" alt=""></button>
  <div class="product-container">
    <div class="product-card">
      <div class="product-image">
        <span class="discount-tag">50% offer</span>
        <img src="static/img/product image 1.png" class="product-thumb"</pre>
```

```
alt="">
        <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
        <h2 class="product-brand">brand</h2>
        a short line about the cloth.
        <span class="price">$20</span><span class="actual-price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
        <span class="discount-tag">50% offer</span>
        <img src="static/img/product image 3.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
        <h2 class="product-brand">brand</h2>
        a short line about the cloth.
        <span class="price">$20</span><span class="actual-price">$40</span>
      </div>
    </div>
```

```
<div class="product-card">
      <div class="product-image">
         <span class="discount-tag">50% offer</span>
        <img src="static/img/product image 4.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
        <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
         <span class="discount-tag">50% offer</span>
        <img src="static/img/card2.png" class="product-thumb" alt="">
         <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
        a short line about the cloth.
         <span class="price">$20</span><span class="actual-price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
```

```
<span class="discount-tag">50% offer</span>
    <img src="static/img/card3.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    <img src="static/img/card5.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
```

```
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    <img src="static/img/card6.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    <img src="static/img/card7.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
```

```
<img src="static/img/card8.png" class="product-thumb" alt="">
         <button class="card-btn">add to whislist</button>
       </div>
       <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-price">$40</span>
       </div>
    </div>
  </div>
</section>
<section class="product">
  <h2 class="product-category">shoes</h2>
  <button class="pre-btn"><img src="static/img/arrow.png" alt=""></button>
<button class="nxt-btn"><img src="static/img/arrow.png" alt=""></button>
  <div class="product-container">
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card9.png" class="product-thumb" alt="">
         <button class="card-btn">add to whislist</button>
```

```
</div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    <img src="static/img/card10.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    <img src="static/img/card11.png" class="product-thumb" alt="">
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    a short line about the cloth.
```

```
<span class="price">$20</span><span class="actual-price">$40</span>
       </div>
    </div>
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card12.png" class="product-thumb" alt="">
         <button class="card-btn">add to whislist</button>
       </div>
       <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-price">$40</span>
       </div>
    </div>
</div>
</section>
<footer>
</footer>
  <script src="static/js/nav.js"></script>
  <script src="static/js/home.js"></script>
  <script src="static/js/footer.js"></script>
</body>
```

#### </html>



#### **7.1 Feature 2**

Using chat bot we can manage user's choices and orders.

 $from\ flask\ import\ Flask,\ render\_template$ 

import os

```
app = Flask(\underline{\hspace{0.5cm}} name\underline{\hspace{0.5cm}} , template\_folder='Templates', static\_folder='static')
```

@app.route('/')

def index():

return render\_template('index.html')

@app.route('/product')

def product():

return render\_template('product.html')

```
@app.route('/search')
def search():
    return render_template('search.html')

@app.route('/404')
def error():
    return render_template('404.html')

if___name__ =='___main___':
    port = int(os.environ.get('PORT', 5000))
```



# 8. TESTING

# 8.1 Test Cases

This report shows the number of test cases that have passed, failed, and untested

Section	Total Cases	NotTest ed	Fa il	Pa ss
Login	5	0	0	5
Register	7	0	0	7
Home Page	2	0	0	2
Order page	3	0	0	3
Order products	9	0	0	9
Final Report Output	4	0	0	4
Version Control	2	0	0	2

5				Date	03-Nov-22	3
				Team ID	PNT2022TMID48162	1
				Project Name	Smart Fashion Recommender Application	li .
				Maximum Marks	4 marks	
Test case ID	Feature Type	Component	Test Scenario	Pre-Requisite	Steps To Execute	Test Data
oginPage_TC_OOs	Functional	Home Page	Verify user is able to see the Login/Signup popup when user clicked on My account button		Enter URL and click go     Click on My Account dropdown button     Verify login/Singup popup displayed or not.	https://lecalhest.4000/logi
.oginPage_TC_002	ui	Home Page	Verify the UI elements in Login/Signup popup		Enter URL and click go     Click on My Account dropdown button     Nerify login/Singup popup with below UI elements:     a.email test box     b.password text box     c.login button     d.New customer? Create account link     e.Last password? Recovery password link	https://localhost.4000/
.oginPage_TC_003	Functional	Ноте раде	Verify user is able to log into application with Valid credentials		1.Enter URL(https://shopenzer.com/) and click go     2.Click on My Account dropdown button     3.Enter Valid username/email in Email text box     4.Enter valid password in password text box     5.Click on login button	Username:rijanish4 10@gmail.com paspword: 123456
oginPage_TC_OO4	Functional	Login page	Verify user is able to log into application with inValid credentials		Enter URL(https://Localhost-4000/) and click go     C.Click on My. Account drogdown button     Senter InValid username/email in Email text box     4 Enter valid password in password sext box     S.Click on login button	Username: cBDI@gmail.com password: Testing 123
oginPage_TC_004	Functional	Login page	Verify user is able to log into application with inValid credentials		Enter URL[https://Localhost.4000/] and click go     Click on My Account dropdown button     Enter Valid username/email in Email text box     Enter Invalid password in password text box     S.Click on login button	Username: rijanish410@gmail. com password: 1234567
oginPago_TC_005	Functional	Login page	Verify user is able to log into application with inValid credentials		1. Enter URL (https://Localhost-4000/jand click go     2. Click on My Account dropdown button     3. Enter Invalid username/email in Email text box     4. Enter Invalid password in password text box     5. Click on login button	Username: rilOt@gmail.com password: Testing123
erify user is able that with chat bot ?	Functional		Verifly user is able to chat with chat Bot		Chat bot under the website	Dress

Verify user is able to Buy products	Functional	order page	verify user is able to order products	user will buy the prodject in order page	user data
Veriify user is get purchase conformation mail?	Functional		verify user is able to get conformation mail	user will get the mail Notification	email
1					
	·				

Expected Result	Actual Result	Status	Commnets	TC for Automation(Y/N)	BUG ID	Executed By
Login/Signup popup should display	Working as expected	Pass		8		>
Application should show below UI elements: a.email text box b.password text box c.Login button with orange colour d.New customer? Create account link e.Last password? Recovery password link	Working as expected	Pass				
User should navigate to user account homepage	working as expected	Pass				
Application should show 'Incorrect email or password ' validation message.	Working as expected	Pass				
Application should show 'incorrect' email or password ' validation message.	working as expected	Pass			7	
Application should show 'Incorrect email or password ' validation message.	working as expected	Pass				,
Application will send replay as dress	Working as expected	Pass				*

Apllication will send order conformation message	Working as expected	Pass		
Application will send conformation email	working as expected	pass		

# **8.2** User Acceptance Testing

### **Purpose of Document**

The purpose of this document is to briefly explain the test coverage and open issues of the SmartFashionRecommender Application project at the time of the release too User Acceptance Testing (UAT).

## **Defect Analysis**

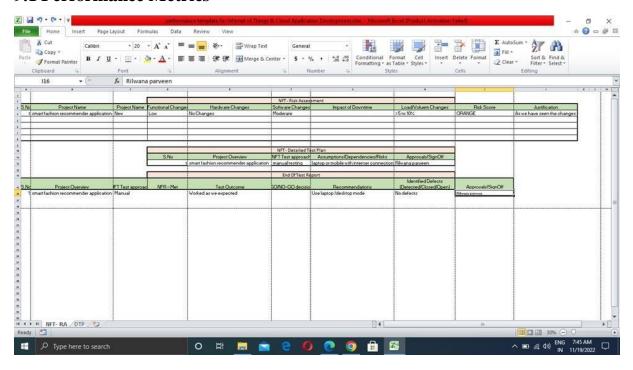
This report shows the number of resolved or closed bugs at each severity level, and how theywere resolved

Resolu	Sever	Sever	Sever	Sever	Subto
tion	ity 1	ity 2	ity 3	ity 4	tal

By Design	5	5	2	3	21
Duplicate	1	0	3	0	4
External	2	3	0	1	6
Fixed	11	2	4	20	37
Not Reproduc ed	0	0	1	0	1
Skipped	0	0	1	1	2
Won't Fix	0	5	2	1	8
Totals	24	14	13	26	77

## 9. RESULTS

### **9.1 Performance Metrics**



## 10 ADVANTAGES & DISADVANTAGES

#### **ADVANTAGES**

Chatbots can gather Customer Insights.

Reduction in Costs of Human Resource

Interactive marketing guide.

Increase in number of customers.

Anytime anywhere.

Customer satisfaction.

Quick response.

### **DISADVANTAGES**

Less contact of customers.

Lagging of customer satisfaction.

No quick response.

Waste of time for customer to to buy product easily.

Can't answer the multipart question.

This project smart fashion recommender application has been developed using python flask. This bot has the ability to have conversation with the consumers knowing, understanding their needs and problem and gives answer to all what They need. Thus, site of proposed marketing guide gives us better bot performance in marketing field. Thus a higher system performance is achieved. The website provides a computerized version of marketing which will benefit in the product of the company. It makes entire process easy.

## FUTURE SCOPE

11.

Future chatbots can communicate at multiple levels with automation at the system level. They have the ability to maintain the system, task, and peoplecontexts. There is a possibility of introduction of master bots and eventually chatbot OS. The future of chatbots is that businesses will automate simple payments

and allow users to pay directly over live chat or Facebook Messenger apps. The instant process makes the cusmer happy and improves customer satisfaction. MasterCard has also launched a chatbot, especially for customer payments. Voice bots are becoming mainstream. Voice is the next big thing!. Users are already used to starting their days with "Ok Google, what's in my calendar today?".

be voice-driven". It is a greatly emerging conversational banking trend. It's all about facilitating your users with a seamless experience with your business, and you can achieve that by voice-driven chatbots. Accenture research says "Digital consumers prefer messaging platforms that have a voice and text-based interfaces.

## 13. APPENDIX

## **Source Code**

### **Index.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-</pre>
scale=1.0">
  <title>Smart Fashion Recommender Application</title>
  <link rel="stylesheet" href="static/css/home.css">
</head>
<body>
  <nav class="navbar">
  </nav>
```

```
<!-- hero section -->
<header class="hero-section">
  <div class="content">
    <img src="static/img/light-logo.png" class="logo" alt="">
    best fashion collection of all time
  </div>
</header>
<section class="product">
  <h2 class="product-category">best selling</h2>
  <button class="pre-btn"><img src="static/img/arrow.png"
alt=""></button>
<button class="nxt-btn"><img src="static/img/arrow.png"
alt=""></button>
  <div class="product-container">
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card1.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
```

```
</div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
         <span class="discount-tag">50% offer</span>
        <img src="static/img/card2.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
```

```
<span class="discount-tag">50% offer</span>
         <img src="static/img/card3.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
       </div>
       <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
       </div>
    </div>
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card4.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
       </div>
       <div class="product-info">
```

```
<h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card5.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card6.png" class="product-thumb"</pre>
```

```
alt="">
        <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
        <h2 class="product-brand">brand</h2>
        a short line about the cloth.
        <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
        <span class="discount-tag">50% offer</span>
        <img src="static/img/card7.png" class="product-thumb"</pre>
alt="">
        <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
        <h2 class="product-brand">brand</h2>
        a short line about the cloth.
```

```
<span class="price">$20</span><span class="actual-</pre>
price">$40</span>
       </div>
    </div>
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card8.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
       </div>
       <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
       </div>
    </div>
  </div>
</section>
<!-- collections -->
<section class="collection-container">
  <a href="#" class="collection">
    <img src="static/img/women-collection.png" alt="">
```

```
women <br>> apparels
  </a>
  <a href="#" class="collection">
    <img src="static/img/men-collection.png" alt="">
    men <br>> apparels
  </a>
  <a href="#" class="collection">
    <img src="static/img/accessories-collection.png" alt="">
    accessories
  </a>
</section>
<section class="product">
  <h2 class="product-category">shirts</h2>
  <button class="pre-btn"><img src="static/img/arrow.png"
alt=""></button>
<button class="nxt-btn"><img src="static/img/arrow.png"
alt=""></button>
  <div class="product-container">
    <div class="product-card">
      <div class="product-image">
```

```
<span class="discount-tag">50% offer</span>
         <img src="static/img/product image 1.png" class="product-</pre>
thumb" alt="">
         <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/product image 3.png" class="product-</pre>
thumb" alt="">
         <button class="card-btn">add to whislist</button>
       </div>
       <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
```

```
price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/product image 4.png" class="product-</pre>
thumb" alt="">
         <button class="card-btn">add to whislist/button>
      </div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
```

```
<span class="discount-tag">50% offer</span>
         <img src="static/img/card2.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card3.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
```

```
</div>
    </div>
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card5.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
       </div>
       <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
       </div>
    </div>
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
```

```
<img src="static/img/card6.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
       </div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card7.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
      </div>
       <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
```

```
</div>
    </div>
    <div class="product-card">
      <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card8.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
  </div>
</section>
```

```
<section class="product">
  <h2 class="product-category">shoes</h2>
  <button class="pre-btn"><img src="static/img/arrow.png"
alt=""></button>
<button class="nxt-btn"><img src="static/img/arrow.png"
alt=""></button>
  <div class="product-container">
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card9.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
       </div>
       <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
       </div>
    </div>
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
```

```
<img src="static/img/card10.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
       </div>
       <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
       </div>
    </div>
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card11.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
       </div>
       <div class="product-info">
         <h2 class="product-brand">brand</h2>
```

```
a short line about the cloth.
        <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
    <div class="product-card">
      <div class="product-image">
        <span class="discount-tag">50% offer</span>
        <img src="static/img/card12.png" class="product-thumb"</pre>
alt="">
        <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
        <h2 class="product-brand">brand</h2>
        a short line about the cloth.
        <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
      </div>
    </div>
```

</div>

```
</section>
<footer>
</footer>
  <script src="static/js/nav.js"></script>
  <script src="static/js/home.js"></script>
  <script src="static/js/footer.js"></script>
</body>
</html>
Product.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-</pre>
scale=1.0">
  <title>Product</title>
```

```
<link rel="stylesheet" href="static/css/home.css">
  <link rel="stylesheet" href="static/css/product.css">
</head>
<body>
  <nav class="navbar">
  </nav>
  <section class="product-details">
    <div class="image-slider">
       <div class="product-images">
         <img src="static/img/product image 1.png" class="active"</pre>
alt="">
         <img src="static/img/product image 2.png" alt="">
         <img src="static/img/product image 3.png" alt="">
         <img src="static/img/product image 4.png" alt="">
       </div>
    </div>
    <div class="details">
       <h2 class="product-brand">calvin klein</h2>
       Lorem ipsum dolor sit, amet
consectetur adipisicing elit.
       <span class="product-price">$99</span>
```

```
<span class="product-actual-price">$200</span>
       <span class="product-discount">( 50% off )</span>
       select size
       <input type="radio" name="size" value="s" checked hidden
id="s-size">
       <label for="s-size" class="size-radio-btn check">s</label>
       <input type="radio" name="size" value="m" hidden id="m-
size">
       <label for="m-size" class="size-radio-btn">m</label>
       <input type="radio" name="size" value="l" hidden id="l-size">
       <label for="l-size" class="size-radio-btn">l</label>
       <input type="radio" name="size" value="xl" hidden id="xl-</pre>
size">
       <label for="xl-size" class="size-radio-btn">xl</label>
       <input type="radio" name="size" value="xxl" hidden id="xxl-</pre>
size">
       <label for="xxl-size" class="size-radio-btn">xxl</label>
```

```
<button class="btn cart-btn">add to cart</button>
       <button class="btn">add to wishlist</button>
    </div>
  </section>
  <section class="detail-des">
    <h2 class="heading">description</h2>
    Lorem ipsum dolor sit amet consectetur adipisicing
elit. Veniam,.....
  </section>
  <section class="product">
    <h2 class="product-category">best selling</h2>
    <button class="pre-btn"><img src="static/img/arrow.png"
alt=""></button>
  <button class="nxt-btn"><img src="static/img/arrow.png"
alt=""></button>
    <div class="product-container">
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card1.png" class="product-thumb"</pre>
alt="">
           <button class="card-btn">add to whislist</button>
         </div>
```

```
<div class="product-info">
           <h2 class="product-brand">brand</h2>
          a short line about the
cloth.
          <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
        </div>
      </div>
      <div class="product-card">
        <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card2.png" class="product-thumb"</pre>
alt="">
          <button class="card-btn">add to whislist</button>
        </div>
        <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
```

```
price">$40</span>
         </div>
       </div>
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card3.png" class="product-thumb"</pre>
alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card4.png" class="product-thumb"</pre>
alt="">
           <button class="card-btn">add to whislist</button>
```

```
</div>
        <div class="product-info">
          <h2 class="product-brand">brand</h2>
          a short line about the
cloth.
          <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
        </div>
      </div>
      <div class="product-card">
        <div class="product-image">
          <span class="discount-tag">50% offer</span>
          <img src="static/img/card5.png" class="product-thumb"</pre>
alt="">
          <button class="card-btn">add to whislist</button>
        </div>
        <div class="product-info">
          <h2 class="product-brand">brand</h2>
          a short line about the
cloth.
```

```
<span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card6.png" class="product-thumb"</pre>
alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card7.png" class="product-thumb"</pre>
alt="">
```

```
<button class="card-btn">add to whislist</button>
        </div>
        <div class="product-info">
           <h2 class="product-brand">brand</h2>
          a short line about the
cloth.
          <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
        </div>
      </div>
      <div class="product-card">
        <div class="product-image">
           <span class="discount-tag">50% offer</span>
          <img src="static/img/card8.png" class="product-thumb"</pre>
alt="">
          <button class="card-btn">add to whislist</button>
        </div>
        <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
```

```
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
    </div>
  </section>
  <section class="product">
    <h2 class="product-category">shirts</h2>
    <button class="pre-btn"><img src="static/img/arrow.png"
alt=""></button>
  <button class="nxt-btn"><img src="static/img/arrow.png"
alt=""></button>
    <div class="product-container">
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/product image 1.png" class="product-</pre>
thumb" alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
```

```
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/product image 2.png" class="product-</pre>
thumb" alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
```

```
<div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/product image 3.png" class="product-</pre>
thumb" alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/product image 4.png" class="product-</pre>
thumb" alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
```

```
a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
      </div>
    </div>
  </section>
  <section class="product">
    <h2 class="product-category">shoes</h2>
    <button class="pre-btn"><img src="static/img/arrow.png"</pre>
alt=""></button>
  <button class="nxt-btn"><img src="static/img/arrow.png"</pre>
alt=""></button>
    <div class="product-container">
       <div class="product-card">
```

```
<div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card9.png" class="product-thumb"</pre>
alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
      </div>
      <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card10.png" class="product-thumb"</pre>
alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
```

```
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card11.png" class="product-thumb"</pre>
alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
```

```
<div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card12.png" class="product-thumb"</pre>
alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
      </div>
    </div>
  </section>
<footer></footer>
```

```
<script src="static/js/nav.js"></script>
  <script src="static/js/footer.js"></script>
  <script src="static/js/home.js"></script>
  <script src="static/js/product.js"></script>
</body>
</html>
Search.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-</pre>
scale=1.0">
  <title>Search Results for</title>
  <link rel="stylesheet" href="static/css/home.css">
 <link rel="stylesheet" href="static/css/search.css">
</head>
<body>
  <nav class="navbar"></nav>
```

```
<section class="search-results">
    <h2 class="heading">search results for
<span>product</span></h2>
  </section>
  <div class="product-container">
    <div class="product-card">
       <div class="product-image">
         <span class="discount-tag">50% offer</span>
         <img src="static/img/card1.png" class="product-thumb"</pre>
alt="">
         <button class="card-btn">add to whislist</button>
       </div>
       <div class="product-info">
         <h2 class="product-brand">brand</h2>
         a short line about the cloth.
         <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
       </div>
    </div>
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card2.png" class="product-thumb"</pre>
alt="">
```

```
<button class="card-btn">add to whislist</button>
        </div>
        <div class="product-info">
           <h2 class="product-brand">brand</h2>
          a short line about the
cloth.
          <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
        </div>
      </div>
      <div class="product-card">
        <div class="product-image">
           <span class="discount-tag">50% offer</span>
          <img src="static/img/card3.png" class="product-thumb"</pre>
alt="">
          <button class="card-btn">add to whislist</button>
        </div>
        <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
```

```
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card4.png" class="product-thumb"</pre>
alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card5.png" class="product-thumb"</pre>
```

```
alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
         </div>
       </div>
       <div class="product-card">
         <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card6.png" class="product-thumb"</pre>
alt="">
           <button class="card-btn">add to whislist</button>
         </div>
         <div class="product-info">
           <h2 class="product-brand">brand</h2>
```

```
a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
        </div>
      </div>
      <div class="product-card">
        <div class="product-image">
           <span class="discount-tag">50% offer</span>
           <img src="static/img/card7.png" class="product-thumb"</pre>
alt="">
           <button class="card-btn">add to whislist</button>
         </div>
        <div class="product-info">
           <h2 class="product-brand">brand</h2>
           a short line about the
cloth.
           <span class="price">$20</span><span class="actual-</pre>
price">$40</span>
        </div>
      </div>
      <div class="product-card">
        <div class="product-image">
           <span class="discount-tag">50% offer</span>
```

```
</div>
```

```
<footer></footer>
  <script src="static/js/nav.js"></script>
  <script src="static/js/footer.js"></script>
</body>
</html>
404.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-</pre>
scale=1.0">
  <title>Page not found-User lost</title>
  <link rel="stylesheet" href="static/css/home.css">
 <link rel="stylesheet" href="static/css/404.css">
```

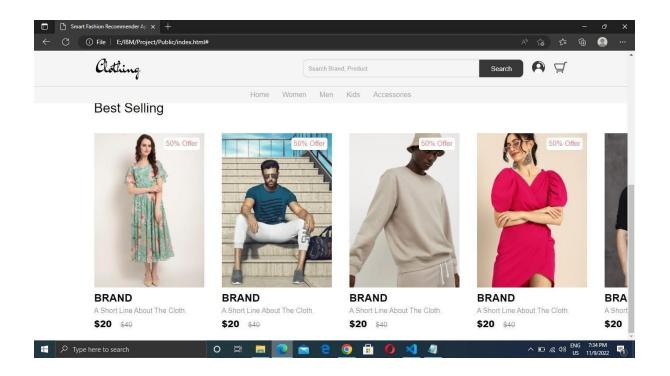
```
</head>
<body>
  <nav class="navbar"></nav>
  <img src="static/img/404.png" class="four-0-four-image" alt="">
look like you are lost. Head to back to our
<a href="#">homepage</a>
  <script src="static/js/nav.js"></script>
</body>
</html>
app.py
@app.route('/')
def index():
  return render_template('index.html')
@app.route('/product')
def product():
  return render_template('product.html')
```

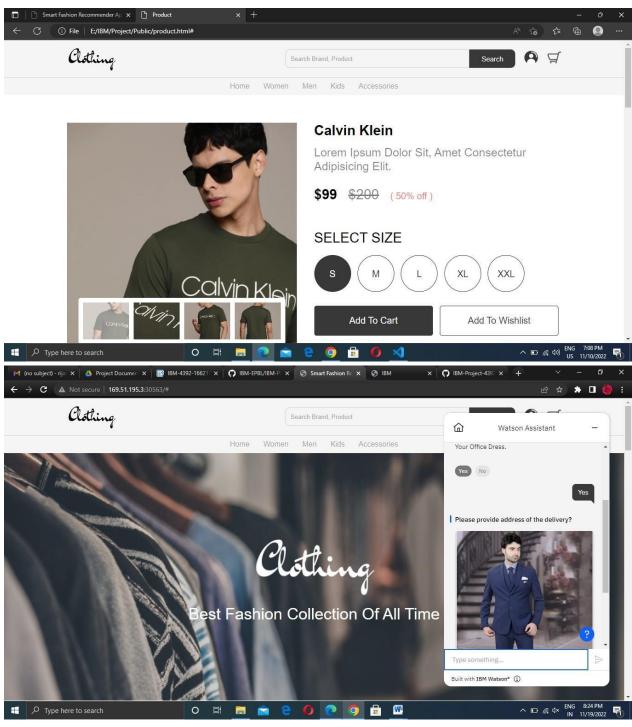
```
@ app.route('/search')
def search():
    return render_template('search.html')

@ app.route('/404')
def error():
    return render_template('404.html')

if __name__ ==' __main___':
    port = int(os.environ.get('PORT', 5000))
    app.run(debug=True, host='0.0.0.0', port=port)
```







GitHub & Project Demo Link

https://github.com/IBM-EPBL/IBM-Project-35563-1660286062