

SMART FASHION RECOMMENDER APPLICATION A PROJECT REPORT

Submitted by

RILWANA PARVEEN J	(Reg.No.912619104020)
PARAMESHWARI S	(Reg.No.912619104017)
SANDHIYA B	(Reg.No.912619104022)
SARANYA C	(Reg.No.912619104024)
SURIYA JOTHI S	(Reg.No.912619104029)

In partial fulfilment for the award of the degree
Of

BACHELOR OF ENGINEERING

IN

COMPUTER SCIENCE AND ENGINEERING

**SRI BHARATHI ENGINEERING COLLEGE FOR WOMEN
KAIKURICHI,PUDUKKOTTAI-622303**

1. INTRODUCTION

1.1. Project Overview

1.2. Purpose

2. LITERATURE SURVEY

2.1. Existing problem

2.2. References

2.3. Problem Statement Definition

3. IDEATION & PROPOSED SOLUTION

3.1. Empathy Map Canvas

3.2. Ideation & Brainstorming

3.3. Proposed Solution

3.4. Problem Solution fit

4. REQUIREMENT ANALYSIS

4.1. Functional requirement

4.2. Non-Functional requirements

5. PROJECT DESIGN

5.1. Data Flow Diagrams

5.2. Solution & Technical Architecture

5.3. User Stories

6. PROJECT PLANNING & SCHEDULING

6.1. Sprint Planning & Estimation

6.2. Sprint Delivery Schedule

6.3. Reports from JIRA

7. CODING & SOLUTIONING

7.1. Feature 1

7.2. Feature 2

7.3. Database Schema

8. TESTING

8.1. Test Cases

8.2. User Acceptance Testing

9. RESULTS

9.1. Performance Metrics

10.ADVANTAGES & DISADVANTAGES

11.CONCLUSION

12.FUTURE SCOPE

13.APPENDIX

Source Code

GitHub & Project Demo Link

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

The purpose of this Min project is to solve the existing problem of making delay in attending the customers and the chatbot did not answer the multiple part question. When a customer wants to know about the product details and procedure while they can't find in websites, chatbot acts as a servicer, and satisfy the customer needs. Interactions with customers are always at the center of a successful marketing strategy. And if your business can engage buyers effectively either on the website or in the app, it will easily achieve the sales goals on any scale. This is why chatbots are now a top channel of communication between customers and businesses.

Having an AI bot is a wise approach as 53% of consumers are more likely to shop with a business they can message. The use of AI-enabled bots can help you automate repetitive tasks and market the business in a big way. Chatbots for marketing is becoming an incredibly powerful marketing tool for businesses to improve customer engagement and qualify leads with dynamic conversational capabilities.

Chatbot marketing is an innovative approach of employing computer programs to automate interactions with prospects and drive revenue. It's used to qualify and engage with leads round the clock regardless of whether or not the marketing & sales team are available online. The purpose of bot marketing is to answer support questions and start conversations with website visitors as and when needed. It can help businesses promote their products or services with targeted messaging to boost customer engagement and increase brand visibility.

Chatbots can help automate marketing communication and ensure instant and timely responses to customer

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.
- [3] P. Ratnasingham, "The importance of trust in electronic commerce," *Internet Res.*, vol. 8, no. 4, pp. 313–321, Oct. 1998.
- [4] Y. Guo, M. Wang, and X. Li, "Application of an improved Apriori algorithm in a mobile e-commerce recommendation system," *Ind. Manage. Data Syst.*, vol. 117, no. 2, pp. 287–303, Mar. 2017.
- [5] B. Zareie and N. J. Navimipour, "The effect of electronic learning systems on the employee's commitment," *Int. J. Manage. Edu.*, vol. 14, no. 2, pp. 167–175, 2016.
- [6] N. J. Navimipour and Z. Soltani, "The impact of cost, technology acceptance and employees' satisfaction on the effectiveness of the electronic customer relationship management systems," *Comput. Hum. Behav.*, vol. 55, pp. 1052–1066, Feb. 2016.
- [7] S. H. Sharif, S. Mahmazi, N. J. Navimipour, and B. F. Aghdam, "A review on search and discovery mechanisms in social networks," *Int. J. Inf. Eng. Electron. Bus.*, vol. 5, no. 6, p. 64, 2013.
- [8] N. J. Navimipour, A. M. Rahmani, A. H. Navin, and M. Hosseinzadeh, "Expert cloud: A cloud-based framework to share the knowledge and skills of human resources," *Comput. Hum. Behav.*, vol. 46, pp. 57–74, May 2015. [9] S. Hazratzadeh and N. J. Navimipour, "Colleague recommender system in the expert cloud using features matrix," *Kybernetes*, vol. 45, no. 9, pp. 1342–1357, Oct. 2016.
- [10] M. Ashouraie and N. J. Navimipour, "Priority-based task scheduling on heterogeneous resources in the expert cloud," *Kybernetes*, vol. 44, no. 10, pp. 1455–1471, Nov. 2015.

- [11] N. J. Navimipour, A. M. Rahmani, A. H. Navin, and M. Hosseinzadeh, “Job scheduling in the expert cloud based on genetic algorithms,” *Kybernetes*, vol. 43, no. 8, pp. 1262–1275, Aug. 2014.
- [12] A. Sourì, A. M. Rahmani, and N. J. Navimipour, “Formal verification approaches in the Web service composition: A comprehensive analysis of the current challenges for future research,” *Int. J. Commun. Syst.*, vol. 31, no. 17, p. e3808, Nov. 2018.
- [13] A. Simovic, “A big data smart library recommender system for an educational institution,” *Library Hi Tech*, vol. 36, no. 3, pp. 498–523, Sep. 2018.
- [14] P. Resnick and H. R. Varian, “Recommender systems,” *Commun. ACM*, vol. 40, no. 3, pp. 56–58, 1997.
- [15] S. Pal and S. Pal, “Recommender system in e-commerce: Bringing revolution in marine product industry,” *Indian J. Comput. Sci.*, vol. 3, no. 5, pp. 7–13, 2018.
- [16] D. Galeano and A. Paccanaro, “A recommender system approach for predicting drug side effects,” in *Pros. Int. Joint Conf. Neural Netw. (IJCNN)*, Jul. 2018, pp. 1–8.
- [17] J. Chen, B. Wang, L. U, and Z. Ouyang, “Personal recommender system based on user interest community in social network model,” *Phys. A, Stat. Mech. Appl.*, vol. 526, Jul. 2019, Art. no. 120961.

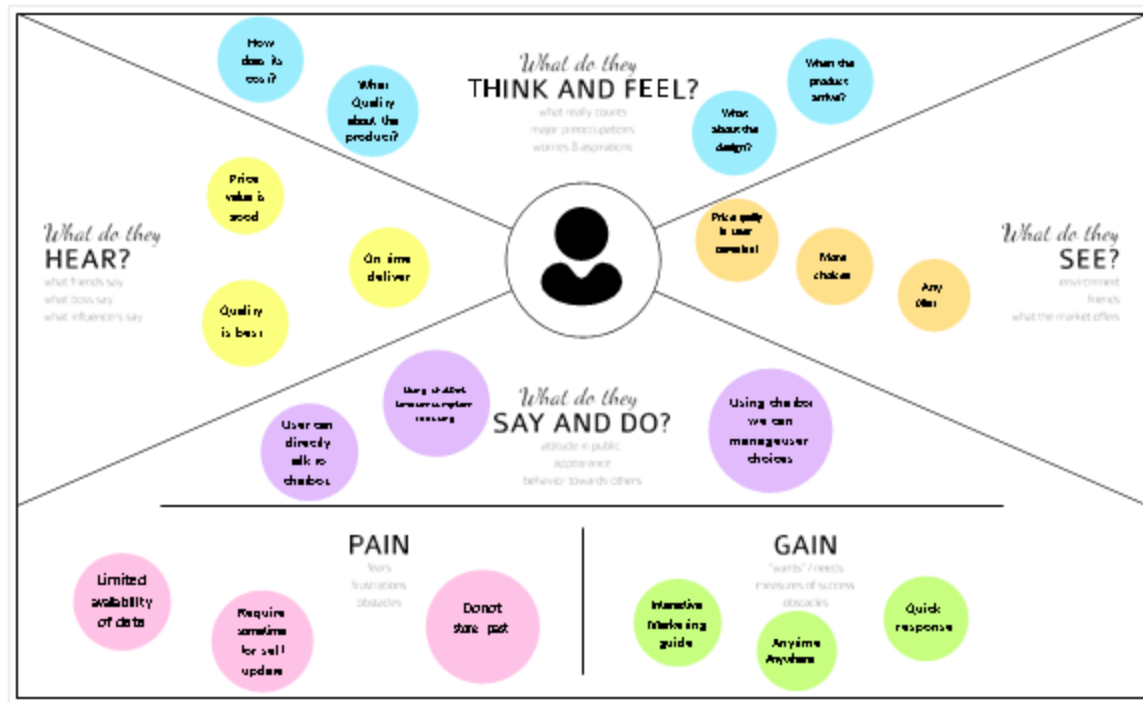
2.3 Problem Statement Definition

Chatbots can be available to solve customer problems 24/7 whether it is day or night! They don’t need to sleep after all! This is much more difficult to

achieve using human customer service as it would require rotating teams that would be more complicated to manage as well.

3. IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas



3.2 Ideation & Brainstorming

SMART FASHION RECOMMENDER 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 AI 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

A Team gathering
Define who should participate in the session and send an invite. Share relevant information or pre-work ahead.

B Set the goal
Think about the problem you'll be focusing on solving in the brainstorming session.

C Learn how to use the facilitation tools
Use the Facilitation Superpowers to run a happy and productive session.

[Open article](#)

1 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-friendly interface. The main aim of the project is to develop a smart chatbot that is able to understand the needs of the user and recommend products of desire.

PROBLEM

How might we (your problem statement)?

Key rules of brainstorming

To run a smooth and productive session

- Stay in topic.
- Defer judgment.
- Go for volume.
- Encourage wild ideas.
- Listen to others.
- If possible, be visual.

4 Prioritize

Your team should all be on the same page about what's important moving forward. Place your ideas on this grid to determine which ideas are important and which are feasible.

20 minutes

Importance

If each of these tasks could get done without any difficulty or cost, which would have the most positive impact?

The grid shows ideas plotted by importance (y-axis) and feasibility (x-axis). A diagonal line separates high-impact/feasible ideas from low-impact/feasible ones.

- High Resolution images for product** (High importance, Low feasibility)
- Handle Secure payments** (Medium importance, Low feasibility)
- Offers/Discount** (Low importance, Low feasibility)
- Reduce user navigation** (Medium importance, Medium feasibility)
- Best design in market** (High importance, High feasibility)
- User friendly web application** (High importance, High feasibility)
- Instant product results based on preferences** (Medium importance, High feasibility)
- Well defined product description and its available categories** (Medium importance, High feasibility)

TP
Participants can use their cursor to point at where sticky notes should go on the grid. The facilitator can confirm the spot by using the laser pointer holding the sticky note on the sticky note.

After you collaborate

You can export the mural as an image or pdf to share with members of your company who might find it helpful.

Quick add-ons

A Share the mural
Share a view link to the mural with stakeholders to keep them in the loop about the outcomes of the session.

B Export the mural
Export a copy of the mural as a PNG or PDF to attach to emails, include in slides, or save in your drive.

Keep moving forward

- Strategy blueprint**
Define the components of a new idea or strategy.
[Open the template](#)
- Customer experience journey map**
Understand customer needs, motivations, and obstacles for an experience.
[Open the template](#)
- Strengths, weaknesses, opportunities & threats**
Identify strengths, weaknesses, opportunities, and threats (SWOT) to develop a plan.
[Open the template](#)

[Share template feedback](#)

3.3 Proposed Solution

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	<p>A new innovative solution through which users can directly do online shopping based on the choice without any search.</p> <p>It can be done using a chatbot.</p> <p>Modules Used:</p> <ul style="list-style-type: none"> • Admin <p>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.</p> <ul style="list-style-type: none"> • User <p>The user will login into the website and go through the products available on the website .Instead of navigating to</p>

		<p>several screens for booking products online ,The user can directly talk to the chatbot regarding the product</p>
2.	Idea / Solution description	<p>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 and suggests available offers of the product.</p> <p>The introduction of chatbot makes an interactive website and boosts the productivity of the product.</p>
3.	Novelty / Uniqueness	<p>Many online shopping application is mainly based on the search engine while this project make use of interactive chatbot like alexa,siri etc</p>

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 systems 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

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) Age, gender, location, browsing habits, interests and even the devices we use, say a lot about our shopping habits. They influence what we buy, why we buy, and how often we spend money.	6. CUSTOMER CONSTRAINTS <ul style="list-style-type: none"> Quality issues. Delivery and logistics Digital payment failures. Additional charges. Unclear return and guarantee policies Lack of security. 	5. AVAILABLE SOLUTIONS <ul style="list-style-type: none"> Generally, the search bar option is available when a customer or user needs to find the desired product. However, occasionally this can lead to the user or customer finding a product that is unrelated to what they were looking for. 	Explore AS, differential
	2. JOBS-TO-BE-DONE / PROBLEMS <ul style="list-style-type: none"> Navigating between various screens to make an online purchase. This one is the grumpy one. Typically, e-commerce features include searching for a user's product may take more time. 	9. PROBLEM ROOT CAUSE <ul style="list-style-type: none"> Making an online purchase while navigating between numerous screens. The grouchy one is the one. When a customer visits your e-commerce website, they expect to easily and quickly locate what they're looking for. 	7. BEHAVIOUR <ul style="list-style-type: none"> A key priority convenience. Simple access on all devices. Availability of omnichannel shopping Uncomplicated payment Quick and dependable shipping. 	
Focus on J&P, tap into BE, understand RC	3. TRIGGERS <ul style="list-style-type: none"> Utilize the personal touch. Encourage Loyalty 	10. YOUR SOLUTION <ul style="list-style-type: none"> You can directly do your online shopping based on your choice without any search. It can be done by using a chatbot. User recommendations can be made by the chatbot depending on their interests. It may advertise their day's top specials and promotions. It will keep a database of the customer's information and orders. If the order is accepted, the chatbot will 	8. CHANNELS OF BEHAVIOUR ONLINE <ul style="list-style-type: none"> In order to purchase a specific commodity or service, the customer must first register online at the relevant website. A customer adds a good or service to their "shopping cart" when they like it. OFFLINE <ul style="list-style-type: none"> Warehouseman collects products specified in an order. 	Focus on J&P, tap into BE, understand RC

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

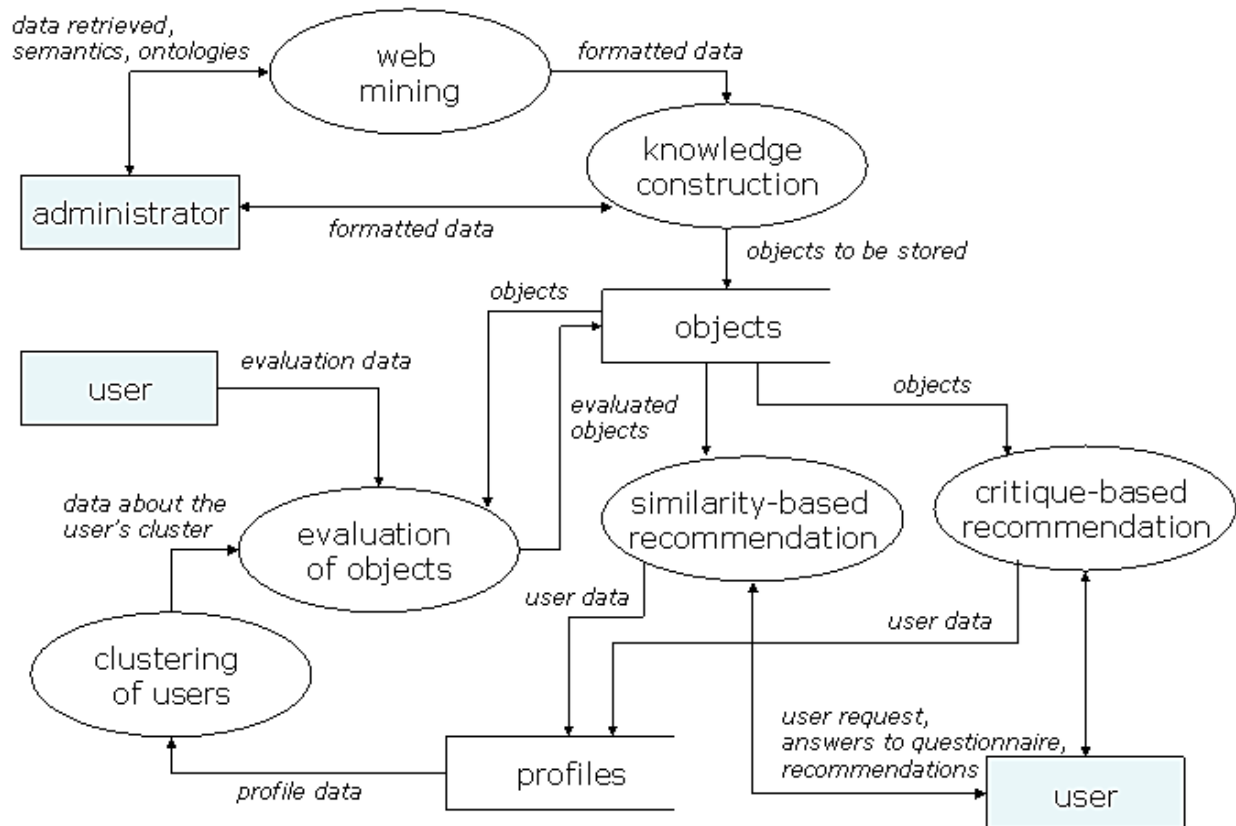
NFR-1	usability	<p>The application will be designed for making Good HUMAN – COMPUTER Interaction in such a way,</p> <p>Any user can easily navigate</p> <p>User Can easily View and understandable</p> <p>Comfort while making Place order</p> <p>Comfort with tracking facilities</p> <p>Easy and Compact design</p> <p>These all are about to achieve a defined goal Effectively, Efficiently and Satisfactorily.</p>
NFR-2	Security	<p>The application will be Using of “Secure Socket Layer” (SSL) Certificate will provide a More security of the Project and This process will happen</p>

		<p>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.</p>
NFR-3	Reliability	<p>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.</p>
NFR-4	Performance	<p>It Focus on the loading application as quickly as possible irrespective of the number of user traffic</p>
NFR-5	Availability	<p>The Application will be Available to all users at any given point of time.</p> <p>User can access the chatbot for raising any queries.</p>
NFR-6	Scalability	<p>Chatbot can be very useful during festival</p>

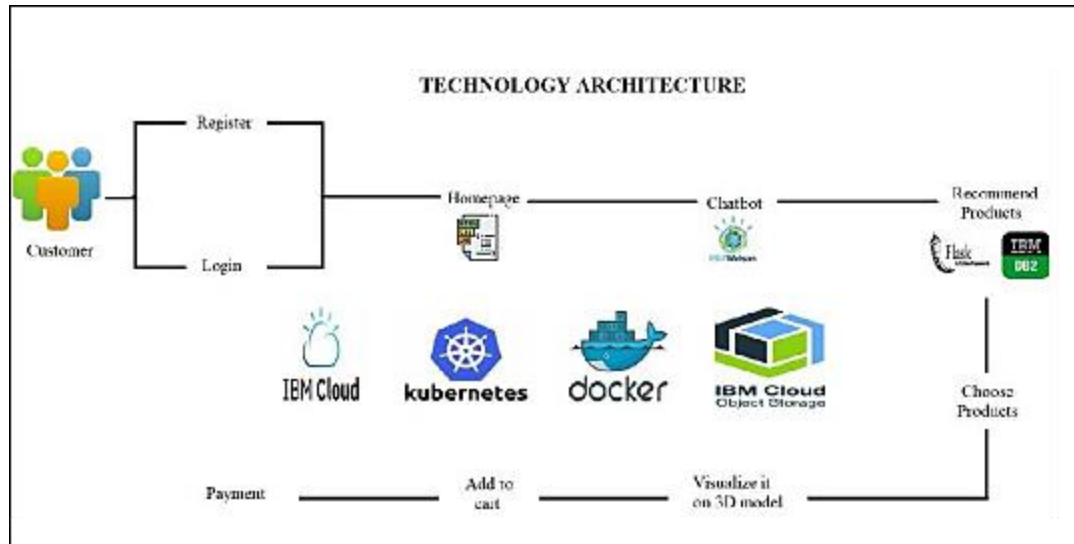
		season to know about offers and discounts. It will be helpful whenever we make online shopping
--	--	--

5.PROJECT DESIGN

5.1 Data Flow Diagrams



5.2 Solution & Technical Architecture



5.3 User Stories

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,	I can access my account / dashboard	High	Sprint-1

			password, and confirming my password.			
		USN-2	As a user, I will receive confirmatio n email once I have registered for the application	I can receive confirmatio n 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 Gmail login	Low	Sprint-2
		USN-4	As a user, I can register for the application through Gmail	I can register &access the dashboard 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 application with Gmail login	High	Sprint-1
	Dashboard	USN-5	As a user ,I can log access the dashboard of the application by logging into the application	I can access the dashboard by logging into the application	High	Sprint-1
Customer (Web user)	Registration	USN-1	As a user ,I can register for the web page by entering the email ,password	I can access my account /dashboard	High	Sprint-1

			and confirming my password			
		USN-2	As a user I will receive confirmatio n email once I have registered for the web- pages	I can register & access the dashboard e with Gmail login	High	Sprint-1
		USN-3	As a user, I can registered for the web- page through Email	I can register & access the dashboard with Gmail Login	Low	Sprint-2
		USN-4	As a user, I can register for the web- page through Email	I can register & access the dashboard with Gmail Login	Medium	Sprint-1

	login	USN-5	As a user, I can log into the web-page by entering my username/e mail & password	I can login into the application with Gmail Login	High	Sprint-1
	Dashboard	USN-5	As a user, I can log access the dashboard by logging into the web-page	I can access the dashboard by logging into the web-page	High	Sprint-1
	Login	USN-1	As a customer care executive, I can log into the application by entering my	As a customer care executive, I can log into the application by entering	High	Sprint-1

			executive email id & password	my executive email id & password		
	Dashboard	USN-1	As a customer care executive, I can access the dashboard of the application by logging into the application	As a customer care executive, I can access the dashboard of the application by logging into the application	High	Sprint-1
	Service	USN-1	As a customer Care Executive, I can access the customer care service page of the application by logging and	I can access the service page by logging & accessing the page	High	Sprint-1

			accessing the page			
Administrator	Login	USN-1	As a administrator, I can log into the application by entering my administrator email id & password	I can log into the application with Gmail application	High	Sprint-1
	Dashboard	USN-1	As a Administrator, I can access the dashboard of the application by logging into the application	I can access the dashboard by logging into the application.	High	Sprint-1

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 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 <ul style="list-style-type: none">● registration page● login page

		<ul style="list-style-type: none"> • 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	Once the image is uploaded

	cluster	to IBM container registry deploy the image toward IBM kubernetes cluster
--	---------	---

Completed Tasks:

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 and 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		USN-7	As a user, I Create IBM DB2 and connect with Python		High	S.Parameshwari B.Sandhiya C.Saranya
Sprint-3		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	2	Medium	S.Parameshwari B.Sandhiya

			IBM Container registry			C.Saranya
Sprint-4		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 <ul style="list-style-type: none"> ●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

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	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

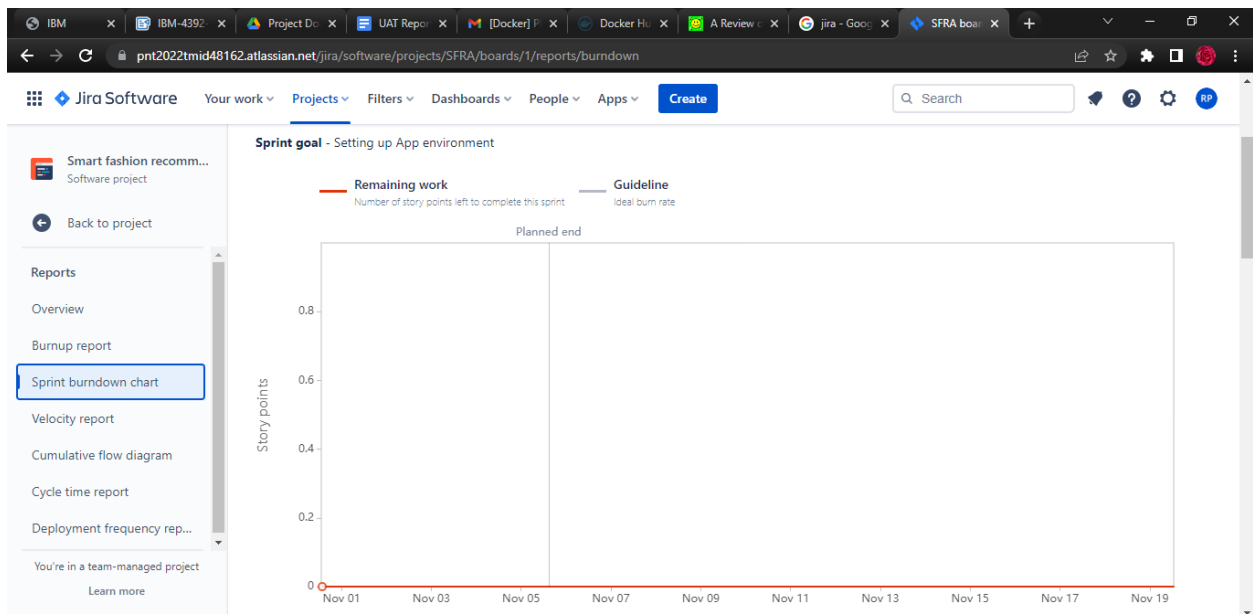
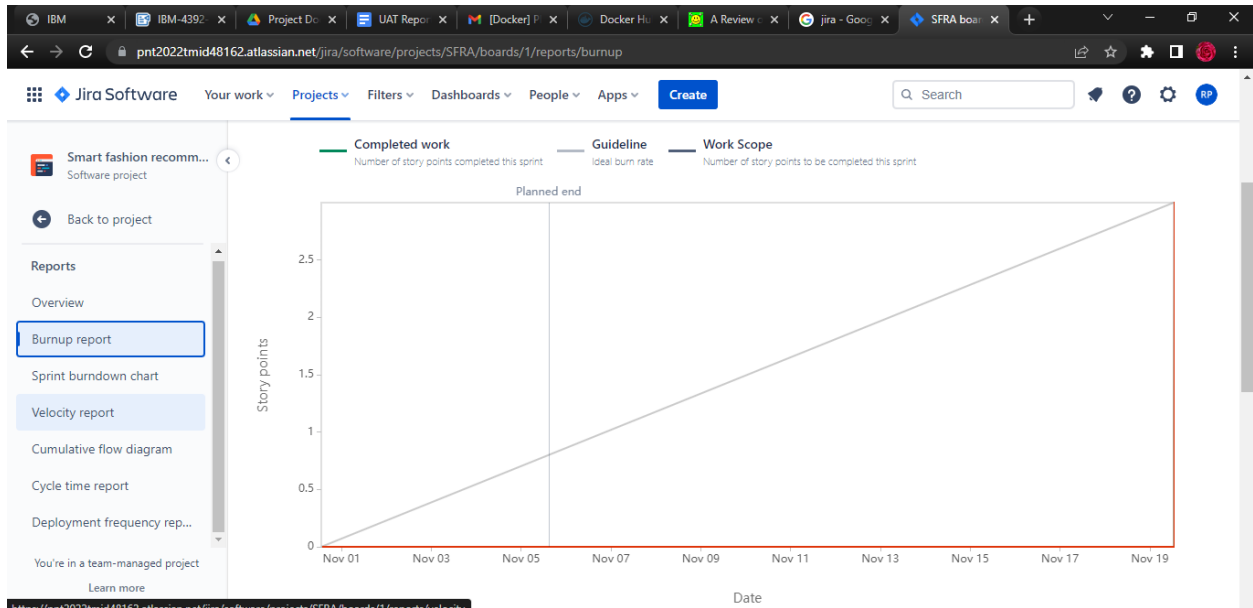
Velocity

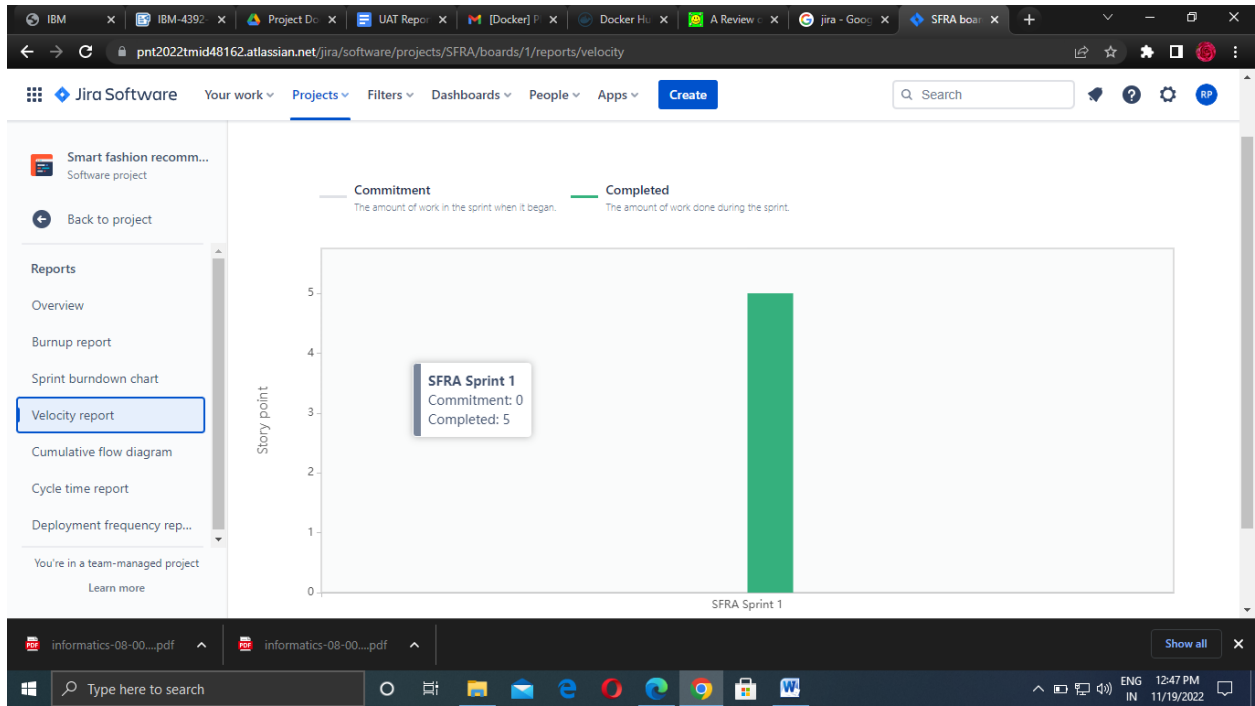
Imagine we have a 6-day sprint duration, and the velocity of the team is 18(points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \text{Sprint Duration} / \text{Velocity}$$

$$AV = 24/6 = 4$$

6.3 Reports from JIRA





7. CODING & SOLUTIONING

7.1 Feature 1

```
from flask import Flask, render_template
app = Flask(__name__, template_folder='Templates',
static_folder='static')
@app.route('/')
def index():
    return render_template('index.html')

if __name__=='__main__':
    app.run(debug = True)
!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">

<p class="sub-heading">best fashion collection of all time</p>

</div>

</header>

<section class="product">

<h2 class="product-category">best selling</h2>

<button class="pre-btn"></button>

<button class="nxt-btn"></button>

<div class="product-container">

<div class="product-card">

```
<div class="product-image">
  <span class="discount-tag">50% offer</span>
  
  <button class="card-btn">add to wishlist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to wishlist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
```

```
        <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>  
          
        <button class="card-btn">add to wishlist</button>  
    </div>  
    <div class="product-info">  
        <h2 class="product-brand">brand</h2>  
        <p class="product-short-des">a short line about the  
cloth.</p>  
        <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>

<button class="card-btn">add to wishlist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to wishlist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
```

```
        <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>  
          
        <button class="card-btn">add to wishlist</button>  
    </div>  
    <div class="product-info">  
        <h2 class="product-brand">brand</h2>  
        <p class="product-short-des">a short line about the  
cloth.</p>  
        <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>

<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
```

\$20\$40

</div>

</div>

</div>

</section>

<!-- collections -->

<section class="collection-container">

**<p class="collection-title">women
 apparels</p>**

**<p class="collection-title">men
 apparels</p>**

<p class="collection-title">accessories</p>

</section>

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

  <div class="product-card">
    <div class="product-image">
```



```
<span class="discount-tag">50% offer</span>

<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
<h2 class="product-brand">brand</h2>
<p class="product-short-des">a short line about the
cloth.</p>
<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>

<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
```

```
<h2 class="product-brand">brand</h2>
<p class="product-short-des">a short line about the
cloth.</p>
<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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>

<button class="card-btn">add to wishlist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to wishlist</button>
  </div>
```

```
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>
  
  <button class="card-btn">add to wishlist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to wishlist</button>
  </div>
```

```
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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"></button>
  <button class="nxt-btn"></button>
  <div class="product-container">
    <div class="product-card">
      <div class="product-image">
        <span class="discount-tag">50% offer</span>
        
        <button class="card-btn">add to whislist</button>
```

```
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
```

```
<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>  
      
    <button class="card-btn">add to wishlist</button>  
  </div>  
  <div class="product-info">  
    <h2 class="product-brand">brand</h2>  
    <p class="product-short-des">a short line about the  
cloth.</p>  
    <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>  
      
    <button class="card-btn">add to wishlist</button>
```



```
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <span class="price">$20</span><span class="actual-
price">$40</span>
</div>
</div>
```

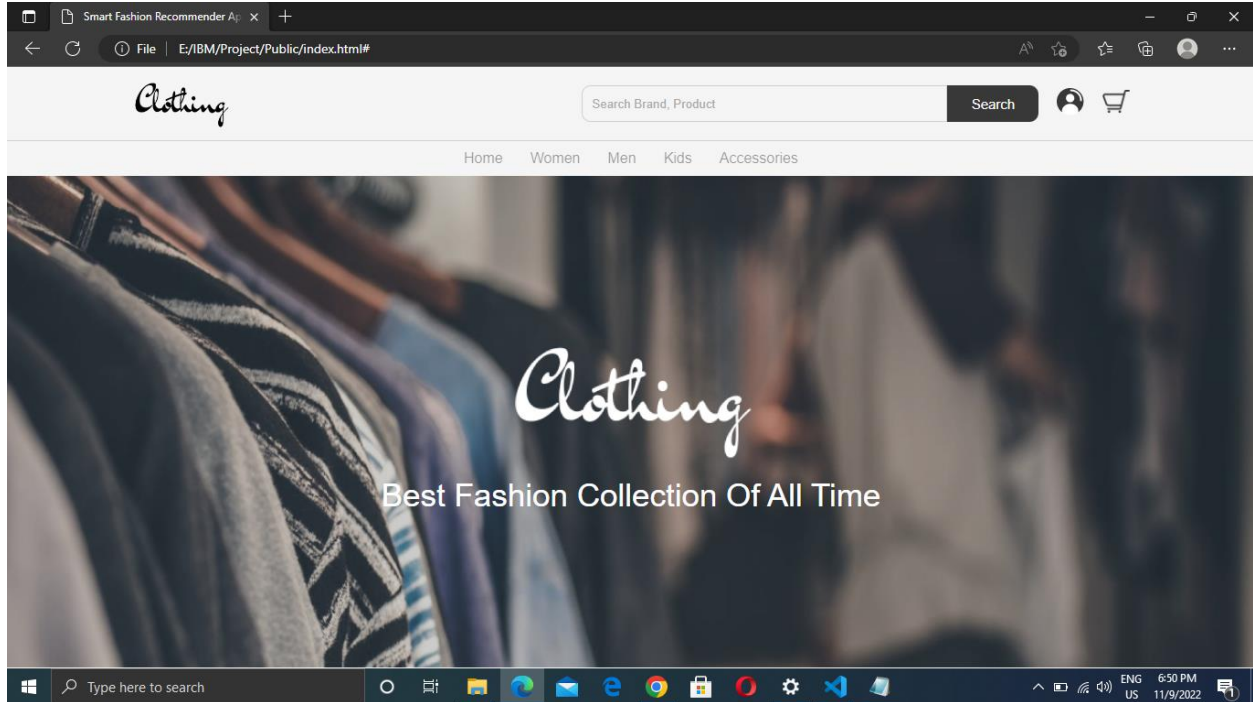
```
</div>
</section>
<footer>
```

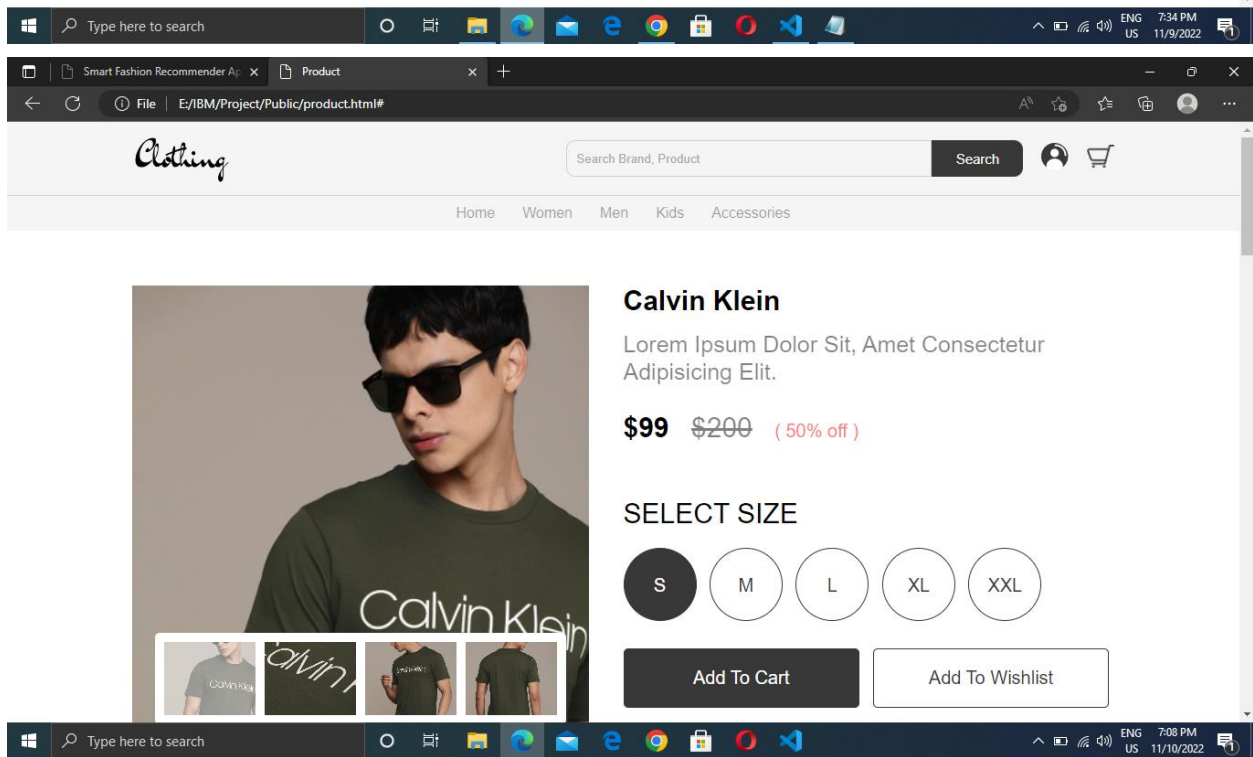
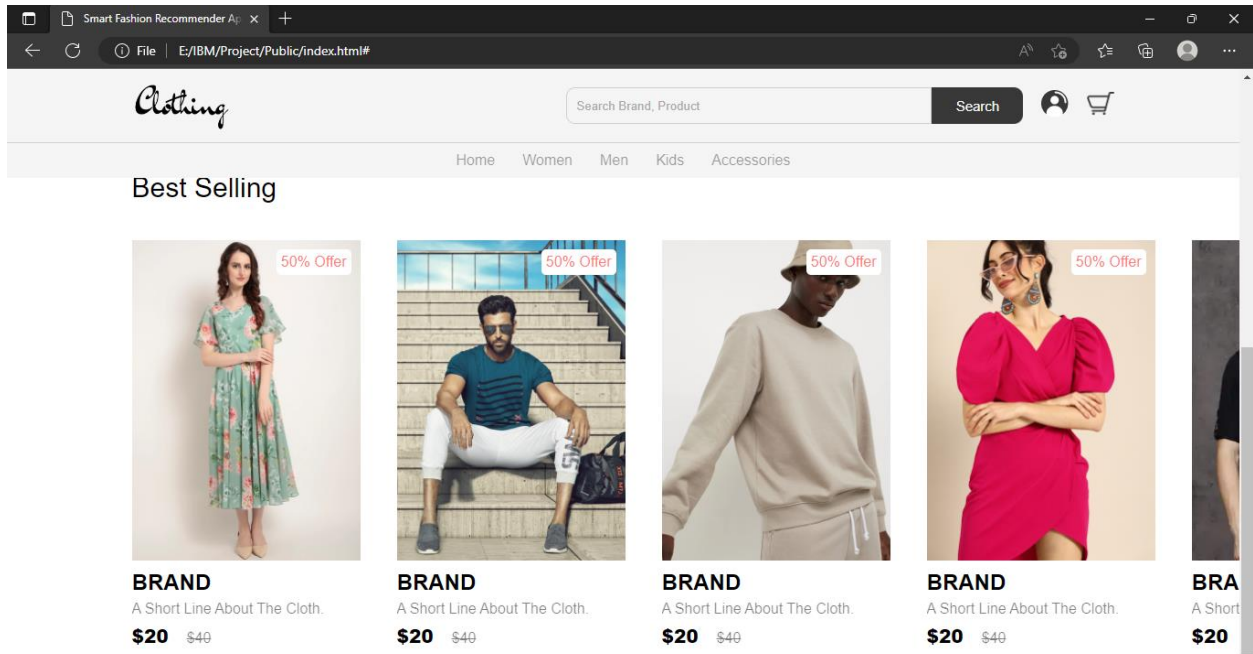
```
</footer>
<script src="static/js/nav.js"></script>
<script src="static/js/home.js"></script>
```

```
<script src="static/js/footer.js"></script>
```

```
</body>
```

```
</html>
```





7.2 Feature 2

```
from flask import Flask
```

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

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

```
def helloworld():
```

```
    return helloworld
```

```
if __name__=='__main__':
```

```
    app.run()
```

```
<!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>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">
      
      
      
      
    </div>
  </div>
  <div class="details">
    <h2 class="product-brand">calvin klein</h2>
    <p class="product-short-des">Lorem ipsum dolor sit, amet
consectetur adipisicing elit.</p>
    <span class="product-price">$99</span>
    <span class="product-actual-price">$200</span>
    <span class="product-discount">( 50% off )</span>

    <p class="product-sub-heading">select size</p>
```

**<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-
size">**

<label for="xl-size" class="size-radio-btn">xl</label>

**<input type="radio" name="size" value="xxl" hidden
id="xxl-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>

**<p class="des">Lorem ipsum dolor sit amet consectetur
adipiscing elit. Veniam,</p>**

```
</section>
<section class="product">
  <h2 class="product-category">best selling</h2>
  <button class="pre-btn"></button>
  <button class="nxt-btn"></button>
  <div class="product-container">
    <div class="product-card">
      <div class="product-image">
        <span class="discount-tag">50% offer</span>
        
        <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the
cloth.</p>
        <span class="price">$20</span><span class="actual-
price">$40</span>
```

</div>

</div>

<div class="product-card">

<div class="product-image">

50% offer

<button class="card-btn">add to whislist</button>

</div>

<div class="product-info">

<h2 class="product-brand">brand</h2>

<p class="product-short-des">a short line about the cloth.</p>

\$20\$40

</div>

</div>

<div class="product-card">

<div class="product-image">

50% offer

<button class="card-btn">add to whislist</button>

</div>

<div class="product-info">


```
<h2 class="product-brand">brand</h2>
<p class="product-short-des">a short line about the
cloth.</p>
<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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
```

```
<p class="product-short-des">a short line about the
cloth.</p>
    <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the
cloth.</p>
        <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <span class="price">$20</span><span class="actual-
price">$40</span>
  </div>
</div>
</div>
</section>
<section class="product">
  <h2 class="product-category">shirts</h2>
  <button class="pre-btn"></button>
  <button class="nxt-btn"></button>
  <div class="product-container">
    <div class="product-card">
```

```
<div class="product-image">
  <span class="discount-tag">50% offer</span>
  
  <button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
```

```
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
```

```
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the
cloth.</p>
        <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"></button>
```

```
<button class="nxt-btn"></button>
```

```
<div class="product-container">
  <div class="product-card">
    <div class="product-image">
      <span class="discount-tag">50% offer</span>
      
      <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
      <h2 class="product-brand">brand</h2>
      <p class="product-short-des">a short line about the
cloth.</p>
      <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>
      
```



```
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the
cloth.</p>
        <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the
cloth.</p>
```

```
        <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>
```

```
        
```

```
        <button class="card-btn">add to whislist</button>
```

```
    </div>
```

```
<div class="product-info">
```

```
    <h2 class="product-brand">brand</h2>
```

```
    <p class="product-short-des">a short line about the  
cloth.</p>
```

```
        <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/footer.js"></script>

<script src="static/js/home.js"></script>

<script src="static/js/product.js"></script>

</body>

</html>

8. TESTING

8.1 Test Cases

WPS Office

Testcases ...mplate (2)

Sign in

Free Trial

Menu

Paste

Cut

Copy

Format Painter

Home

Insert

Page Layout

Formulas

Data

Review

View

Tools

Sm

Click to F...

Calibri

11

A⁺

A⁻

B

I

U

Orientation

Merge and Center

Wrap Text

General

%

000

+0.00

-0.00

Conditional Formatting

Cell Style

G1

fx

	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB
3-Nov-22																							
PH2022TMExxxxxxxx																							
Project - xxx																							
4-Nov																							
5																							
	Steps To Execute	Test Data	Expected Result	Actual Result	Status	Comments	TC for Automation(Y/N)	BUG ID	Executed By														
6	1.Enter URL and click go 2.Click on My Account dropdown button 3.Verify login/Singup popup displayed or not	https://shoperner.com/	Login/Singup popup should display	Working as expected	Pass																		
7	1.Enter URL and click go 2.Click on My Account dropdown button 3.Verify login/Singup popup with below UI elements: a.Email text box b.Password text box c.Login button d.New customer? Create account link e.Last password? Recovery password link	https://shoperner.com/	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																		
8	1.Enter URL(https://shoperner.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: chulam@gmail.com password: Testing123	User should navigate to user account homepage	Working as expected	Pass																		
9	1.Enter URL(https://shoperner.com/) and click go 2.Click on My Account dropdown button 3.Enter Invalid username/email in Email text box 4.Enter valid password in password text box 5.Click on login button	Username: chulam@gmail.com password: Testing123	Application should show 'Incorrect email or password' validation message.	Working as expected	Pass																		
10	1.Enter	Username: chulam@gmail.com	Registration should show																				

Shopenner Testcases

Testscenarios

Average=0

Count=0

Sum=0

58%

Desktop

0:37

12:28 PM

Saturday

11/19/2022

8.2 User Acceptance Testing

8.2 User Acceptance Testing

Acceptance Testing
UAT Execution & Report Submission

Date	17 November 2022
Team ID	PRJ2022REC08912
Project Name	Smart Fashion Recommender Application
Maximum Marks	4 Marks

1. Purpose of Document
The purpose of this document is to briefly explain the test coverage and open issues of the Smart Fashion Recommender Application project at the time of the release to User Acceptance Testing (UAT).

2. Defect Analysis
This report shows the number of resolved or closed bugs at each severity level, and how they were resolved.

Resolution	Severity 1	Severity 2	Severity 3	Severity 4	Subtotal
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 Reproduced	0	0	1	0	1

9. RESULTS

9.1 Performance Metrics

S.No	Project Name	Project Overview	Test Outcome	Identified Defects
1	smart fashion recommender application	New	Low	No Changes
2	smart fashion recommender application	Manual	Worked as we expected	No defects

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.

- Better service to customers.

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.

CONCLUSION

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

Future chatbots can communicate at multiple levels with automation at the system level. They have the ability to maintain the system, task, and people contexts. 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 customer 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-
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">

<p class="sub-heading">best fashion collection of all time</p>

</div>

</header>

<section class="product">

<h2 class="product-category">best selling</h2>

<button class="pre-btn"></button>

<button class="nxt-btn"></button>

<div class="product-container">

<div class="product-card">

<div class="product-image">

50% offer

```
<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
```

```
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>
  
  <button class="card-btn">add to wishlist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to wishlist</button>
  </div>
```

```
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <span class="price">$20</span><span class="actual-
price">$40</span>
  </div>
</div>
</div>
</section>
```



```
<!-- collections -->
```

```
<section class="collection-container">
```

```
  <a href="#" class="collection">
```

```
    
```

```
    <p class="collection-title">women <br> apparels</p>
```

```
  </a>
```

```
  <a href="#" class="collection">
```

```
    
```

```
    <p class="collection-title">men <br> apparels</p>
```

```
  </a>
```

```
  <a href="#" class="collection">
```

```
    
```

```
    <p class="collection-title">accessories</p>
```

```
  </a>
```

```
</section>
```

```
<section class="product">
```

```
  <h2 class="product-category">shirts</h2>
```

```
  <button class="pre-btn"></button>
```

```
  <button class="nxt-btn"></button>
```

```
<div class="product-container">
  <div class="product-card">
    <div class="product-image">
      <span class="discount-tag">50% offer</span>
      
      <button class="card-btn">add to wishlist</button>
    </div>
    <div class="product-info">
      <h2 class="product-brand">brand</h2>
      <p class="product-short-des">a short line about the
cloth.</p>
      <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>
    
    <button class="card-btn">add to wishlist</button>
  </div>
  <div class="product-info">
```

```
<h2 class="product-brand">brand</h2>
<p class="product-short-des">a short line about the
cloth.</p>
<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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <span class="price">$20</span><span class="actual-
price">$40</span>
  </div>
```

</div>

<div class="product-card">

<div class="product-image">

50% offer

<button class="card-btn">add to whislist</button>

</div>

<div class="product-info">

<h2 class="product-brand">brand</h2>

<p class="product-short-des">a short line about the cloth.</p>

\$20\$40

</div>

</div>

<div class="product-card">

<div class="product-image">

50% offer

<button class="card-btn">add to whislist</button>

</div>

<div class="product-info">

```
<h2 class="product-brand">brand</h2>
<p class="product-short-des">a short line about the
cloth.</p>
<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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>
    
    <button class="card-btn">add to wishlist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>
    
    <button class="card-btn">add to wishlist</button>
  </div>
```

```
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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"></button>

<button class="nxt-btn"></button>

<div class="product-container">

<div class="product-card">

<div class="product-image">

50% offer

<button class="card-btn">add to whislist</button>

</div>

<div class="product-info">

<h2 class="product-brand">brand</h2>

<p class="product-short-des">a short line about the cloth.</p>


```
        <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>  
          
        <button class="card-btn">add to wishlist</button>  
    </div>  
    <div class="product-info">  
        <h2 class="product-brand">brand</h2>  
        <p class="product-short-des">a short line about the  
cloth.</p>  
        <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>

<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
```

```
        <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>
```

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-
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">
        
        
        
        
      </div>
    </div>
    <div class="details">
```

<h2 class="product-brand">calvin klein</h2>

**<p class="product-short-des">Lorem ipsum dolor sit, amet
consectetur adipisicing elit.</p>**

\$99

\$200

(50% off)

<p class="product-sub-heading">select size</p>

**<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-
size">**

<label for="xl-size" class="size-radio-btn">xl</label>

```
<input type="radio" name="size" value="xxl" hidden
id="xxl-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>
  <p class="des">Lorem ipsum dolor sit amet consectetur
adipisicing elit. Veniam, .....</p>
</section>
<section class="product">
  <h2 class="product-category">best selling</h2>
  <button class="pre-btn"></button>
  <button class="nxt-btn"></button>
  <div class="product-container">
    <div class="product-card">
      <div class="product-image">
        <span class="discount-tag">50% offer</span>
```

```

<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
```

```
<p class="product-short-des">a short line about the
cloth.</p>
    <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the
cloth.</p>
        <span class="price">$20</span><span class="actual-
price">$40</span>
        </div>
    </div>
</div>
<div class="product-card">
    <div class="product-image">
        <span class="discount-tag">50% offer</span>
```



```

<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
```

```

        <p class="product-short-des">a short line about the
cloth.</p>
        <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the
cloth.</p>
        <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>

```

```

<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the
cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
```

```

        <p class="product-short-des">a short line about the
cloth.</p>
        <span class="price">$20</span><span class="actual-
price">$40</span>
    </div>
</div>
</div>
</section>
<section class="product">
    <h2 class="product-category">shirts</h2>
    <button class="pre-btn"></button>
    <button class="nxt-btn"></button>
    <div class="product-container">
        <div class="product-card">
            <div class="product-image">
                <span class="discount-tag">50% offer</span>
                
                <button class="card-btn">add to whislist</button>
            </div>
            <div class="product-info">
                <h2 class="product-brand">brand</h2>

```

```
<p class="product-short-des">a short line about the
cloth.</p>
    <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the
cloth.</p>
        <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
```

```
        <p class="product-short-des">a short line about the
cloth.</p>
        <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"></button>
    <button class="nxt-btn"></button>
    <div class="product-container">
        <div class="product-card">
            <div class="product-image">
```

```
<span class="discount-tag">50% offer</span>

<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
<h2 class="product-brand">brand</h2>
<p class="product-short-des">a short line about the
cloth.</p>
<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>

<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
<h2 class="product-brand">brand</h2>
<p class="product-short-des">a short line about the
cloth.</p>
```



```
        <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>
```

```
        
```

```
        <button class="card-btn">add to whislist</button>
```

```
    </div>
```

```
<div class="product-info">
```

```
    <h2 class="product-brand">brand</h2>
```

```
    <p class="product-short-des">a short line about the  
cloth.</p>
```

```
        <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>

<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
<h2 class="product-brand">brand</h2>
<p class="product-short-des">a short line about the
cloth.</p>
<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/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-
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>
      
      <button class="card-btn">add to wishlist</button>
    </div>
    <div class="product-info">
      <h2 class="product-brand">brand</h2>
      <p class="product-short-des">a short line about the
cloth.</p>
      <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>
      
      <button class="card-btn">add to wishlist</button>
    </div>
    <div class="product-info">
      <h2 class="product-brand">brand</h2>
```

```
<p class="product-short-des">a short line about the
cloth.</p>
    <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the
cloth.</p>
        <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
```

```
<p class="product-short-des">a short line about the
cloth.</p>
    <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the
cloth.</p>
        <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the
cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
```


<p class="product-short-des">a short line about the cloth.</p>

\$20\$40

</div>

</div>

</div>

</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-
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>
```

```
  
```

```
<p class="four-0-four-msg">look like you are lost. Head to back to
our <a href="#">homepage</a></p>
```

```
<script src="static/js/nav.js"></script>
```

```
</body>
```

```
</html>
```

home.css

```
@import 'nav.css';
```

```
@import 'footer.css';
```

```
.hero-section{
```

```
    width: 100%;
```

```
    height: calc(100vh - 120px);
```

```
    background-image: url('../img/header.png');
```

```
    background-size: cover;
```

```
    display: flex;
```

```
    justify-content: center;
```

```
    align-items: center;
```

```
}
```

```
.hero-section .logo{
```

```
    height: 150px;
```

```
    display: block;
```

```
margin: auto;  
}
```

```
.hero-section .sub-heading{  
margin-top: 10px;  
text-align: center;  
color: #fff;  
text-transform: capitalize;  
font-size: 35px;  
font-weight: 300;  
}
```

```
.product{  
position: relative;  
overflow: hidden;  
padding: 20px 0;  
}
```

```
.product-category{  
padding: 0 10vw;  
font-size: 30px;  
font-weight: 500;  
margin-bottom: 40px;  
text-transform: capitalize;  
}
```

```
.product-container{
```

```
padding: 0 10vw;  
display: flex;  
overflow-x: auto;  
scroll-behavior: smooth;  
}
```

```
.product-container::-webkit-scrollbar{  
    display: none;  
}
```

```
.product-card{  
    flex: 0 0 auto;  
    width: 250px;  
    height: 450px;  
    margin-right: 40px;  
}
```

```
.product-image{  
    position: relative;  
    width: 100%;  
    height: 350px;
```

```
    overflow: hidden;  
}
```

product.css

```
.product-details{  
    width: 100%;  
    padding: 60px 10vw;  
    display: flex;  
    justify-content: space-between;  
}
```

```
.image-slider{  
    width: 500px;  
    height: 500px;  
    position: relative;  
    background-image: url('../img/product\ image\ 1.png');  
    background-size: cover;  
}
```

```
.product-images{  
    position: absolute;  
    bottom: 20px;  
    left: 50%;  
    transform: translateX(-50%);  
    width: 90%;  
    background: #fff;
```

```
border-radius: 5px;  
display: grid;  
grid-template-columns: repeat(4, 1fr);  
height: 100px;  
grid-gap: 10px;  
padding: 10px;  
}
```

```
.product-images img{  
  width: 100%;  
  height: 80px;  
  object-fit: cover;  
  cursor: pointer;  
}
```

```
.product-images img.active{  
  opacity: 0.5;  
}  
.details{  
  width: 50%;  
}
```

```
.details .product-brand{  
    text-transform: capitalize;  
    font-size: 30px;  
}
```

```
.details .product-short-des{  
    font-size: 25px;  
    line-height: 30px;  
    height: auto;  
    margin: 15px 0 30px;  
}
```

```
.product-price{  
    font-weight: 700;  
    font-size: 30px;  
}
```

```
.product-actual-price{  
    font-size: 30px;  
    opacity: 0.5;  
    text-decoration: line-through;  
    margin: 0 20px;  
    font-weight: 300;  
}
```



```
.product-discount{  
  color: #ff7d7d;  
  font-size: 20px;  
}
```

```
.product-sub-heading{  
  font-size: 30px;  
  text-transform: uppercase;  
  margin: 60px 0 10px;  
  font-weight: 300;  
}
```

```
.size-radio-btn{  
  display: inline-block;  
  width: 80px;  
  height: 80px;  
  text-align: center;  
  font-size: 20px;  
  border: 1px solid #383838;  
  border-radius: 50%;
```

```
margin: 10px;  
margin-left: 0;  
line-height: 80px;  
text-transform: uppercase;  
color: #383838;  
cursor: pointer;  
}
```

```
.size-radio-btn.check{  
    background: #383838;  
    color: #fff;  
}
```

```
.btn{  
    width: 48%;  
    padding: 20px;  
    border-radius: 5px;  
    background: none;  
    border: 1px solid #383838;  
    color: #383838;  
    font-size: 20px;  
    cursor: pointer;  
    margin: 20px 0;  
    text-transform: capitalize;  
}
```

```
.cart-btn{  
    margin-right: 2%;  
    background: #383838;  
    color: #fff;  
}  
.detail-des{  
    padding: 0 10vw;  
    text-transform: capitalize;  
}
```

```
.heading{  
    font-size: 30px;  
    margin-bottom: 30px;  
}
```

```
.des{  
    color: #383838;  
    line-height: 25px;  
}
```

search.css

```
.search-results{  
  width: 100%;  
  padding: 60px 0;  
}
```

```
.heading{  
  font-size: 20px;  
  text-transform: capitalize;  
  font-weight: 400;  
  margin-bottom: 40px;  
  padding: 0 10vw;  
}
```

```
.heading span{  
  font-weight: 700;  
}
```

```
.product-container{  
  display: grid;  
  grid-template-columns: repeat(4, 1fr);  
  height: auto;  
  grid-row-gap: 40px;  
}
```

404.css

```
.four-0-four-image{  
  display: block;
```

```
margin: 60px auto;  
}
```

```
.four-0-four-msg{  
  text-align: center;  
  text-transform: capitalize;  
  color: #383838;  
}
```

```
.four-0-four-msg a{  
  color: #383838;  
}
```

Home.js

```
const productContainers = [...document.querySelectorAll('.product-  
container')];
```

```
const nxtBtn = [...document.querySelectorAll('.nxt-btn')];
```

```
const preBtn = [...document.querySelectorAll('.pre-btn')];
```

```
productContainers.forEach((item, i) => {  
  let containerDimenstions = item.getBoundingClientRect();  
  let containerWidth = containerDimenstions.width;
```

```
nxtBtn[i].addEventListener('click', () => {  
    item.scrollLeft += containerWidth;  
})
```

```
preBtn[i].addEventListener('click', () => {  
    item.scrollLeft -= containerWidth;  
})  
})
```

Product.js

```
const productImages = document.querySelectorAll(".product-  
images img"); // selecting all image thumbs  
const productImageSlide = document.querySelector(".image-  
slider"); // selecting image slider element
```

```
let activeImageSlide = 0; // default slider image
```

```
productImages.forEach((item, i) => { // loopinh through each image  
thumb
```

```
    item.addEventListener('click', () => { // adding click event to each  
image thumbnail
```

```
        productImages[activeImageSlide].classList.remove('active'); //  
removing active class from current image thumb
```

```
        item.classList.add('active'); // adding active class to the current  
or clicked image thumb
```

```
        productImageSlide.style.backgroundImage =  
        `url('${item.src}')`; // setting up image slider's background image  
        activeImageSlide = i; // updating the image slider variable to  
track current thumb  
    })  
})
```

```
const sizeBtns = document.querySelectorAll('.size-radio-btn'); //  
selecting size buttons  
let checkedBtn = 0; // current selected button
```

```
sizeBtns.forEach((item, i) => { // looping through each button  
    item.addEventListener('click', () => { // adding click event to each  
        sizeBtns[checkedBtn].classList.remove('check'); // removing  
check class from the current button  
        item.classList.add('check'); // adding check class to clicked  
button  
        checkedBtn = i; // upading the variable  
    })  
})
```

app.py

```
from flask import Flask, render_template
import os
```

```
app = Flask(__name__, 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')
```

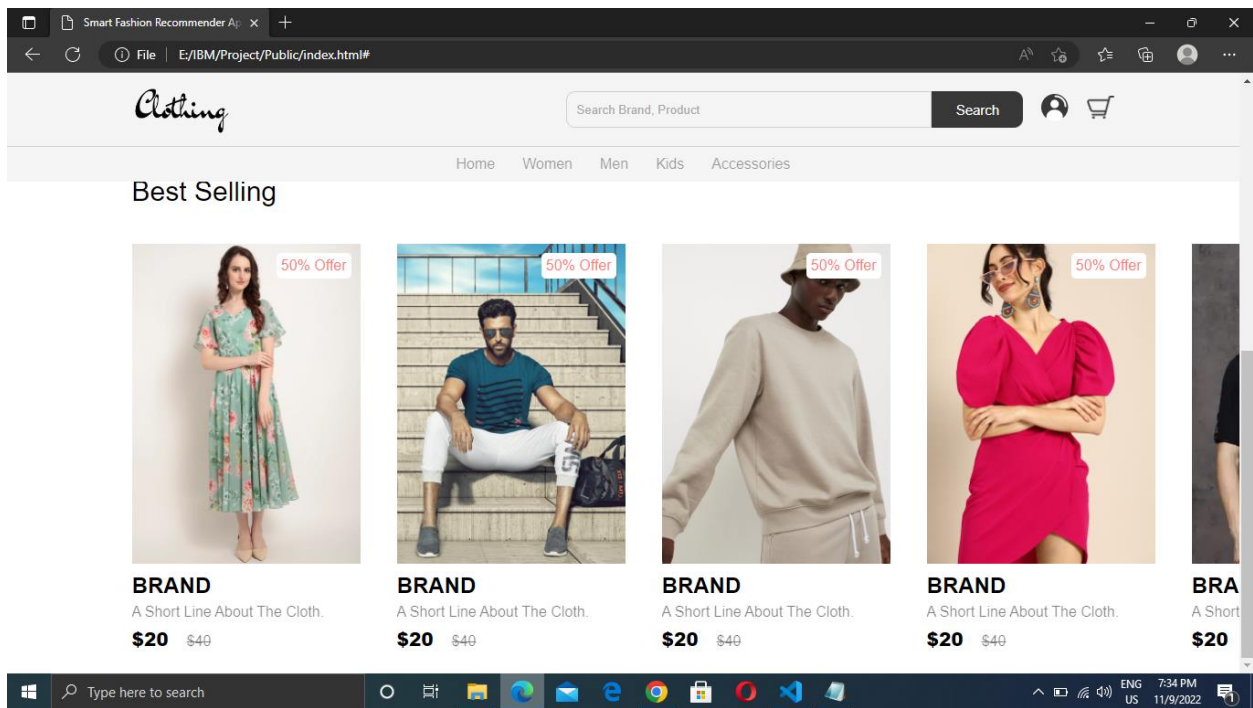
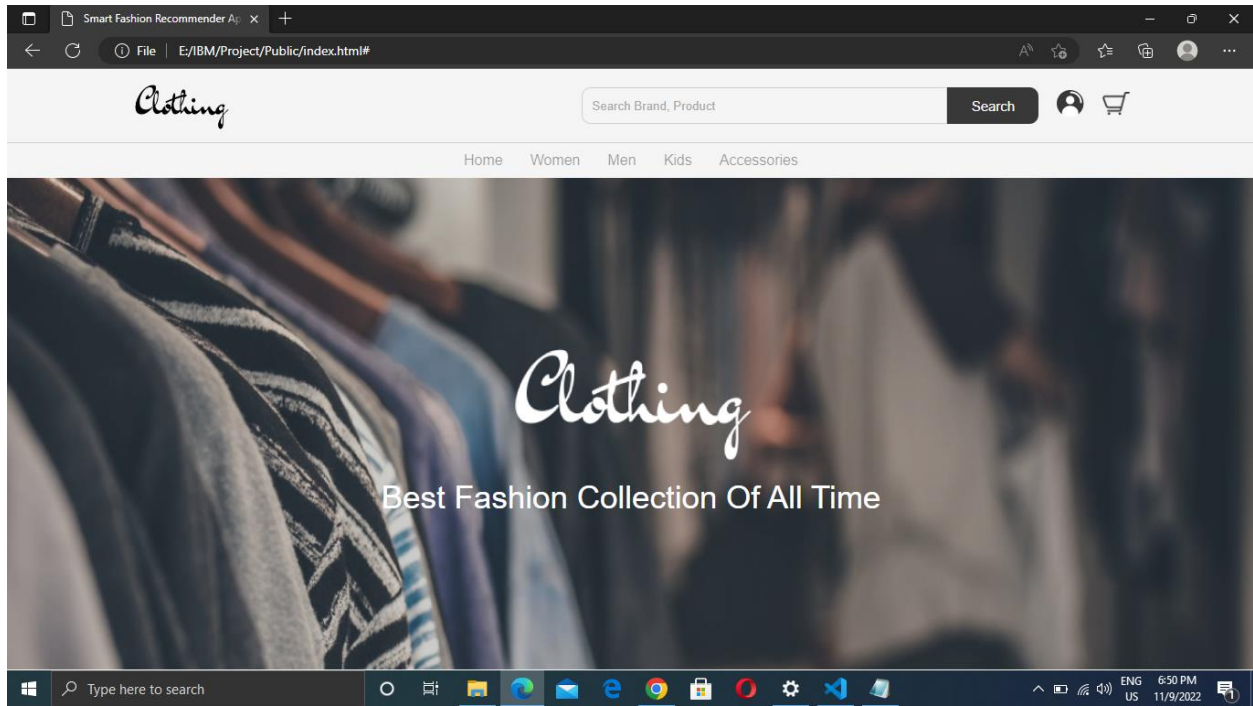
```
@app.route('/404')
def error():
    return render_template('404.html')
```

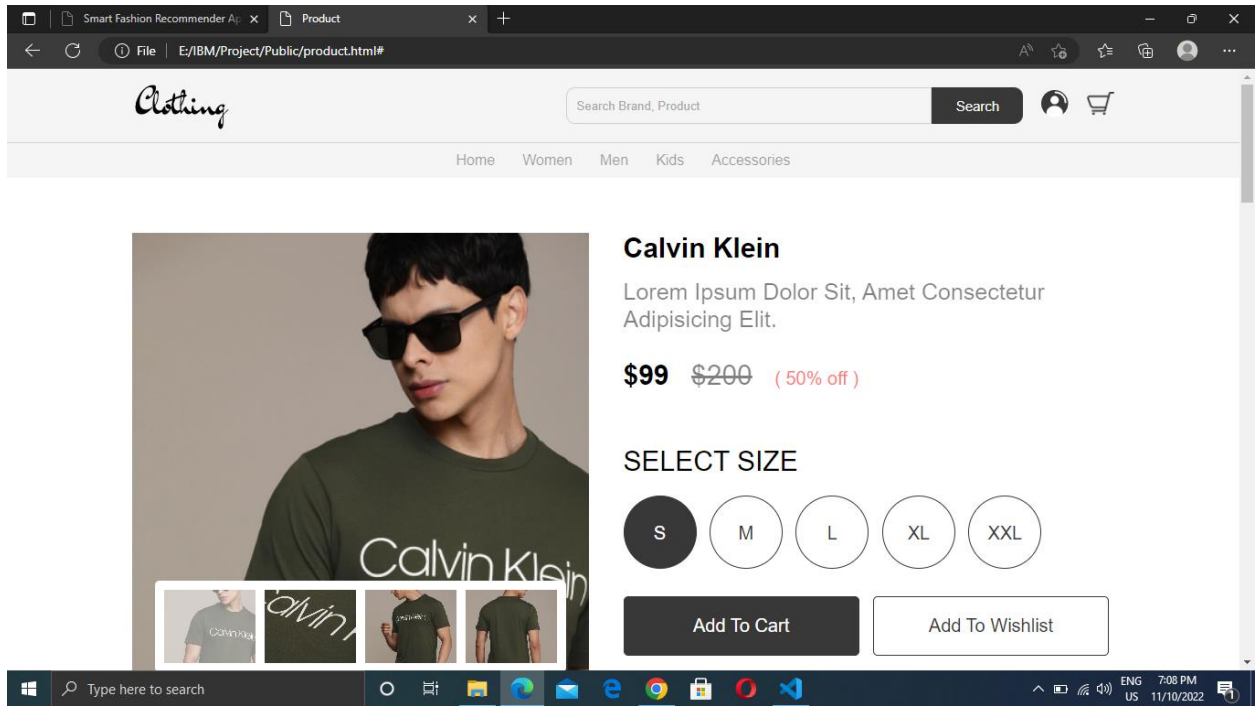
```
if __name__ == '__main__':
    port = int(os.environ.get('PORT', 5000))
```

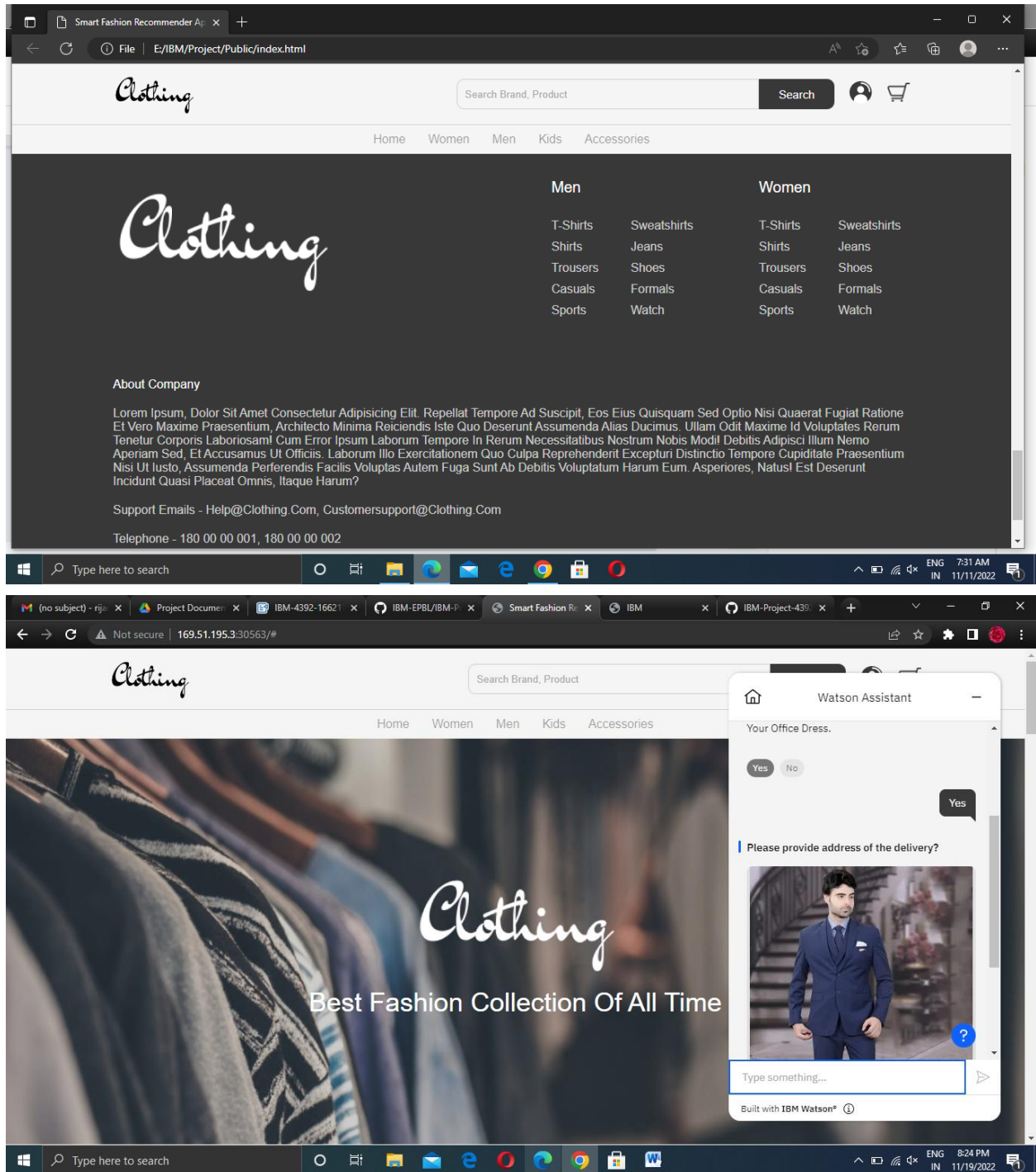


```
app.run(debug=True, host='0.0.0.0', port=port)
```

Ouptut:







GitHub & Project Demo Link

IBM-Project-4392-1658731021

<https://we.tl/t-FdUTfMTM48>

APPENDIX

Source Code

```
from flask import Flask
app=Flask(__name__)
@app.route('/')
def helloworld():
    return helloworld
```

```
if __name__=='__main__':
    app.run()
```

```
<!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>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">
```

```
        
```

```
        
```

```
        
```

```
        
```

```
      </div>
```

```
    </div>
```

```
    <div class="details">
```

```
      <h2 class="product-brand">calvin klein</h2>
```

```
      <p class="product-short-des">Lorem ipsum dolor sit, amet consectetur  
adipisicing elit.</p>
```

```
      <span class="product-price">$99</span>
```

```
      <span class="product-actual-price">$200</span>
```

```
      <span class="product-discount">( 50% off )</span>
```

```
      <p class="product-sub-heading">select size</p>
```

```
      <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-size">
<label for="xl-size" class="size-radio-btn">xl</label>
<input type="radio" name="size" value="xxl" hidden id="xxl-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>
```

```
<p class="des">Lorem ipsum dolor sit amet consectetur adipisicing elit.
```

```
Veniam, .....</p>
```

```
</section>
```

```
<section class="product">
```

```
<h2 class="product-category">best selling</h2>
```

```
<button class="pre-btn"></button>
```

```
<button class="nxt-btn"></button>
```

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

```
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
```

```

<button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
  
  <button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
    
```



```
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the cloth.</p>
        <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the cloth.</p>
        <span class="price">$20</span><span class="actual-
price">$40</span>
    </div>
</div>
</div>
</section>
```

```
<section class="product">
  <h2 class="product-category">shirts</h2>
  <button class="pre-btn"></button>
<button class="nxt-btn"></button>
  <div class="product-container">
    <div class="product-card">
      <div class="product-image">
        <span class="discount-tag">50% offer</span>
        
        <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the cloth.</p>
        <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>
        
        <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the cloth.</p>
```

```
        <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>  
          
        <button class="card-btn">add to whislist</button>  
    </div>  
    <div class="product-info">  
        <h2 class="product-brand">brand</h2>  
        <p class="product-short-des">a short line about the cloth.</p>  
        <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>  
          
        <button class="card-btn">add to whislist</button>
```

```
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the cloth.</p>
  <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"></button>
<button class="nxt-btn"></button>
  <div class="product-container">
    <div class="product-card">
      <div class="product-image">
        <span class="discount-tag">50% offer</span>
        
        <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the cloth.</p>
```

```
        <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the cloth.</p>
        <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
```

```
<h2 class="product-brand">brand</h2>
<p class="product-short-des">a short line about the cloth.</p>
<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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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/footer.js"></script>
<script src="static/js/home.js"></script>
<script src="static/js/product.js"></script>
</body>
</html>

from flask import Flask
app=Flask(__name__)
@app.route('/')
def helloworld():
    return helloworld

if __name__=='__main__':
    app.run()
<!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">
    
    <p class="sub-heading">best fashion collection of all time</p>
  </div>
</header>
<section class="product">
  <h2 class="product-category">best selling</h2>
  <button class="pre-btn"></button>
<button class="nxt-btn"></button>
  <div class="product-container">
    <div class="product-card">
      <div class="product-image">
        <span class="discount-tag">50% offer</span>
        
        <button class="card-btn">add to whislist</button>
      </div>
      <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the cloth.</p>
        <span class="price">$20</span><span class="actual-price">$40</span>
      </div>
    </div>
  </div>
</div>
```



```
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
```

</div>

<div class="product-info">

<h2 class="product-brand">brand</h2>

<p class="product-short-des">a short line about the cloth.</p>

\$20\$40

</div>

</div>

<div class="product-card">

<div class="product-image">

50% offer

<button class="card-btn">add to whislist</button>

</div>

<div class="product-info">

<h2 class="product-brand">brand</h2>

<p class="product-short-des">a short line about the cloth.</p>

\$20\$40

</div>

</div>

<div class="product-card">

<div class="product-image">

50% offer

<button class="card-btn">add to whislist</button>

```
</div>
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the cloth.</p>
  <span class="price">$20</span><span class="actual-price">$40</span>
</div>
</div>
</div>
</section>
<!-- collections -->
<section class="collection-container">
  <a href="#" class="collection">
    
    <p class="collection-title">women <br> apparels</p>
  </a>
  <a href="#" class="collection">
    
    <p class="collection-title">men <br> apparels</p>
  </a>
  <a href="#" class="collection">
    
    <p class="collection-title">accessories</p>
  </a>
</section>
<section class="product">
  <h2 class="product-category">shirts</h2>
  <button class="pre-btn"></button>
<button class="nxt-btn"></button>
  <div class="product-container">
```

```
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
```

```
        <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the cloth.</p>
        <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>
        
        <button class="card-btn">add to whislist</button>
    </div>
    <div class="product-info">
        <h2 class="product-brand">brand</h2>
        <p class="product-short-des">a short line about the cloth.</p>
        <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
```



```
    
    <button class="card-btn">add to whislist</button>
</div>
<div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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"></button>
<button class="nxt-btn"></button>
    <div class="product-container">
        <div class="product-card">
            <div class="product-image">
                <span class="discount-tag">50% offer</span>
                
                <button class="card-btn">add to whislist</button>
            </div>
        </div>
    </div>
```

```
<div class="product-info">
  <h2 class="product-brand">brand</h2>
  <p class="product-short-des">a short line about the cloth.</p>
  <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <span class="price">$20</span><span class="actual-price">$40</span>
  </div>
</div>
```

```
</div>
<div class="product-card">
  <div class="product-image">
    <span class="discount-tag">50% offer</span>
    
    <button class="card-btn">add to whislist</button>
  </div>
  <div class="product-info">
    <h2 class="product-brand">brand</h2>
    <p class="product-short-des">a short line about the cloth.</p>
    <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>
```