

SMART FASHION RECOMMENDER APPLICATION

A PROJECT REPORT

Submitted by

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**In partial fulfillment for the award of degree of
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PROJECT REPORTFOR

1. INTRODUCTION

1.1 Project Overview

The main focus and concern of this project will be analysis of a smart fashion and fashion design related techniques and methods learned are to implemented.

1.2 Purpose

The purpose of this project is to present an overview of our skills and knowledge and apply them in the creative and technical part of the design and production process during the creation of a collection for the fashion app.

1.3 Sustainability

Consumers are making decisions that not only focus on their own bottom lines but also on the values of the brands they choose to associate with. Many fashion and apparel companies have to start adapting to this by implementing initiatives such as corporate social responsibility into their brand strategies, having a voice in addition to being profitable.

2. LITERATURE SURVEY

Customer satisfaction dimension and impact of customer loyalty in online shopping sites

E-Commerce

E-commerce is way of business through internet which relates to information searching activities, information sharing purchasing products and services and also maintain customer relationship without any face to face interaction unlike transaction do in traditional way

Often wrong perception made about the way of doing E-commerce business between web retailers and end customers but E-commerce encompasses an full range of conducting online business It's interaction between Business to customer, Business to Business, & Business to government

Customer Satisfaction

When products and services according to the customers expectation then we called it customer satisfaction. If we provide product and service through online shopping sites than customer should be loyal towards shopping ate, and E-Commerce company generate more profit when customer purchase product repetitively In this research satisfaction is related to the outcome of the customer purchase and the performance perceived in order to measure the attitude of respondents towards product

Purchase Intention

Model of The Un dimensionalist View of Attitude" Purchasing intention is outcome of attitude which reflect to willingness of customer's to buy from a particular retailer Actual behavior of the consumer consider entertaining for research.

2.1 Problem Statement Definition

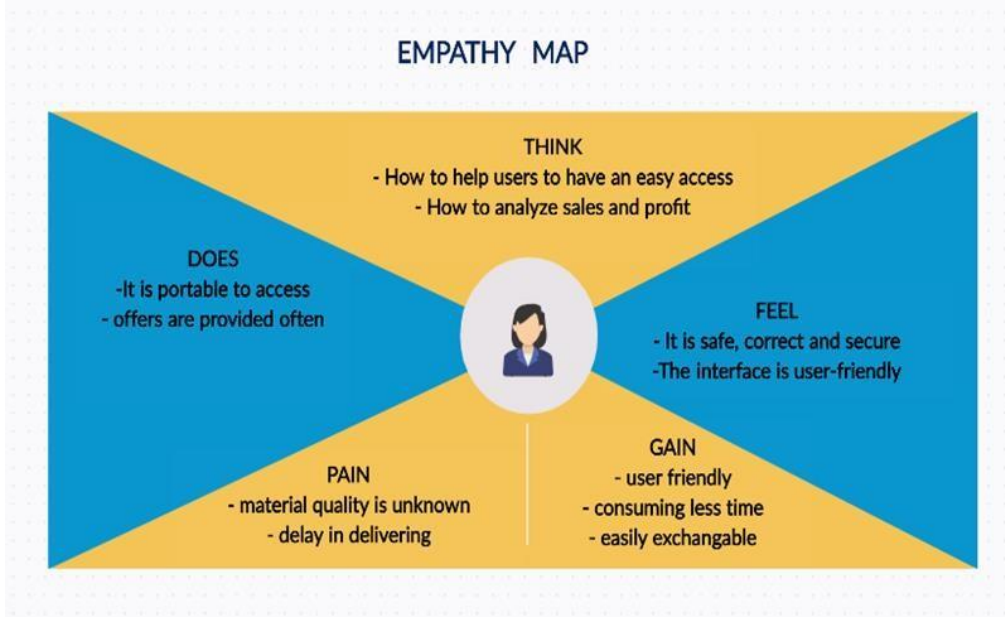
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3. IDEATION & PROPOSED SOLUTION

3.1 Empathy Map Canvas



3.2 Proposed Solution

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	. To the best of the authors' knowledge, this is the first scholarly article to review the state-of-the-art fashion recommendation systems and the corresponding filtering techniques. In addition, this review also explores various potential models that could be implemented to develop fashion recommendation systems in the future. This paper will help researchers, academics, and practitioners who are interested in machine learning, computer vision, and fashion retailing to understand the characteristics of the different fashion recommendation systems.
2.	Idea / Solution description	Recommendation systems have the potential to explore new opportunities for retailers by enabling them to provide customized recommendations to consumers based on information retrieved from the Internet. They help consumers to instantly find the products and services that closely match with their choices. Moreover, different stat-of-the-art algorithms have been developed to recommend products based on users' interactions with their social groups. Therefore, research on embedding social media images within fashion recommendation systems has gained huge popularity in recent times. This paper presented a review of the fashion recommendation systems, algorithmic models and filtering techniques based on the academic articles related to this topic.
3.	Novelty / Uniqueness	There has been significant progress recently in fashion recommendation system research, which will benefit both consumers and retailers soon. The use of product and user images, textual content, demographic history, and cultural information is crucial in developing recommendation frameworks. Product attributes and clothing style matching are common features of collaborative and content-based filtering techniques. Researchers can develop more

		sophisticated hyper personalized filtering techniques considering the correlation between consumers' clothing styles and personalities.
4.	Social Impact / Customer Satisfaction	After collecting a sizable sampling of customer satisfaction surveys, analyze how pleased your customers are with their experience with your business. Most surveys use a scale of answers to provide you with customer satisfaction metrics. The customer satisfaction metrics will divide your business into differing aspects so you can see how well each portion of your business is doing. This allows you to see what may need immediate action, what can wait, and what you should leave alone completely.
5.	Business Model (Revenue Model)	Ultimately, you need to understand your customer and their expectations, assess your current resources to find a realistic revenue model, and identify your budget allocation. And, there are many other types of revenue streams to consider within these five models (check out 101 of them. Of course, while competition is fierce in the online world, there has never been a better time to get in on the action. Covid-19 accelerated the shift to eCommerce by five years in just one year, boosting revenue growth in eCommerce and making it the number one shopping choice of customers everywhere.
6.	Scalability of the Solution	When your ecommerce store's customer support demands outpace what you're able to handle on your own, the solution might not be to hire a new rep. It might be to integrate a chatbot into your store to answer common questions.

3.3 Problem Solution fit

Define CS, fit into Focus on I&D, Jan info, BE, understand RC	1. CUSTOMER SEGMENT(S) <i>Who is your customer?</i> <i>The persons age range 12-60 are our users</i>	6. CUSTOMER <i>What constraints prevent your customers from taking action or limit their choices of solutions? i.e. spending power, budget, no cash, network connection, available devices.</i>	5. AVAILABLE SOLUTIONS <i>Which solutions are available to the customers</i> <i>or need to get the job done? What have they tried in the past? What pros & cons do these solutions have?</i> <i>Since our application consists of chatbots the user can easily reach their needs.</i>	Evaluate AS, fit into Focus on I&D, Jan info, BE, understand RC
	2. JOBS-TO-BE-DONE / PROBLEMS <i>Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one.</i>	9. PROBLEM ROOT CAUSE <i>What is the real reason that this problem exists? What is the back story behind the need to do this job?</i> <i>The current trends, customer pain points regarding automation cover problems</i>	7. BEHAVIOUR <i>Customer purchase through our application.</i>	

4. REQUIREMENT ANALYSIS

4.1 Functional requirement

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Facebook Registration through Gmail Registration through Mobile number
FR-2	User Confirmation	Confirmation via Email Confirmation via OTP
FR-3	User Password	Set Password based on the criteria
FR-4	User Reset Password	Set new password Re type new password
FR-5	User Login	Login via Email and Password login via Username and Password
FR-6	User Payment	Payment via Credit cardPayment via Debit cardPayment via Wallet Payment via Cash on

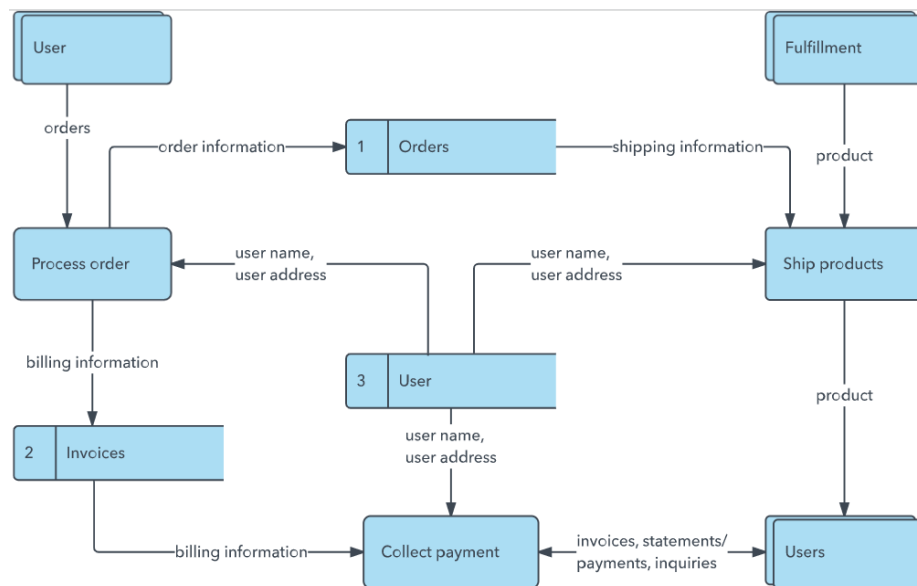
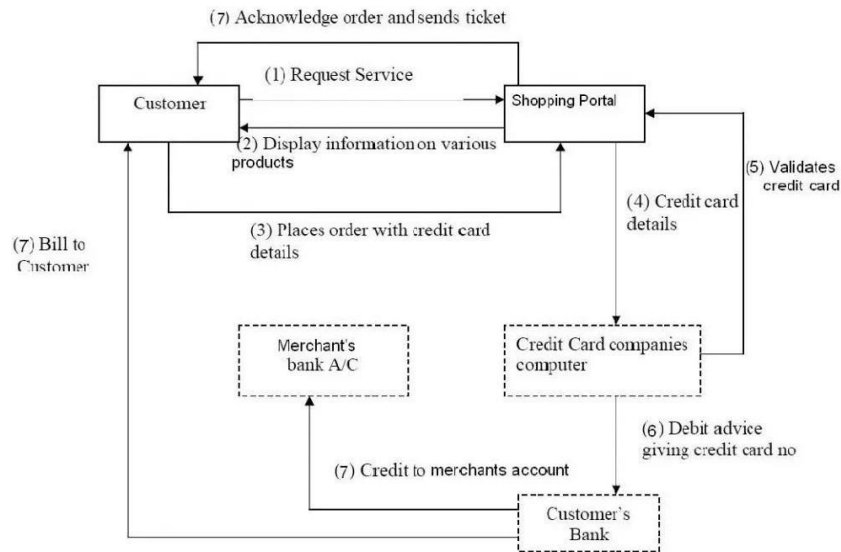
4.2 Non-Functional requirements

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

FR No.	Non-Functional Requirement	Description
NFR-1	Usability	How often the users use the application
NFR-2	Security	All data inside the system will be protected against malware attacks or unauthorized access.
NFR-3	Reliability	How the system runs without any failure
NFR-4	Performance	How fast a particular piece of it responds to certain user's actions under a certain workload.
NFR-5	Availability	How the system is available to the user at a given point in time.
NFR-6	Scalability	It assesses the highest workloads under which the system will still meet the performance requirements.

5. PROJECT DESIGN

5.1 Data Flow Diagrams

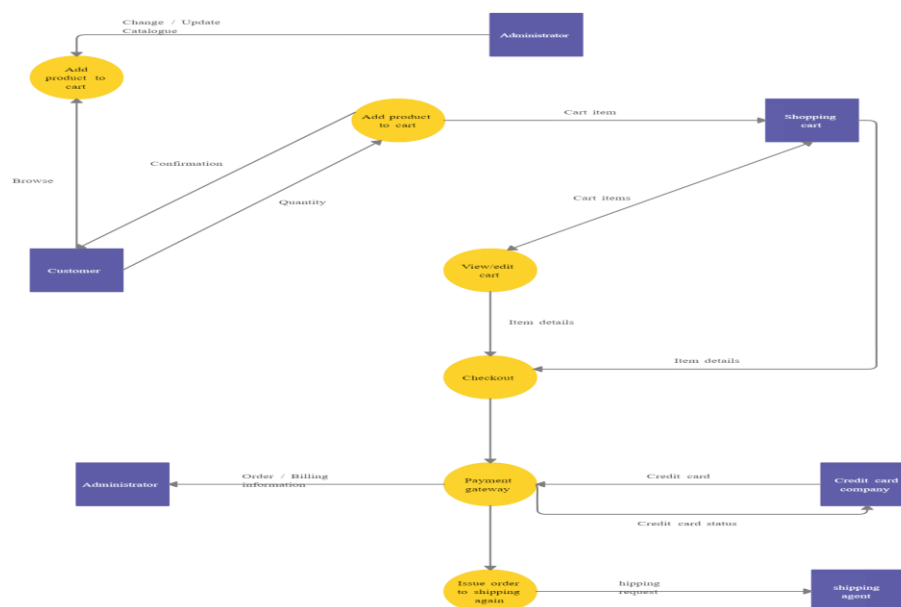


5.2 Solution & Technical Architecture

Solution Architecture:

Solution architecture is a complex process – with many sub-processes – that bridges the gap between business problems and technology solutions. Its goals are to:

- Find the best tech solution to solve existing business problems.
- Describe the structure, characteristics, behavior, and other aspects of the software to project stakeholders.
- Define features, development phases, and solution requirements.
- Provide specifications according to which the solution is defined, managed, and delivered.



5.3 User Stories

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

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	Flask	Python
2.	encryption hashing and salting	Encryption hashing and salting	Encryptions
3.	Scalable Architecture	Getting resources to different parts of the system that need it	Microservices Architecture
4.	Availability	The Application available 24/7	IBM Cloud
5.	Performance	1000 request per day	IBM Watson

6. CODING & SOLUTIONING

6.1 FEATURE

<https://github.com/IBM-EPBL/IBM-Project-4626-1658736337/blob/main/project%20Development%20Phase/Delivery%20of%20Sprint%201.pdf>

It consists of two modules index and story

Index- It is the main webpage of our model

Story- It shows about the need for plasma donation

6.2 FEATURE 2

<https://github.com/IBM-EPBL/IBM-Project-4626-1658736337/blob/main/project%20Development%20Phase/Delivery%20of%20Sprint%202.pdf>

Here we discussed about register module,

In this module, users can register their name as a donor. If a certain age limit is satisfied their registration process for plasma donors will be accepted.

6.3 FEATURE 3

<https://github.com/IBM-EPBL/IBM-Project-4626-1658736337/blob/main/project%20Development%20Phase/Delivery%20of%20Sprint%203.pdf>

Here we discussed about login module,

In this module, users can login as a donor and they can update their availability status.

Chatbot also created which helps the user to know more about plasma donation.

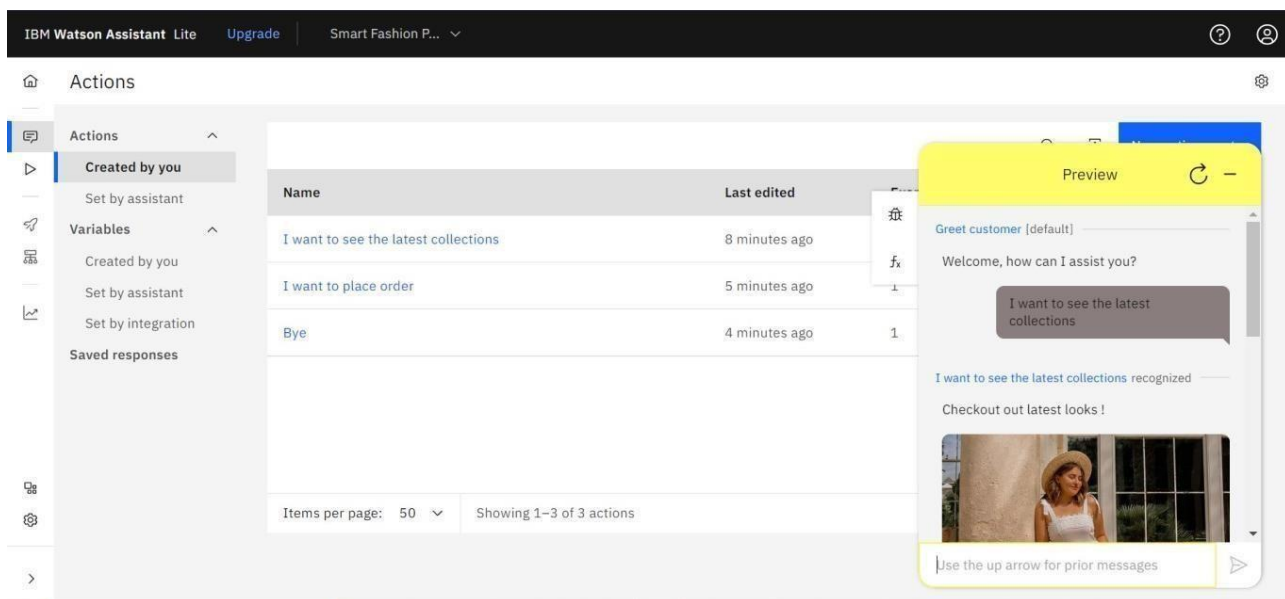
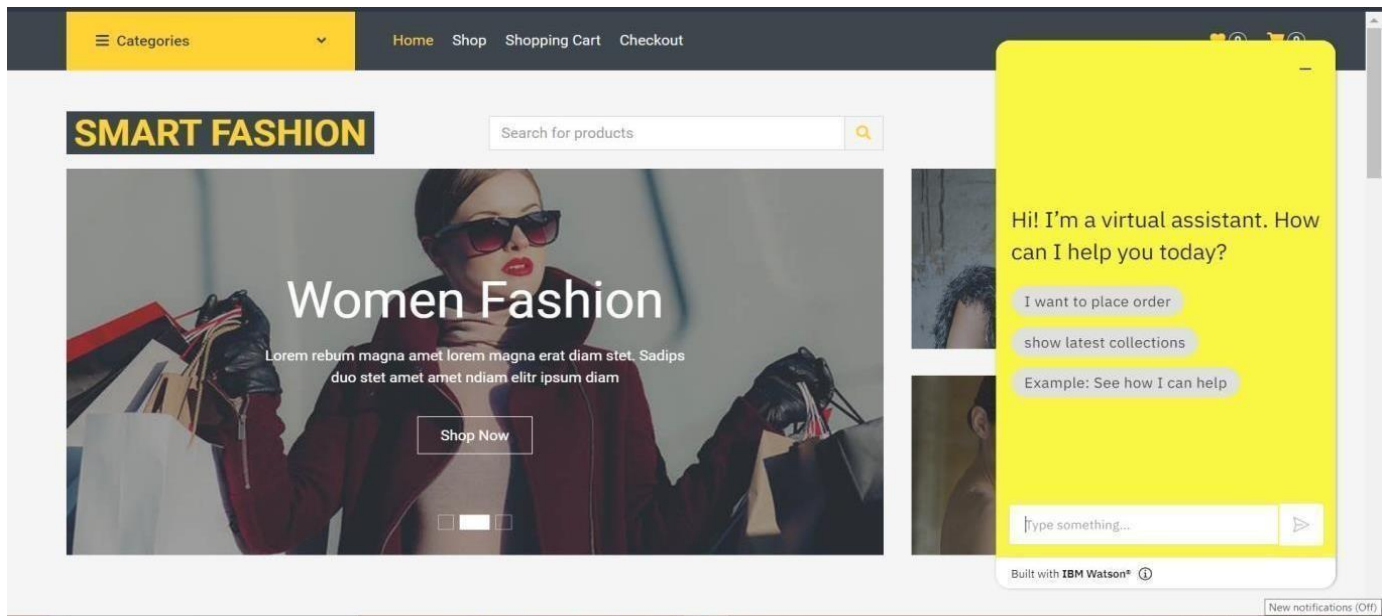
6.4 FEATURE 4

<https://github.com/IBM-EPBL/IBM-Project-4626-1658736337/blob/main/project%20Development%20Phase/Delivery%20of%20Sprint%204.pdf>

In this process we make a database connectivity for register , login and update of donor information.

7. TEST CASES

7.1 CHATBOT WORKING



Actions

Actions

Created by you

Set by assistant

Variables

Created by you

Set by assistant

Set by integration

Saved responses

Address

Tr Free text

Address

Name

Tr Free text

Name

Pincode

Number

Pincode

Items per page: 50

Showing 1–3 of 3 variables

11 of 1 pages

Preview

8. CONCLUSION

The efficient way of finding plasma donors for the infected people is implemented using the plasma donor website that is hosted on Cloud platform. To ensure the smooth functioning of the website operations. I have hosted the website on a cloud platform to make sure the operations are running successfully to deploy the application cl service.

FUTURE ENHANCEMENTS

Upgrading the UI that is more user-friendly which will help many users to access the website and also ensures that many plasma donors can be added into the community. Using elastic load balancer, it helps to handle multiple requests at the same time which will maintain the uptime of the website with negligible downtime.

9.APPENDIX GITHUB

LINK:

[**https://github.com/IBM-EPBL/IBM-Project-4626-1658736337**](https://github.com/IBM-EPBL/IBM-Project-4626-1658736337)