Document for project report

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INTRODUCTION

There is currently no existing system that is capable of recommending clothes based on the occasions. Different occasions call for different clothing Moreover, a lot of fashion is based on the colour combinations of outfits. The proposed Fashion Recommendation System is intended to be used by individual users in order to with the help of chat bot and also to get recommendations by the system on what clothes to wear. The main aim of the project is user need can is directly interact to the chat bot then it will show the details. The user will login into website and go through the

products available on the website. Instead of navigating to several screens for booking products online, the user can directly talk to chat bot regarding the products. Get the recommendations based on information provided by the user. Such a system should be capable of helping someone who has no fashion sense to wear clothes that leave a good impression on others. The system should be such that it is easily accessible and easy to take advantage of the various features that it provides. A chat bot is a very useful entity that the user can use to view and manage the images of clothes that they have uploaded. Chat bot have varying levels of complexity being either stateless or state full Stateless chat bots approach each 12s 2022, 2037 as if interacting and frame newresponses in context. Adding a chat bot to a services or sales department requires low or no moding Many chat bot services providers allow developers to build conversational user interfaces for third party business application. The system should be capable of handling the 4 basic clothing types: Shirt, T-Shirt, Pants and Shoes.

Overview

With the rapid development of online shopping, interpretable personalized fashion recommen- dation using image has attracted increasing attention in recent years. The current work has been able to capture the user's preferences for visible features and provide visual explanations. However, they ignored the invisible

features, such as the material and quality of the clothes, and failed to offer textual explanations.Online review is a powerful source for understanding users' shopping experiences, preferences and feedbacks on product/item performances, and thus is useful for enhancing personalized recommendations for future purchases. However, most extant fashion recommendation methods lack effective frameworks to integrate local and global aspect representations extracted from customers' ratings and reviews users quickly find what they need or new products they might be interested in.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 Fashion is perceived as a meaningful way of self-expressing that people use for different purposes. It seems
to be an integral part of every person in modern societies, from everyday life to exceptional events and
occasions. Fashionable products are highly demanded, and consequently, fashion is perceived as a desirable and profitable industry integrated overview of researches in this field, there is still a need for conducting further studies considering image-based fashion recommender
systems from a more practical perspective.

Purpose

Today, recommender systems are widely used in various industries such as video streaming services, online shopping, and content creation and sharing. Thanks to the development of deep learning and artificial intelligence (AI), recommender systems can use the large amount of data that is generated by users' everyday selections and make high-quality recommendations. Chatbots are without a doubt one of the most modern and promising expressions of the relationship between humans and machines. their use in all fields, from customer service to data collection, is transforming the way that we view machines and how they interact with us.New tools, known as chatbots or virtual assistants, have recently hit the market with the goal of making human-computer connections easier. Virtual financial assistants, for example, are becoming increasingly popular. They can answer simple questions, adjust balances, and do a variety of other things. Virtual assistants - chatbot, are some of the newest tools in our industry, designed to allow humans and computers to connect in a natural way. Over the last few years, these technologies have become more intelligent, and they have become one of the most potent tools for getting things done in a modern office setting.

chatbots have been rapidly making their way into a variety of different categories, especially in the consumer-based space. These chatbots are known for being able to simulate a conversation with a user, often utilizing natural language that

allows for deeper connections and more natural interactions. Chatbots can be found in messaging applications, websites, mobile apps, or through the telephone

Literature survey

Recommender systems provide users with product information

and suggestions, which has gradually become an important research tool in

e-commerce IT technology, which has attracted a lot of attention of

researchers. Collaborative filtering recommendation technology has been

the most successful recommendation technology so far, but there are two

major problems—recommendation quality and scalability. At present,

research at home and abroad mainly focuses on recommendation quality,

and there is less discussion on scalability. -e scalability problem is that as

the size of the system increases, the response time of the system increases to

a point where users cannot afford it. Existing solutions often result in a

significant drop in recommendation quality while reducing recommendation

response time. In this paper, the clustering analysis subsystem based on the genetic algorithm is innovatively introduced into the traditional collaborative filtering recommendation system, and its design and implementation are given. In addition, when obtaining the nearest neighbors, only the clustered users of the target user are searched, making it a collaborative filtering recommender system based on genetic clustering. -e experimental results show that the response time of the traditional collaborative filtering recommender system increases linearly with the increase in the number of users while the response time of the collaborative filtering recommender system based on genetic clustering remains unchanged with the increase in the number of users. On the other hand, the recommendation quality of the collaborative filtering recommender system based on genetic clustering is basically not degraded compared with that of the traditional collaborative filtering recommender system.

Visual and Textual Jointly Enhanced Interpretable Fashion Recommendation

Proposed the use of historical review information by designing bidirectional two-layer adaptive attention review model to obtain the user's visible and invisible preferences for the target item. It enhanced the recommendation effect and provide textual and visual interpretation by jointly learning textual and visual information.

Aspect-Based Fashion Recommendation With Attention Mechanism

The prediction of customer ratings based on online reviews of fashion products are implemented by convolutional neural networks (CNN), long short-term memory networks (LSTM), and attention mechanisms

Differentiated Fashion Recommendation Using Knowledge Graph and Data Augmentation

In this framework, a data augmentation algorithm based on transfer learning is proposed by Using Amazon fashion dataset to filter out the irrelevant items and label by integrating the existing research results of deep learning, combined with factorization machine model to provide high-quality data support for improving recommendation accuracy. The results show that through data augmentation

algorithm to improve data quality, factorization machine model produces higher recommendation accuracy.

Scenery-Based Fashion Recommendation with cross-Domain Generative Adverserial Networks

The fashion recommendation system is implemented by cross domain generative and adversarial network from the collected database.

Cold –Start Recommendation Using BI-Clustering and Fusion for large –scale social recommender system

The proposed system involved bi-clustering and fusion scheme to identify the rating source for accommodation to reduce the dimensionality of rating matrix. The result shows better in terms of accuracy and scalability.

Existing proplem

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Reference

[1] C. Yan, Q. Zhang, X. Zhao, and Y. Huang ‘‘An intelligent field-aware factorization machine model,’’ in Proc. Int. Conf. Database Syst. Adv. Appl., New York, NY, USA, Mar. 2017, pp. 309–323.

[2] S. Rendle, ‘‘ Factorization machines with libFM,’’ ACM Trans. Intell Syst. Technol., vol. 3, no. 3, May 2012, Art. no. 57.

[3]C. Xu, P. Zhao, Y. Liu, V. S. Sheng, J. Xu, F. Zhuang, J. Fang, and

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[4] X. Chen, H. Chen, H. Xu, Y. Zhang, Y. Cao, Z. Qin, and H. Zha,
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Develop. Inf. Retr. (SIGIR), 2019, pp. 765–774.
[5] K. Järvelin and J. Kekäläinen, ‘‘IR evaluation methods for retrieving highly
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Problem statement Definition

This app works as per the user's choice. In this we measure the user's preferences with feedback and find out how to fulfill the user's preference

In general customer want less cost of collection but shop only contains expensive collection because of profits, which makes user feel sad. In this report we measure and explain our user usage habits

Preferences vary from user to user, thus the number of users decreases and the service also decreases.

Problem Statement (PS)	I am (Customer)	I'm trying to	But	Because	Which makes me feel
PS-1	**User/General customer**	Want less cost collection	Shop contain only Expensive collection	Shop owner only want profit	Sad
PS-2	**Whole sale customer**	Want to buy some dress	There is no review or related real image	App doesn't contain any chat box	Frustrat
Ps-3	**User**	Find the offer and discount	He/she missed	There is no notification or didn't remember	grievan
PS-4	**Mobile User**	He /She Find a related image in app	Does not find the image	Because there is no facilities to find a image	Angry
PS-5	**School/University customer**	He /She find a new fashion	Does not have new collection	It does not update the new collection	Boredo

		clothes			
PS-6	**Wholesale customer**	Bye more clothes with credit points or some profit	Having no credit point	It does not contain discount availability	Tired

Ideation and proposed solution

Ideation is the process is to generate ideas and solutions through such as Sketching, Prototyping, Brainstorming, Possible Idea, and a wealth of other ideation techniques.

In the Ideation stage, the aim is **to generate a large number of ideas.we can create a** idea for generating the application to perform well

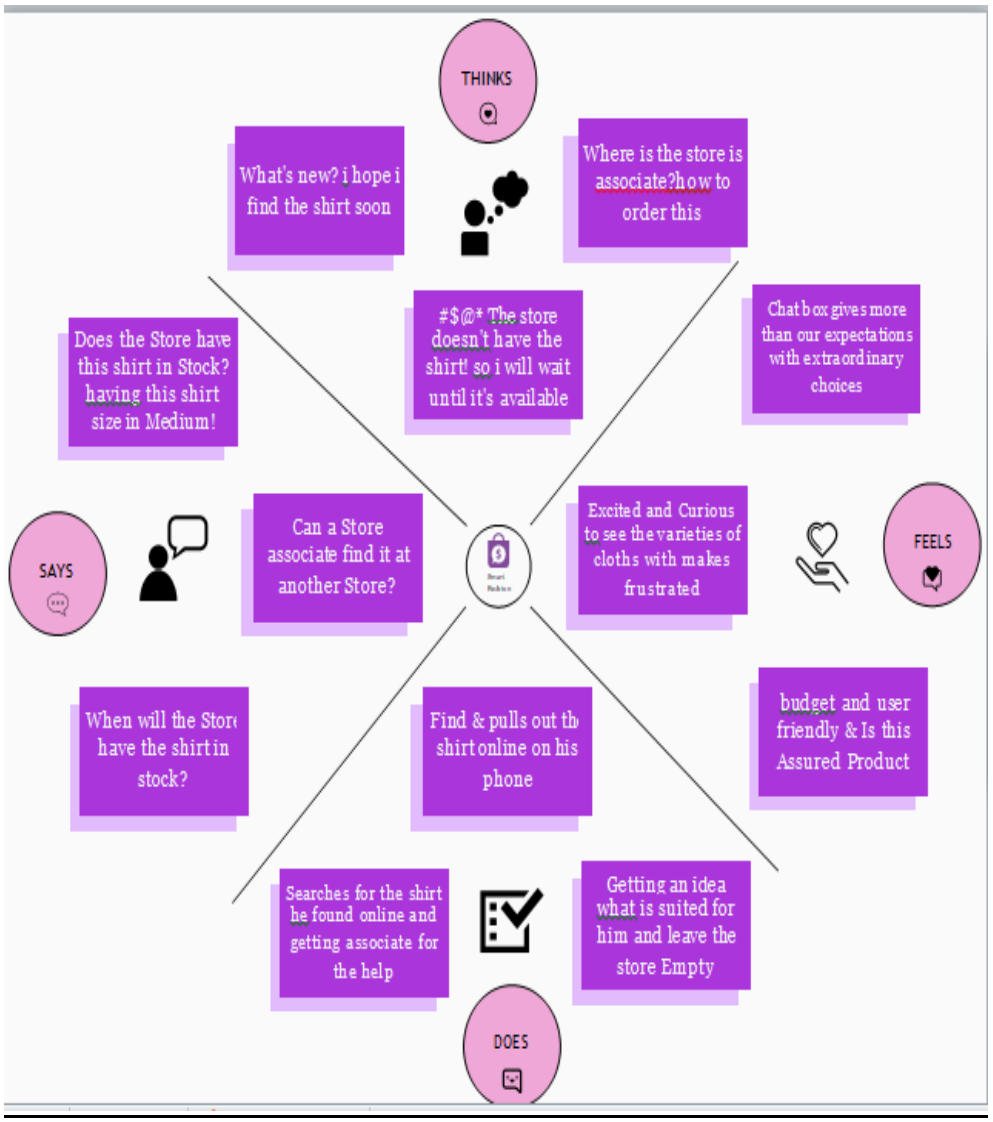
Proposed Solution means **the technical solution to be provided by the Implementation in response to the requirements and the objectives of the Project**.to implement the application based the present situation for the best performance.

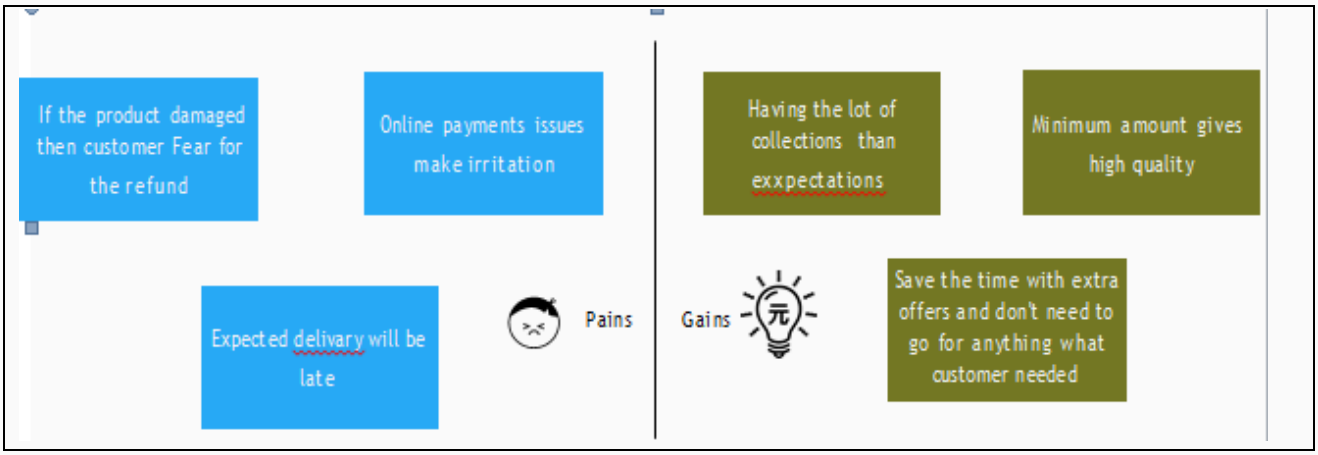
Empathy map canvas

Typically divided into quadrants of **say, think, do, and feel**, the empathy map is intended to get into the head—and heart—of the customer.

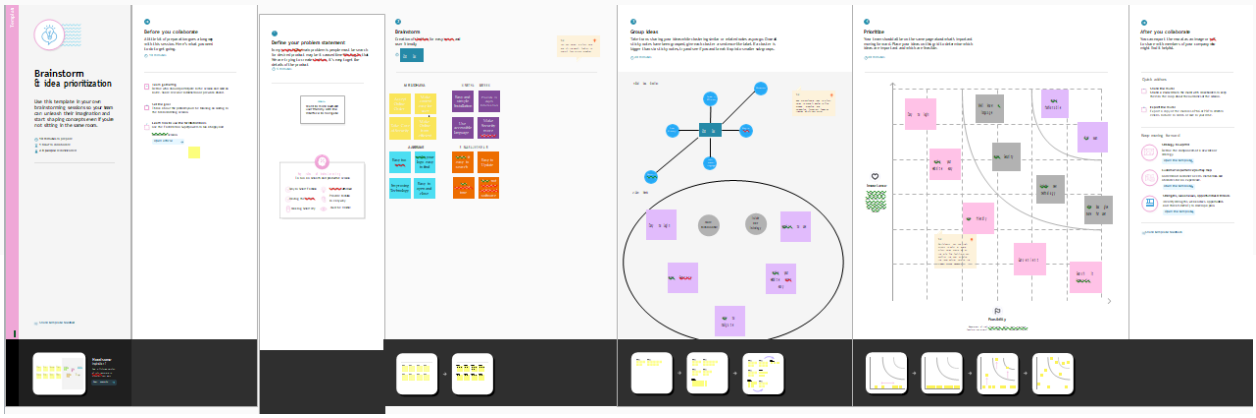
Map, Think, See, Feel, Dos is the main theme of the planning. This way of thinking, I'll buy what's new with the user's ideas

What's new? i hope ifind the shirt soon


THINKS
What's new? i hope i find the shirt soon
Where is the store is associate?how to order this
#$@* The store doesn't have the shirt! so i will wait until it's available
Does the Store have this shirt in Stock? having this shirt size in Medium!
Chat box gives more than our expectations with extraordinary choices
SAYS
Can a Store associate find it at another Store?
Excited and Curious to see the varieties of cloths with makes frustrated
FEELS
When will the Store have the shirt in stock?
Find & pulls out the shirt online on his phone
budget and user friendly & Is this Assured Product
Searches for the shirt he found online and getting associate for the help
Getting an idea what is suited for him and leave the store Empty
DOES



Ideation phase and brainstorming



Proposed solution

Problem Statement (Problem to besolved)

Do not leave any feedback or ratings, it become difficult, it will want to scale, Accustomed to such a quick change in trend. Lack of User Activity, There is no chat box ,it will lead to difficult for searching the products. Lack of internet,occur some bug

Idea/solution description

As an alternative

,we use chat box

Standard Similarity Computation Technique.

Closing Remarks.

Ditch Your User- Based Collaborative Filtering Model.

Access the proper guidance

The

communication is based on the people ,so they can easy to use there own language

The products are so fashionable and popularity,it lead to increases the sales

Novelty /Uniqueness

We check the user's specific selection with a chat box,

There by reducing time

Learns from the

user's

preferences from Updation is available for current

trends

Social impact/Customer Satisfaction

From the user at the end of the session or after placing an order if the

customer satisfaction and providing better

services is provided feedback

Chat box could

also receive

recommendations based on buying patterns and fitting requirements through various applications.

Security for user data

Business Model (Revenue model)

An User Interface, it can perform highly with low cost

Customers are

Public user

Costume business from home

Discount seekers

Small

scale

It fulfill the customer satisfaction high quality with low cost

There is no

travelling time

Scalability of the solution

Storing user preferences as well as

Product information in browser cookies allows

For instant response and retrieval of related product

Micro

Architecture

Problem Solution fit

CUSTOMER SEGMENT(S)

- ***Customers are those who want topurchase fashion items in a short time if you want to donemust be visit the login account***

JOBS-TO-BE-DONE / PROBLEMS

- **To collect data about our visitors and leverage it to make better product** **Seamless Real-Liferecommendations**

understand customer enquires their needs and performance can allow you to personalies product pages and build customer loyalty and affinity

TRIGGERS

- **Creating So Fashionable product.**
- **Reduce Customer Service Costs.**

Monitor Consumer Data to Gain Insights

. EMOTIONS: BEFORE / AFTER

- ***Took longer time to process and respond to the***

queryAnd Must beuser friendly one

AVAILABLE SOLUTIONS

- ***Smart***

  Fashion Recommender which are supported in many browsers

- ***Smart Fashion Recommender Chatbot is developed in this project.***

CUSTOMER CONSTRAINTS

- ***Most of the solution available in theinternet hosts a lot of adds limiting its usability and once updation the customer need to beupdate that***
- **Needs a proper networkconnection**

. BEHAVIOUR

Steamless reallife interaction, customer data security,reduce customer frustration

CHANNELS of BEHAVIOUR

Enable to access the cust,consistant level of quality,short period of across channel

. PROBLEM ROOT CAUSE

Chatbot can help withrecovering abandoned carts

Acces the product Easily across the internet

YOUR SOLUTION

- Ins**tead of navigating to several screens for booking products online, the user can directly talk to Chatbot regarding the products**

4.Requirement analysis:

Requirements analysis or requirements engineering is a process used to determine the needs and expectations of a new product. It involves frequent communication with the stakeholders and end-users of the product to define expectations, resolve conflicts, and document all the key requirements.One of the greatest challenges faced by any organization is to share the vision of the final product with the customers. Hence, a business requirements analysis involves a team effort of all the key stakeholders, software developers, end-users, and customer managers to achieve a shared understanding of what the product should do. This is always done in the early phase of any project to ensure that the final product conforms to all the requirements

4.1.Functional Requirements:

These requirements include scalability, adaptability, extensibility, and manageability. In addition, the cloud must exhibit additional capabilities that address the best-in-class requirements of the enterprise-such as providing for security, real-time availability, and performance.Any requirement which specifies what the system should do." In other words, a functional

requirement will describe a particular behavior of function of the system when certain conditions are met, for example: “Send email when a new customer signs up” or “Open a new account”.define what a product must do, what its features and functions

FR No.	**Functional Requirements**	**Sub Registration**
FR-1	Registration	• It can be done through mobile phones or any other PC using the internet • We can any access any browser • Anyone can register it
FR-2	Login	• Login details can be • User Name

		• Password • Address • Email Id • Phone number (linked with Bank account details) • Alternative mobile number and Email Id

F R-3	Delivery confirmation	• Delivery Confirmation can be done by • OTP • Message • Notification • Phone call
F R-4	Assistance	• Chat box can help the customer needs And it can be user friendly • Voice recognition is also available

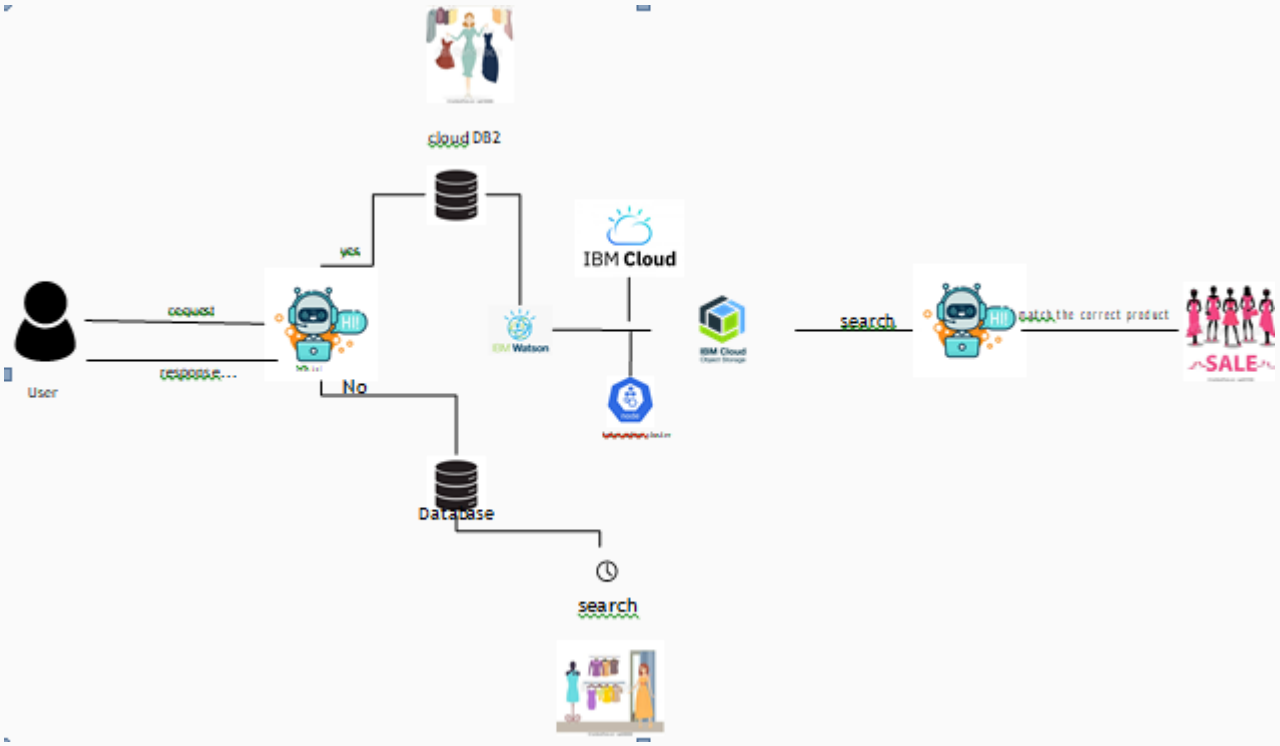
4.2.Non-Functional Requirements:

Non-functional requirements refer to the qualities that a system should have and the constraints under which it must operate. Non-functional requirements are sometimes referred to as the “ilities,” because many end in “ility,” such as, availability, reliability, and maintainability.Non-functional requirements are global constraints on a software system e.g., development costs, operational costs, performance, maintainability, portability, robustness etc.Nonfunctional requirements describe the general properties of a system. They are also known as quality attributes

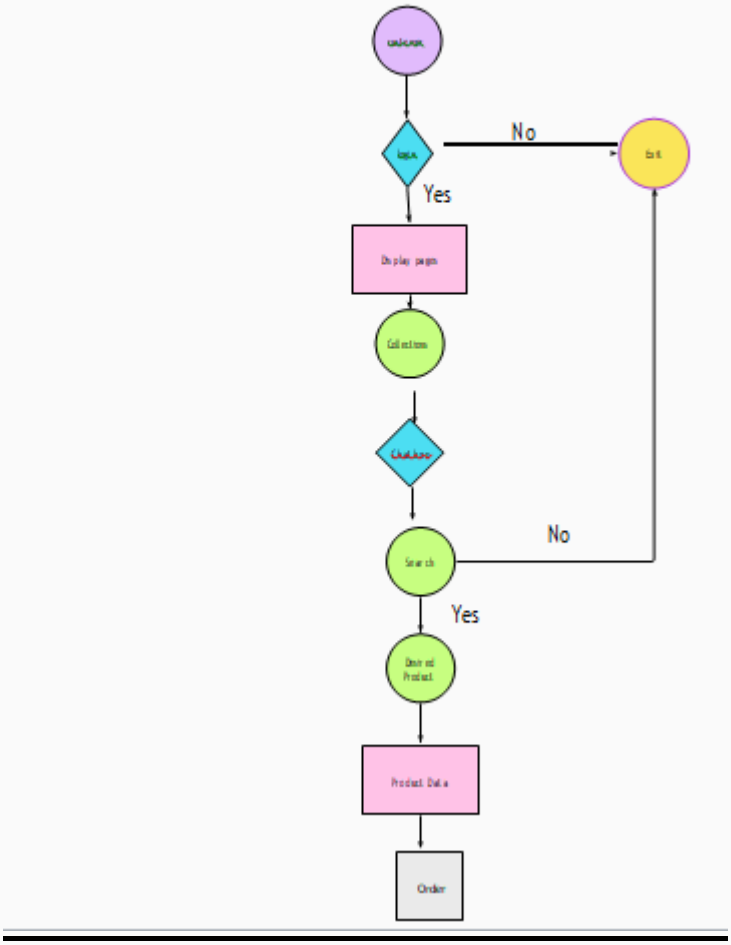
FR No.	**Non-Functional Requirement**	**Description**
NFR-1	**Usability**	• It can used any age limited people • It can be user friendly ,so anyone can easy to access • There is no barrier language
NFR-	**Security**	• The user’s web and app are secure • The services can be hosted on

2		a private network that cannot be accessed through the Internet. • 24*7 access to data experts. • In-built firewall allows only specific access varying from highly restrictive to public. • Encrypted Data Storage Capabilities and Multi-Factor Authentication.
NFR-3	**Reliability**	• It provides the clients with on-demand cloud computing assets and assists with pay-as-you-go method. • It means that the clients can easily build and manage their websites and app
NFR-4	**Performance**	• The chat box shall be able to handle multiplerequests at any given point in time and generate an appropriate response. • The ability to rapidly add and remove resources of the

		applications for meeting customer demand and manage costs
NFR-5	**Availability**	• It is a cloud based web application so user canaccess without any platform limitations ,justusing a browsers with a internet connection isenough for use the application • Fashionable Collection • If you update ,the new collections are displayed on the screen • Chat box available • Online payment
NFR-6	**Scalability**	• The ability to rapidly add and remove resources of the applications for meeting customer demand and manage costs. • The users can utilize computing and storage


cloud DB2
yes
IBM Cloud
request
User
response...
No
IBM Watson
search
match the correct product
SALE
Database
search

Data Flow Diagram



Project Planning and Scheduling

in project planning phase is the important because it which how the project is going on and what wil do the next stage of the system. what is wanted This is the first stage which establishes

what exactly is needed. The ways of attaining them are: interviewing people, videotaping them, looking at the documents and objects that they work with,

observing them directly. The results of observation and interview need to be ordered in some

Sprint planning and scheduling

Sprint 1

Register

As a user, I can register for the application by entering my email, password, and confirming my password.

confirmation

As a user, I will receive confirmation email once I have registered for the application

Login

As a user, I can log into the application by entering email & password

Sprint2

Dashboard

Browse the products that are offered on the website.

The customer can interact with chat bot directly about the products rather than navigate through various screens

Sprint3

Chatbot

The user can directly talk to Chatbot regarding the products. Get the recommendations based on information provided by the use

Tracking the order

As a user, If I order any product, chat bot notifies it.

Sprint 4

Flow of orders and check out

As a user, I can track my order and collect information about shipping

Feedback, comment and section

As a user I can write a fashion review as both positive and negative.

Return the product if not satisfied

As a user, If I am not satisfying with the product, I can return in 7 days from the date of delivery

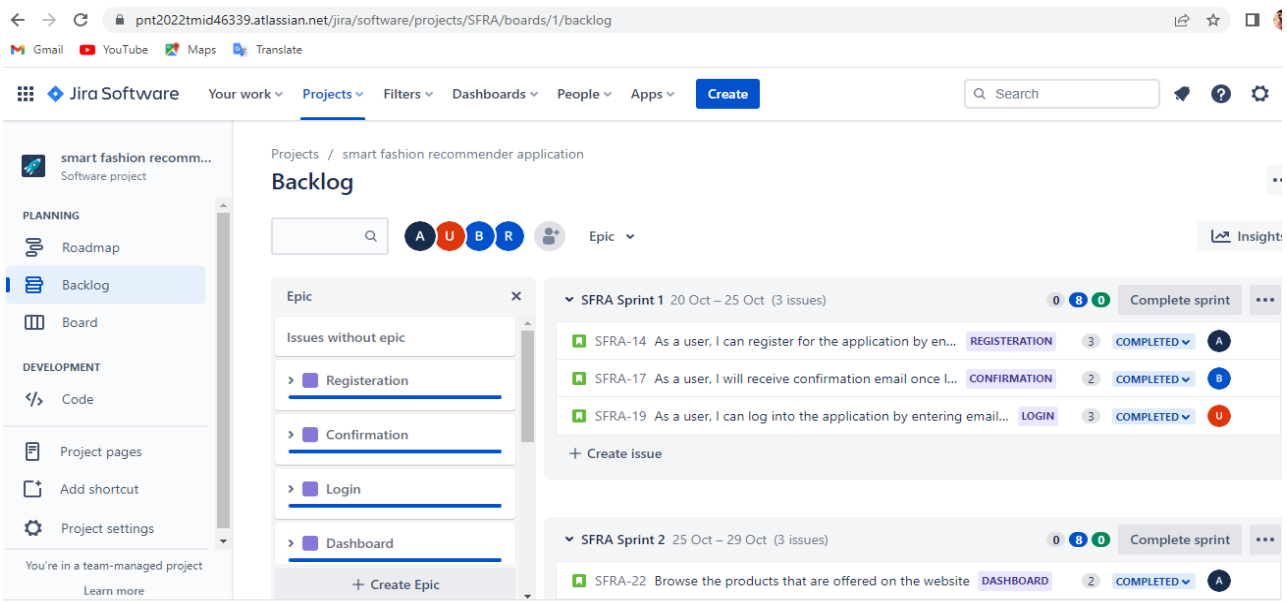
Sprint delivery schedule

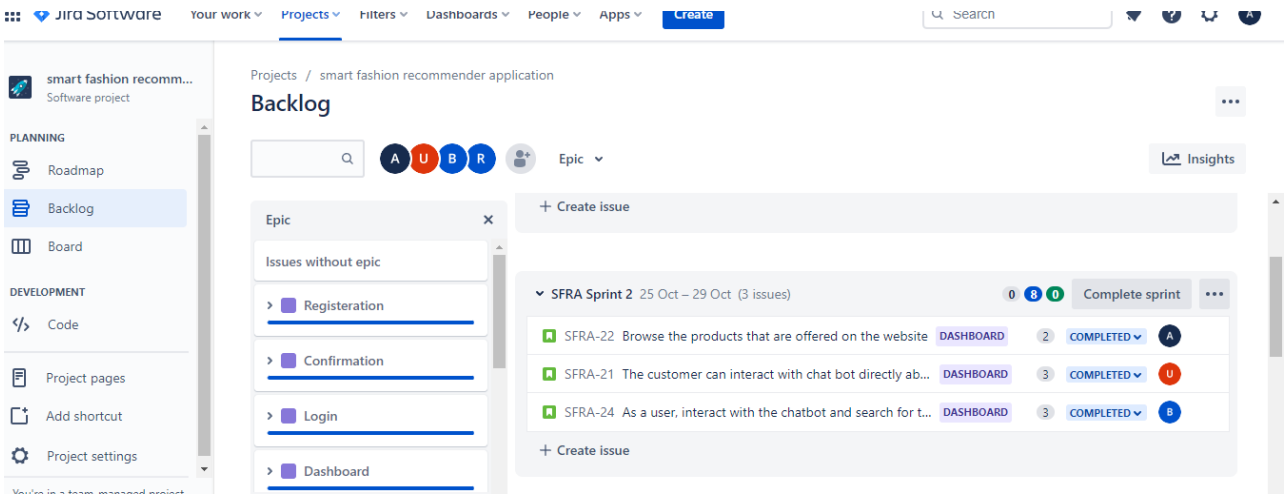
Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned	Sprint Date (Act

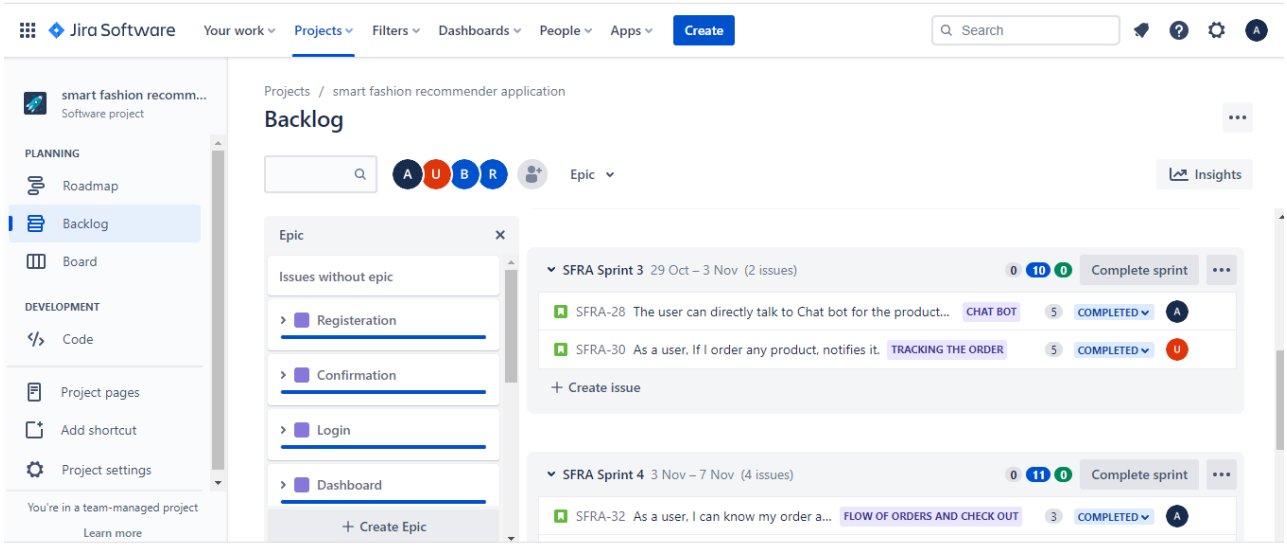
					End Date)	
Sprint-1	08	5 Days	20 Oct 2022	25 Oct 2022	8	25 Oct 20
Sprint-2	08	4 Days	25 Oct 2022	28 Oct 2022	8	28 Oct 20
Sprint-3	10	6 Days	29 Nov 2022	3 Nov 2022	10	03 Nov 20
Sprint-4	11	5 Days	03 Nov 2022	7 Nov 2022	11	07 Nov 2

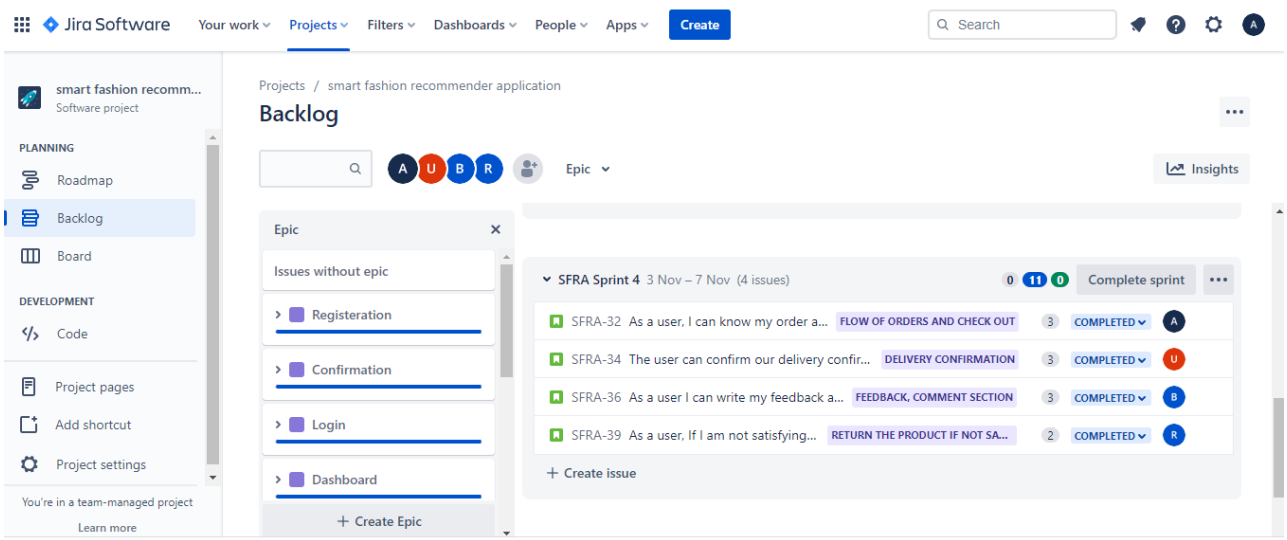
Project report from jira

Sprint issues

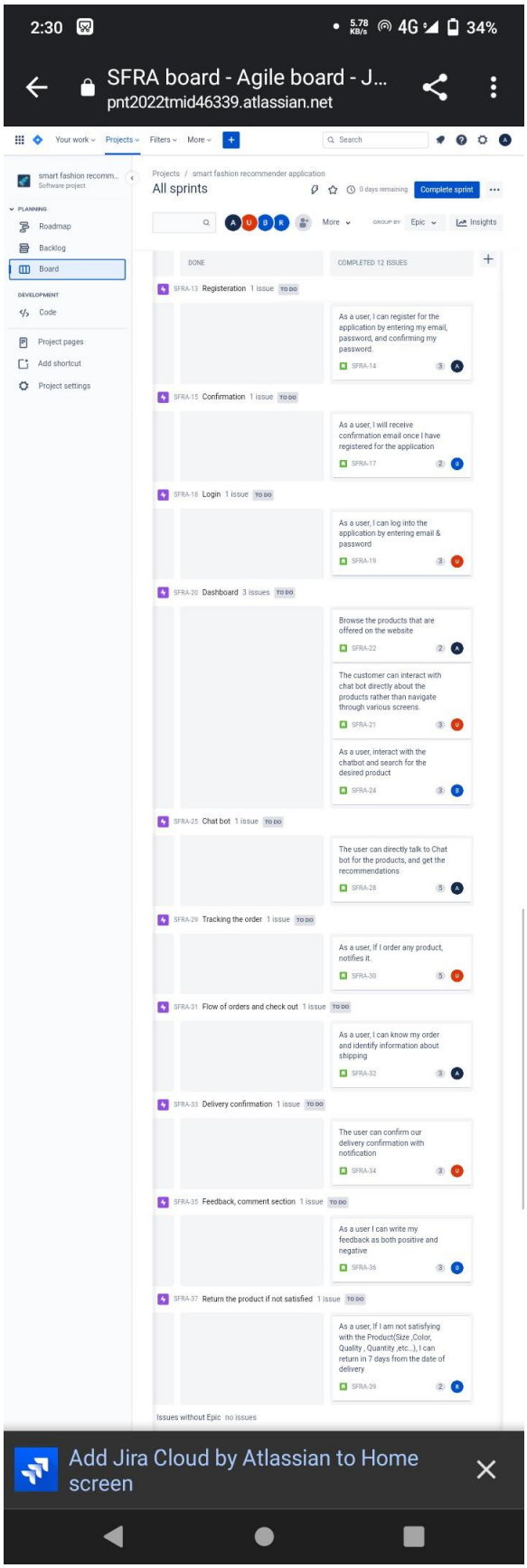



Jira Software
Your work
Projects
Filters
Dashboards
People
Apps
Create
Search
smart fashion recomm...
Software project
PLANNING
Roadmap
Backlog
Board
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
Projects / smart fashion recommender application
Backlog
Epic
Insights
Epic
Issues without epic
Registeration
Confirmation
Login
Dashboard
+ Create issue
SFRA Sprint 2 25 Oct – 29 Oct (3 issues)
0 8 0
Complete sprint
SFRA-22 Browse the products that are offered on the website DASHBOARD 2 COMPLETED
SFRA-21 The customer can interact with chat bot directly ab... DASHBOARD 3 COMPLETED
SFRA-24 As a user, interact with the chatbot and search for t... DASHBOARD 3 COMPLETED
+ Create issue

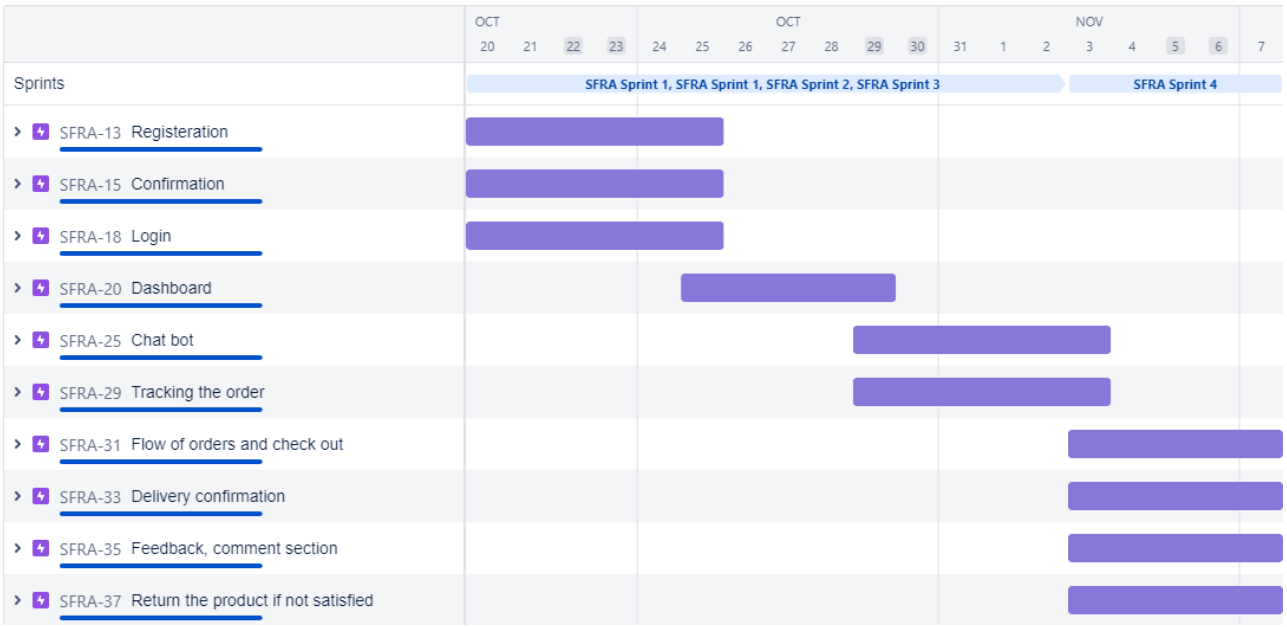

Jira Software
Your work
Projects
Filters
Dashboards
People
Apps
Create
Search
smart fashion recomm...
Software project
PLANNING
Roadmap
Backlog
Board
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
You're in a team-managed project
Learn more
Projects / smart fashion recommender application
Backlog
Epic
Insights
Epic
Issues without epic
Registeration
Confirmation
Login
Dashboard
+ Create Epic
SFRA Sprint 3 29 Oct – 3 Nov (2 issues)
0 10 0
Complete sprint
SFRA-28 The user can directly talk to Chat bot for the product... CHAT BOT 5 COMPLETED
SFRA-30 As a user, If I order any product, notifies it. TRACKING THE ORDER 5 COMPLETED
+ Create issue
SFRA Sprint 4 3 Nov – 7 Nov (4 issues)
0 11 0
Complete sprint
SFRA-32 As a user, I can know my order a... FLOW OF ORDERS AND CHECK OUT 3 COMPLETED



Sprint board


2:30
5.78 KB/s
4G
34%
SFRA board - Agile board - J...
pnt2022tmid46339.atlassian.net
Your work
Projects
Filters
More
Search
smart fashion recomm...
Software project
PLANNING
Roadmap
Backlog
Board
DEVELOPMENT
Code
Project pages
Add shortcut
Project settings
Projects / smart fashion recommender application
All sprints
0 days remaining
Complete sprint
More
GROUP BY
Epic
Insights
DONE
COMPLETED 12 ISSUES
SFRA-13 Registeration 1 issue TO DO
As a user, I can register for the application by entering my email, password, and confirming my password.
SFRA-14
SFRA-15 Confirmation 1 issue TO DO
As a user, I will receive confirmation email once I have registered for the application
SFRA-17
SFRA-18 Login 1 issue TO DO
As a user, I can log into the application by entering email & password
SFRA-19
SFRA-20 Dashboard 3 issues TO DO
Browse the products that are offered on the website
SFRA-22
The customer can interact with chat bot directly about the products rather than navigate through various screens.
SFRA-21
As a user, interact with the chatbot and search for the desired product
SFRA-24
SFRA-25 Chat bot 1 issue TO DO
The user can directly talk to Chat bot for the products, and get the recommendations
SFRA-28
SFRA-29 Tracking the order 1 issue TO DO
As a user, If I order any product, notifies it.
SFRA-30
SFRA-31 Flow of orders and check out 1 issue TO DO
As a user, I can know my order and identify information about shipping
SFRA-32
SFRA-33 Delivery confirmation 1 issue TO DO
The user can confirm our delivery confirmation with notification
SFRA-34
SFRA-35 Feedback, comment section 1 issue TO DO
As a user I can write my feedback as both positive and negative
SFRA-36
SFRA-37 Return the product if not satisfied 1 issue TO DO
As a user, If I am not satisfying with the Product(Size ,Color, Quality , Quantity ,etc...), I can return in 7 days from the date of delivery
SFRA-39
Issues without Epic no issues
Add Jira Cloud by Atlassian to Home screen

Sprint road map



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