

## **Project Report Format**

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## Introduction

### Project Overview

User is buy the product online by chatbot instead of keyboard search. Keyboard Search Is not all time recommends correct product. Chatbot is normally recommends the product by user interest. The keyboard may not recommend the product user interest. The chat also manage the order details in the project. It is very easy the user is to order without any worry about. The user is only focus on the product not all other things in the website. The user is login the webpage. After the dashboard page is shows the dress. In the side the chatbot is here. The chatbot is use the user order the product. The is user selected. The chatbot is sent the mail to user email. Chatbot is send the notification when the product is arrived in the user location. The admin is login the website then the admin dashboard is open. The admin dashboard is gives the user product. The admin can view the user details. The admin dashboard have the update stock. The admin can update the stock using to update the stock. The website use the external chatbot. the chatbot are IBM Watson Assistance. The Website store data at the cloud databse. the database are IBM DB2. It is sql based database. The Website is upload the project in the cloud. It the project is accessed using the IBM Object Storage. The Object storage is use bucket to store the project. The website use the container. The container is Docker. It is used to upload the project to the cloud. The user is click the website to manage the massive amount of user.

### Purpose:

Users to buy product to chatbot. It is very easy the user is use the website.

User can manage the order by chatbot. User can display the product by the user interest.  
User can find the product with less time.

## LITERATURE SURVEY

### 2.1 Existing Problem

Title	Year	Technology	Problem
Outfit Recommender System	2018	E-Commerce, Collaborative filtering, Cloud Computing EngCine, Python, html.	Grey-sheep problem refers to users with unique preferences and tastes that make it difficult to develop accurate profiles.
Clothing fashion Recommendation system	2020	Singular value Decomposition method, Azure ML Studio, Collaborative filtering.	Some offer up too many lowest common denominator recommendation artificially.
Image base fashion recommender system	2021	Cross domain recommendation system, Flask, DevOps, Html, Css	Some don't support the long tail enough and just recommend obvious items, outliers can be a problem.
Modern Fashion recommender system	2022	AWS, Docker, Artificial Intelligence, python, google cloud computing engine.	Inaccurately estimate consumer's true preference stand to pull down willingness to pay for some items and increase of the likelihood of actual it.

## 2.2 References

[1] Mohamed Elleuch, Anis Mezghani, Mariem Khemakhem, Monji Kherallah "Clothing Classification using Deep CNN Architecture based on Transfer Learning", 2021 DOI:10.1007/978-3-030-49336-3\_24 [2] Saurabh Gupta, Siddhartha Agarwal, Apoorve Dave. "Apparel Classifier and Recommender using Deep Learning." (2015). [3] Bossard, Lukas, Matthias Dantone, Christian Leistner, Christian Wengert, Till Quack and Luc Van

Gool. "Apparel Classification with Style." ACCV (2012). [4] Krizhevsky, Alex, Ilya Sutskever and Geoffrey E. Hinton. "ImageNet classification with deep convolutional neural networks." Communications of the ACM 60 (2012): 84 - 90. [5] Congying Guan, Shengfeng Qin, Yang Long, (2019) "\"Apparel-based deep learning system design for apparel style recommendation\"", International Journal of Clothing Science and Technology. [6] Stephen Marsland, ?Machine Learning – An Algorithmic Perspective?, Second Edition, Chapman and Hall/CRC Machine Learning and Pattern Recognition Series, 20

## 2.3 Problem Definition Statement

User is enter the wrong keyword to search keyboard it is recommend wrong product.

Users is give the option to the chatbot to recommend the correct product.

## Ideation and Proposed Solution

### 3.1 Empathy map & Canvas

Empathy Map Canvas: An empathy map is a simple, easy-to-digest visual that captures knowledge about a user's behaviours and attitudes. It is a useful tool to helps teams better understand their users. Creating an effective solution requires understanding the true problem and the person who is experiencing it. The exercise of creating the map helps participants consider things from the user's perspective along with his or her goals and challenges.

# Empathy Map Canvas

Gain insight and understanding on solving customer problems.

1 Build empathy and keep your focus on the user by putting yourself in their shoes.



Share your feedback

Reference:

<https://app.mural.co/invitation/mural/ibmproject0250/1663489514513?sender=u11a15f7b9d6bacf44a890331&key=9537ddbf-520c-44a0-8c57-37939aba8c63>


## 3.2 Brainstorm & Ideation

Brainstorming provides a free and open environment that encourages everyone within a team to participate in the creative thinking process that leads to problem solving. Prioritizing volume over value, out-of-the-box ideas are welcome and built upon, and all participants are encouraged to collaborate, helping each other develop a rich amount of creative solutions. Use this template in your own brainstorming sessions so your team can unleash their imagination and start shaping concepts even if you're not sitting in the same room

Reference: <https://app.mural.co/t/ibmproject0250/m/ibmproject0250/1668146454106/db7d236756f32bba505a2712c7ba94299cc51e2e?sender=ud60e8640702a4e97caed3020>

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

Template



### Prioritize tasks

Get your to-do list under control. Discuss and rank each item by its importance, using a bullseye as a helpful physical constraint: not everything can fit in the center, so not everything can be a priority.

- 2 Hours to Prepare
- 6 Hours to collaborate
- 1-4 people recommended

partner with  
**LUMA INSTITUTE**

1

### Define your problem statement

As a group, Define the problem at the begin.

2 hours

Problem

Develop a Website to user buy the product without any search using only chatbot

2

### After you collaborate

With the relative priority of tasks clear, there are some useful ways to keep your momentum going.

#### Quick add-ons

1

**Vote on the most important theme**


Look at the wedges within your bullseye and start a **Voting session** to decide which theme is most deserving of the team's attention right now.

2

**Assign action items**

Before everyone goes their separate ways, assign a few tasks to each person depending on their role and skillset.


#### Keep moving forward



**Co-create ways to solve a problem**

Try this template if you're not sure how to approach one of the tasks in the center of the bullseye.


[Open the template](#)



**Formalize and explain an idea**

Transform one of your important tasks into a clear concept that can be shared for feedback.

[Open the template](#)



**Map project stakeholders**

Choose a task from the center ring. Make a map of who would work on it and be affected by it.

[Open the template](#)

[Share template feedback](#)

## Step-2: Brainstorm, Idea Listing and Grouping

2

**Brainstorming**

Team Discuss the problem and write

🕒 1 hour

Mani Kumaran S



Israr Ahamed

**Programming Languages and Frameworks****Cloud Services****Website Information and Protocols**

3

**Group Ideas**

As a group, Define the problem at the begin.

🕒 2 hours

**Programming Languages and Frameworks****Cloud Services****Website Information and Protocols****User Details****Pages**



### Step-3: Idea Prioritization

4

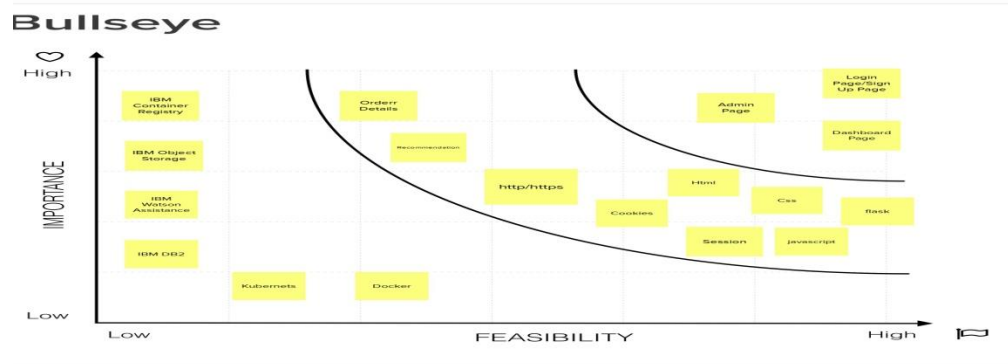
#### Bullseye

Group is discussed about which is high importance and high feasible

🕒 1 hours

##### Problem

It is used to analyse which is high importance and high feasible



### 3.3 Proposed Solution

Project team shall fill the following information in proposed solution template

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Many of the website is use a keyboard search for searching the correct product.The customer is type the wrong word it would recommend wrong product.It is major problem most of the online purchasing website.
2.	Idea / Solution description	We have a chatbot it is choose the option to display the product by the recommendation the correct product.

3.	Novelty / Uniqueness	It Provides the correct product in the online purchasing website. Customer can find the product using the recommendation.
4.	Social Impact / Customer Satisfaction	Customer can easily to find the product using chatbot.
5.	Business Model (Revenue Model)	It provide more sales because that gives the good result.The website display ads and purchase get the commission.
6.	Scalability of the Solution	At starting it is website and after we develop to application for all platform.

### 3.4 Proposed Solution Fit

The Problem-Solution Fit simply means that you have found a problem with your customer and that the solution you have realized for it actually solves the customer's problem. It helps entrepreneurs, marketers and corporate innovators identify behavioral patterns and recognize what would work and why.

#### Purpose:

- Solve complex problems in a way that fits the state of your customers.
- Succeed faster and increase your solution adoption by tapping into existing mediums and channels of behavior.
- Sharpen your communication and marketing strategy with the right triggers and messaging.
- Increase touch-points with your company by finding the right problem-behavior fit and building trust by solving frequent annoyances, or urgent or costly problems.
- Understand the existing situation in order to improve it for your target group

Project Title: Smart Fashion Recommender Application      Project Design Phase-I - Solution Fit Template      Team ID: PNT2022TMD45319

Define CS, fit into CC	<b>1. CUSTOMER SEGMENT(S)</b> Who is your customer? i.e. working parents of 0-5 y.o. kids  1.Customer is not understand the function? 2.Customer is could not solve problem send feedback?	<b>6. CUSTOMER CONSTRAINTS</b> 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.  1.Customer can sue the using the email? 2.Customer can solve problem by using help panel? 3.Customer can solve the problem using the community? 4.Customer can solve the problem using the feedback?	<b>5. AVAILABLE SOLUTIONS</b> Which solutions are available to the customers when they face the problem or need to get the job done? What have they tried in the past? What pros & cons do these solutions have? i.e. pen and paper is an alternative to digital notetaking  1.Customer can send the problem in website community? 2.Customer can send the problem in the website? 3.Customer can send the problem in their social media? 4.Customer can send the report to the compant contact address?	Explore AS, differentiate
	<b>2. JOBS-TO-BE-DONE / PROBLEMS</b> Which jobs-to-be-done (or problems) do you address for your customers? There could be more than one; explore different sides.  1.Customer is able to solve the problem using the help? 2.Customer is able to solve the problem using text? 3.Customer is able to solve the problem in the website community?	<b>9. PROBLEM ROOT CAUSE</b> What is the real reason that this problem exists? What is the back story behind the need to do this job? i.e. customers have to do it because of the change in regulations.  1.Customer is not to understand the solution? 2.Customer is not to find the answer in the help panel? 3.Customer is not to understand the steps? 4.Customer the problem is not send correct to find the solution?	<b>7. BEHAVIOUR</b> What does your customer do to address the problem and get the job done? i.e. directly related: find the right solar panel installer, calculate usage and benefits; indirectly associated: customers spend free time on volunteering work (i.e. Greenpeace)  1.Customer can send the problem to the help panel to the exact solution? 2.Customer can send the problem in the website to the exact solution? 3.Customer can send the problem social media to the exact solution? 4.Customer can sen dthe problem in the feedback to the exact result?	
Focus on J&P, tap into BE, understand RC	<b>3. TRIGGERS</b> What triggers customers to act? i.e. seeing their neighbour installing solar panels, reading about a more efficient solution in the news.  1.Customer can solve the problem by using the help panel?	<b>10. YOUR SOLUTION</b> If you are working on an existing business, write down your current solution first, fill in the canvas, and check how much it fits reality. If you are working on a new business proposition, then keep it blank until you fill in the canvas and come up with a solution that fits within customer limitations, solves a problem and matches customer behaviour.  1.Customer can find the problem in the help panel? 2.Customer can solve by using the feedback?	<b>8. CHANNELS of BEHAVIOUR</b> <b>8.1 ONLINE</b> What kind of actions do customers take online? Extract online channels from #7 1.Customer can receive the data in the mail?  <b>8.2 OFFLINE</b> What kind of actions do customers take offline? Extract offline channels from #7 and use them for customer development. !.Customer can store the data in the device?	Extract online & offline CH of BE
	<b>4. EMOTIONS: BEFORE / AFTER</b> How do customers feel when they face a problem or a job and afterwards? i.e. lost, insecure > confident, in control - use it in your communication strategy & design.  1.The help panel have the the problem to solve step-by-step			

Problem-Solution fit canvas is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 license  
 Created by Daria Nepritskikh / Amaltama.com

**AMALTAMA**

## References:

1. <https://gustdebacker.com/problem-solution-fit/#::~:~:text=What%20is%20a,the%20customer%E2%80%99s%20problem.>
2. <https://www.feedough.com/problem-solution-fit/#::~:~:text=Why%20Achieving%20A,guessing%20their%20needs.>

## 4.Requirement Analysis

### 4.1 Functional Requirements

Following are the functional requirements of the proposed solution.

FR No.	Functional Requirement (Epic)	Sub Requirement (Story / Sub-Task)
FR-1	User Registration	Registration through Form
FR-2	User Interaction	Interact through the Chat Bot
FR-3	Buying Products	Through the chat Bot Recommendation
FR-4	Track Products	Ask the Chat Bot to Track my Orders
FR-5	Return Products	Through the chat Bot
FR_6	New Collections	Recommended from chat Bot

## 4.2 Non Functional Requirements

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

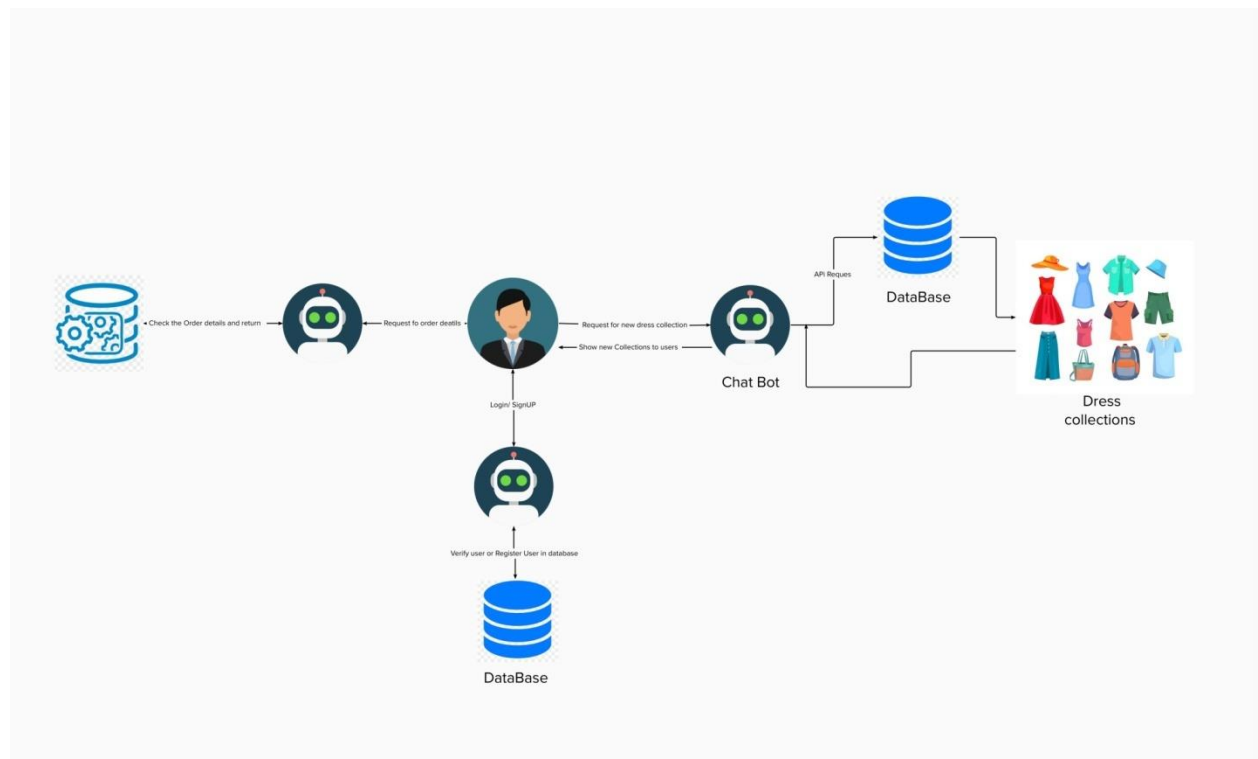
FR No.	Non-Functional Requirement	Description
NFR-1	<b>Usability</b>	Using Android or IOS or windows applications.
NFR-2	<b>Security</b>	The user data is stored securely in IBM cloud.
NFR-3	<b>Reliability</b>	The Quality of the services are trusted.
NFR-4	<b>Performance</b>	Its Provide smooth user experience.
NFR-5	<b>Availability</b>	The services are available for 24/7.
NFR-6	<b>Scalability</b>	Its easy to scalable size of users and products.

## 5.Project Design

### 5.1 Data Flow Diagrams

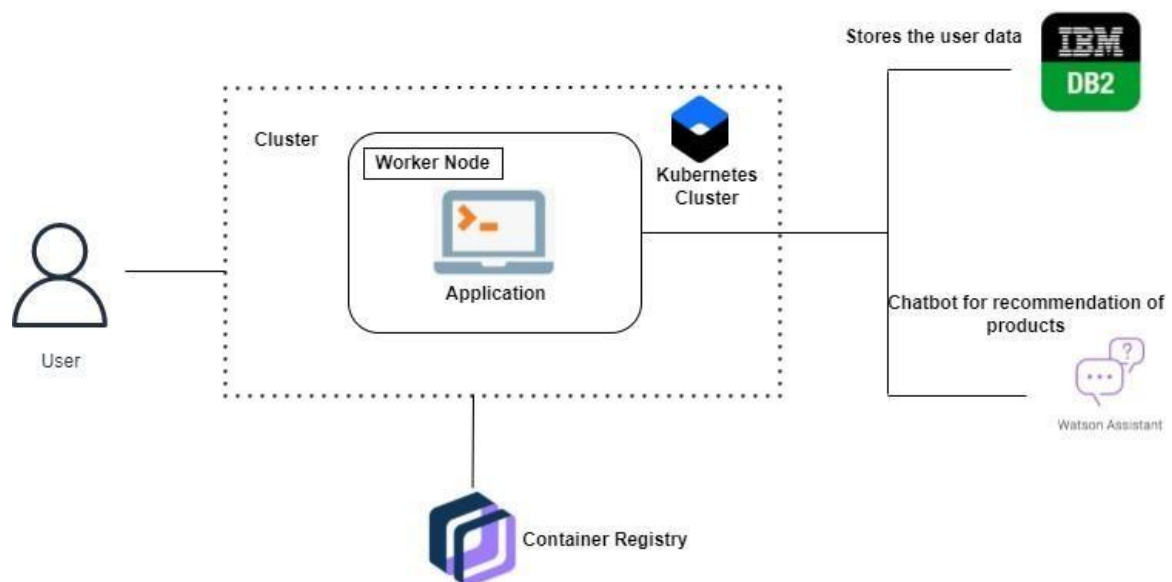
#### ***Data Flow Diagrams:***

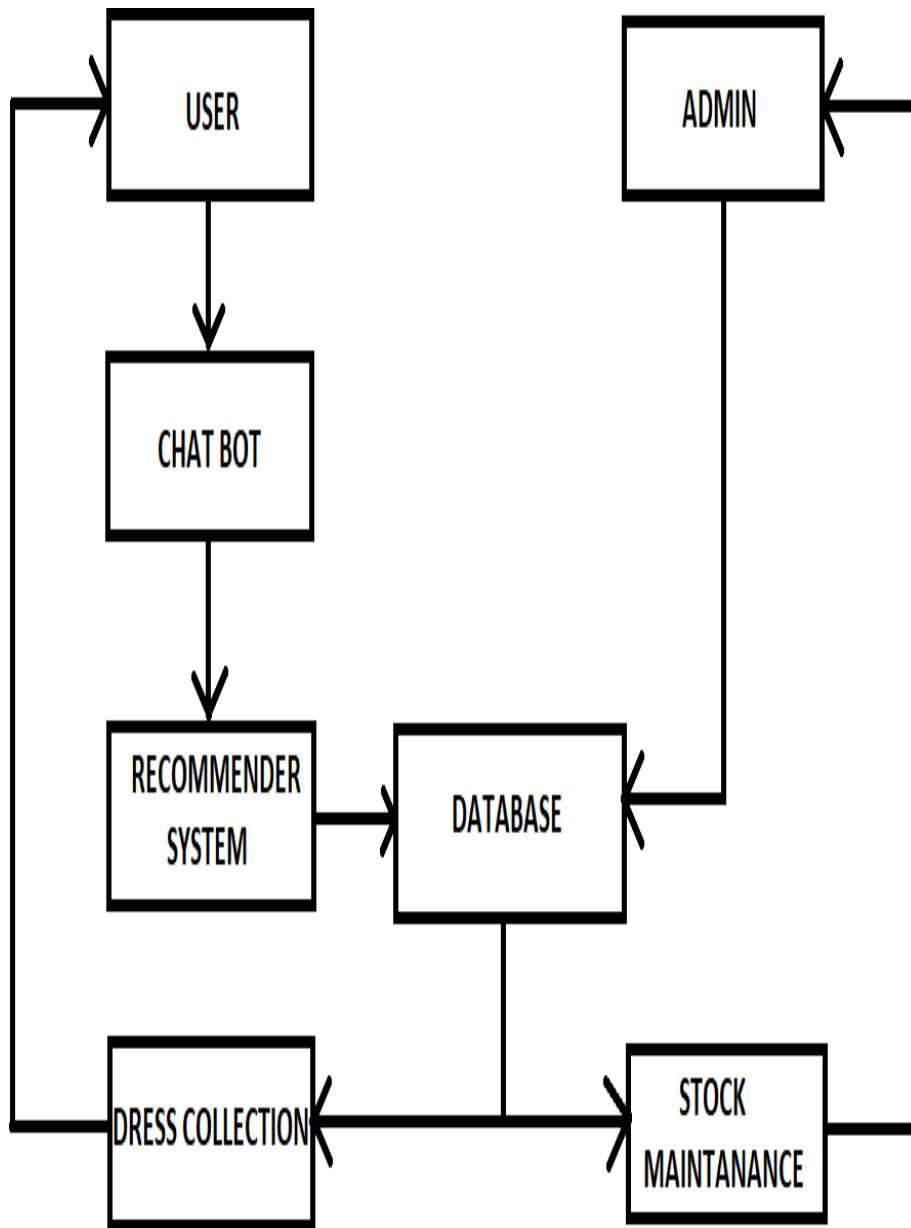
A Data Flow Diagram (DFD) is a traditional visual representation of the information flows within a system. A neat and clear DFD can depict the right amount of the system requirement graphically. It shows how data enters and leaves the system, what changes the information, and where data is stored.



## 5.2 Solution & Technical Architecture

Solution Architecture:





### 5.3 User Stories

Sprint	Functional Requirement(Epic)	User Story Number	User Story/Task	Story Points	Priority	Team Members
Sprint-1	User Panel	USN-1	The User will login into the website and go through the products available on the website	20	High	1.MANIKUMARAN S 2.ISRAR AHAMED M 3.MOHAMED ASRAF NASEEM S 4.MUHIBULLA M
Sprint-2	Admin Panel	USN-2	The role of the admin is to check out the database about the stock and have a track of all the things that the users are purchasing.	20	High	1.MANIKUMARAN S 2.ISRAR AHAMED M 3.MOHAMED ASRAF NASEEM S 4.MUHIBULLA M
Sprint-3	Chat Bot	USN-3	The User can directly talk to Chatbot regarding the products.Get the recommendations based on information provided by the user.	20	High	1.MANIKUMARAN S 2.ISRAR AHAMED M 3.MOAHMED ASRAF NASEEM S 4.MUHIBULLA M
Sprint-4	Final delivery	USN-4	Container of applications using docker kubernets and deployment the application.Create the documentation and final submit the application	20	High	1.MANIKUMARAN S 2.ISRAR AHAMED M 3.MOHAMED ASRAF NASEEM S 4.MUHIBULLA M

## 6.Project Planning & Scheduling

### 6.1 Sprint Planning & Estimation

Sprint	Functional Requirement(Epic)	User Story Number	User Story/Task	Story Points	Priority	Team Members
Sprint-1	User Panel	USN-1	The User will login into the website and go through the products available on the website	20	High	1.MANIKUMARAN S 2.ISRAR AHAMED M 3.MOHAMED ASRAF NASEEM S 4.MUHIBULLA M
Sprint-2	Admin Panel	USN-2	The role of the admin is to check out the database about the stock and have a track of all the things that the users are purchasing.	20	High	1.MANIKUMARAN S 2.ISRAR AHAMED M 3.MOHAMED ASRAF NASEEM S 4.MUHIBULLA M
Sprint-3	Chat Bot	USN-3	The User can directly talk to Chatbot regarding the products.Get the recommendations based on information provided by the user.	20	High	1.MANIKUMARAN S 2.ISRAR AHAMED M 3.MOAHMED ASRAF NASEEM S 4.MUHIBULLA M



Sprint-4	Final delivery	USN-4	Container of applications using docker kubernetes and deployment the application.Create thedocumentation and final submit the application	20	High	1.MANIKUMARAN S 2.ISRAR AHAMED M 3.MOHAMED ASRAF NASEEM S 4.MUHIBULLA M
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## 6.2 Sprint Delivery & Schedule

### ***Project Tracker, Velocity & Burndown Chart: (4 Marks)***

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

### 6.3 Report Jira Files

### ***Burndown Chart:***

