PROJECT REPORT

AI BASED DISCOURSE FOR BANKING INDUSTRY

Team ID: PNT2022TMID45233

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CHAPTER - 1

INTRODUCTION

1.1 PROJECT OVERVIEW

Industries are forced to evolve and update their practices due to technological advances and the contemporary market. The banking sector is one of the most developed sectors and is always looking for the latest technological solutions that improve its efficiency. A smart chatbot takes a query from the user in natural language and gives the appropriate response for the same. This paper aims to discuss the relevance of chatbots in the banking sector and explore how chatbots can be implemented. Net banking websites are complex and involve navigating through multiple pages to find the information you need. Bank employees are exposed to many stressful situations while interacting directly with customers. By using chatbots you can avoid such situations gracefully

1.2 PURPOSE

Firstly, customer service and support. Chatbots are one of the greatest tools in the modern-day business world to help your business enable customer support and customer service. Chatbots take the pressure of having all these people and staff members answering the phones on a continual basis. Chatbots provide 24/7 client support, so existing and potential customers can try and solve their banking problems after work hours and on weekends. This ultimately also leads to better customer experience. A Chatbot could help explain what you do. Personalized services tailored to a customer's individual needs are the latest trend among customers. Around 63% users expect personalized experiences and services. Chatbots improve operational efficiency by streamlining customer care operations.

CHAPTER - 2

LITERATURE SURVEY

2.1 EXISTING PROBLEM

The banking industry has been profoundly influenced by technological evolution in recent decades and consumer adoption of banking technologies is a widely researched topic in the literature. Thus, a more in-depth look into the processes behind the adoption of banking chatbots can be gained through the review of the existing literature on the adoption of other technologies applied in the banking sector, such as i-banking and m-banking. Several theories have been implemented in order to analyze the adoption of different IT systems. According to Hanafizadeh and Khedmatgozar (2012), the most influential theoretical models applied in i-banking adoption studies, are the Diffusion of innovation theory (DIT), the Technology acceptance model, the Decomposed theory of planned behavior (DTPB), the Extended technology acceptance model and the Unified theory of user acceptance of technology (UTAUT), the latter becoming dominant in the literature in recent years. Shaikh and Karjaluoto (2015) analyzed and synthesized existing studies of m-banking adoption and concluded that the most frequently used adoption models were TAM, followed by DIT and UTAUT, while several studies applied a combination of different technology acceptance models (e.g. TAM and DIT). Several of the above mentioned models are composed of intention to use or actual usage as the dependent variables. Based on the literature review, it could be concluded that usefulness and ease of use are fundamental variables in studying technology acceptance in the banking sector. It should also be highlighted that compatibility was found as a key determinant for m-banking and i-banking (Giovanis et al., 2012) adoption. Therefore, it is expected that compatibility will influence banking chatbot adoption as well

2.2 REFERENCES

1.Alam, M., & Khokhar, R. (2006). Impact of Internet on Customer Loyaltyin Swedish Banks. J. Econ. Psycho.

2.Ardito, L., Petruzzelli, A. M., Panniello, U., & Achille, C. (2019). Towards Industry

3.Bellman, R. (1978). An Introduction to Artificial Intelligence: Can Computers Think? San Francisco: Boyd & Fraser Pub. Co

4.https://www.financialdirector.co.uk/2019/10/03/ai-for-financial-directors-and-cfos/

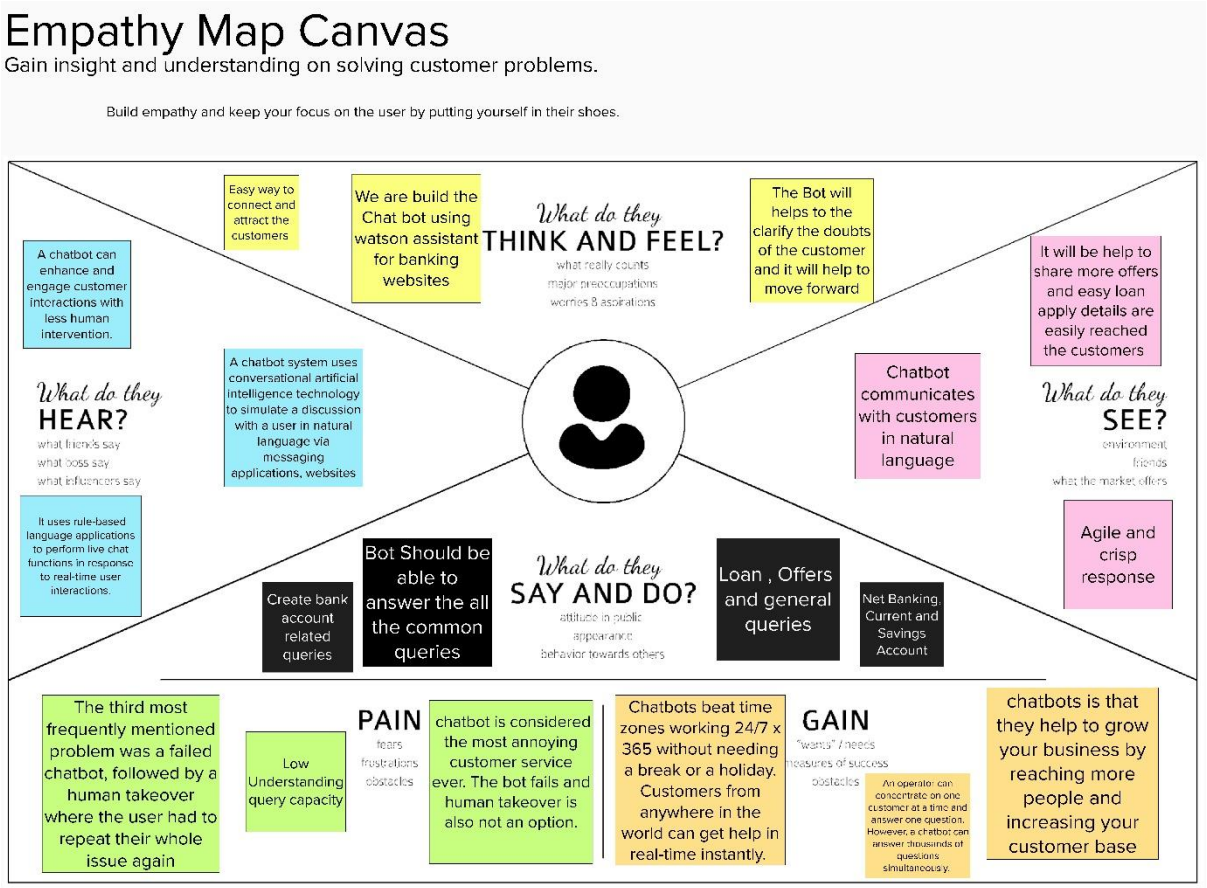
2.3 PROBLEM STATEMENT DEFINITION

Customer Problem Statement Template: Create a problem statement to understand your customer's point of view. The Customer Problem Statement template helps you focus on what matters to create experiences people will love. A well-articulated customer problem statement allows you and your team to find the ideal solution for the challenges your customers face. Throughout the process, you'll also be able to empathize with your customers, which helps you better understand how they perceive your product. By the consequences is noted that 2016 was the year of chatbots. The software industry is oriented on chatbots. Thousands of chatbots are invented on startups and used by the businesses to improve customer service, keeping them hanging by a kind communication. According to research, today chatbots are used to solve several business tasks across many industries like E-Commerce, Insurance, Banking, Healthcare, Finance, Legal, Telecom, Logistics, Retail, Auto, Leisure, Travel, Sports, Entertainment, Media, and many others.

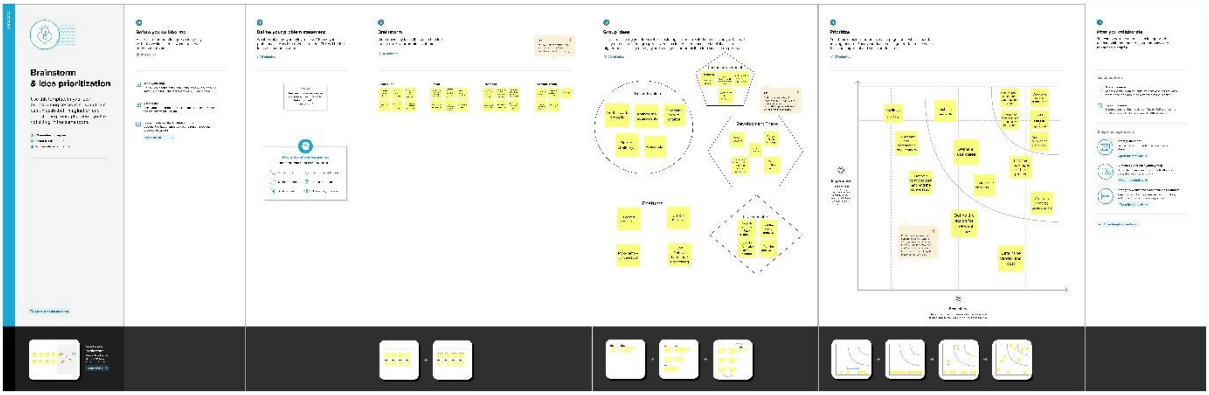
CHAPTER - 3

IDEATION & PROPOSED SOLUTION

3.1 EMPATHY MAP CANVAS



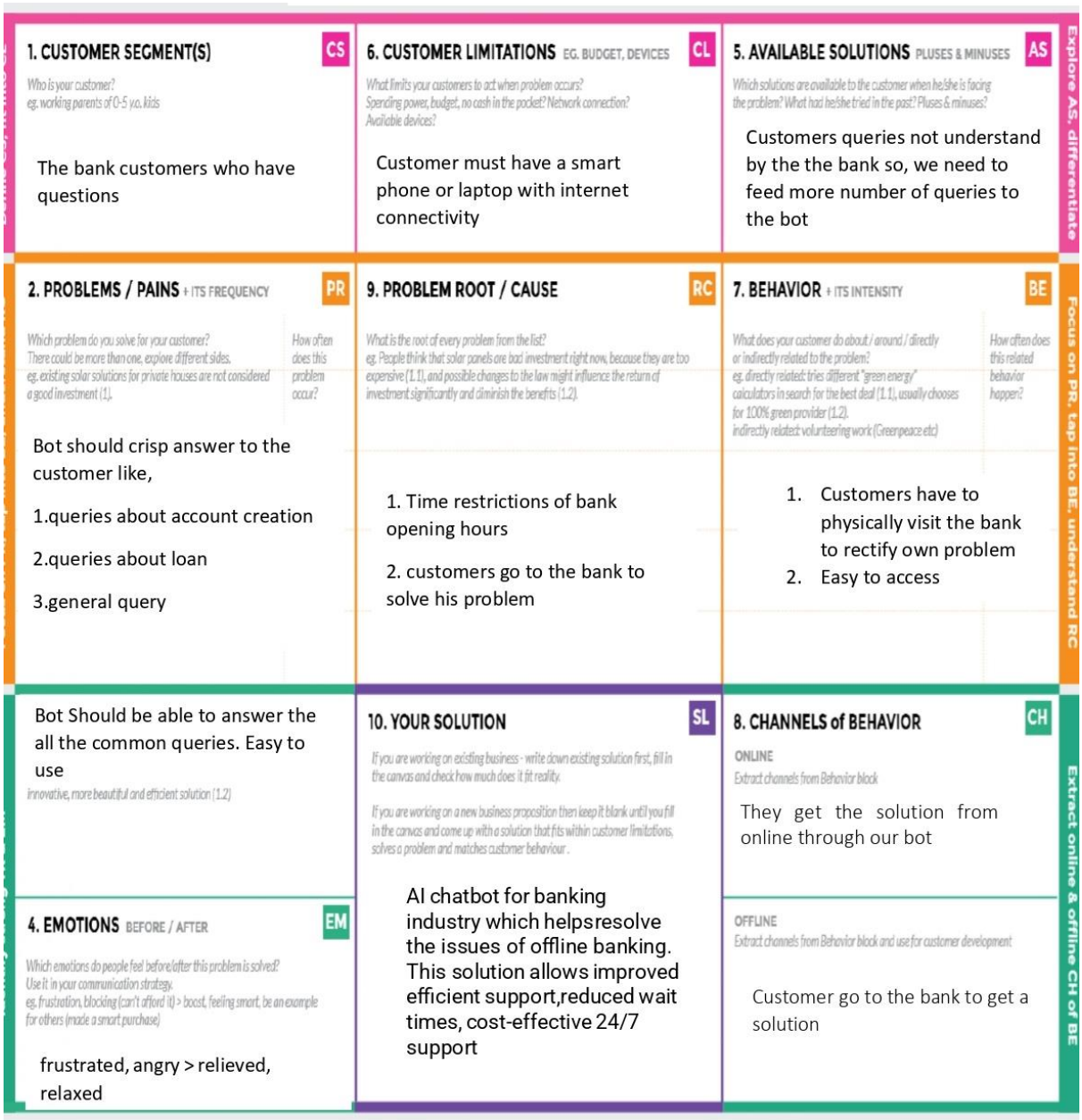
3.2IDEATION & BRAINSTORMING



3.2 PROPOSED SOLUTION

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	Build a chatbot to solve customers' own queries and provide a smooth and efficient solution. customers who use it do not need to go to the bank to resolve their issues
2.	Idea / Solution description	This chatbot will help the customers reach all the banking services and offers offered by the particular bank
3.	Novelty / Uniqueness	Chatbots built using AI can Answer any general banking queries on account creation, loan, net banking, other services etc. If any unfamiliar questions are asked to the chatbot, it will automatically search the web and find suitable answers.
4.	Social Impact / Customer Satisfaction	To ensure user satisfaction, the The chatbot will provide a secure and effective communication between the user and the bank. It will act as a holistic virtual assistant that will help customers ask banking related queries and provide them with relevant recommendations without visiting the bank or calling customer service centers.
5.	Business Model (Revenue Model)	There are two plans, normal and premium plan. Normal plan is free of cost and anybody can install the bot to use the core features. The premium model needs to be subscribed which gives access to personalized banking. It eliminates the need for a massive customer care workforce and even reduces the workloadof the bank employees.
6.	Scalability of the Solution	Initially the bot can only respond to single. Later on Bot is scaled to respond to multiple queries simultaneously. A bot can be used in the cloud to provide access to various locations. It can be scaled according to requirements Include answers to questions related to any new feature or service introduced by the bank.

3.3 PROBLEM SOLUTION FIT



CHAPTER - 4

REQUIREMENT ANALYSIS

4.1 FUNCTIONAL REQUIREMENT

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 website or application Registration through social media
FR-2	User Confirmation	Verification via Email Verification via OTP
FR-3	User Login	Login through website using their specific user Id and password
FR-4	User Access	Access the app requirements
FR-5	User Upload	User should be able to upload the requirements data
FR-6	User Solution	Data report should be Find and delivered to user for within 24 hours
FR-7	User Data Sync	API interface to increase to in voice system

4.2 NON-FUNCTIONAL REQUIREMENTS

Non-functional Requirements:

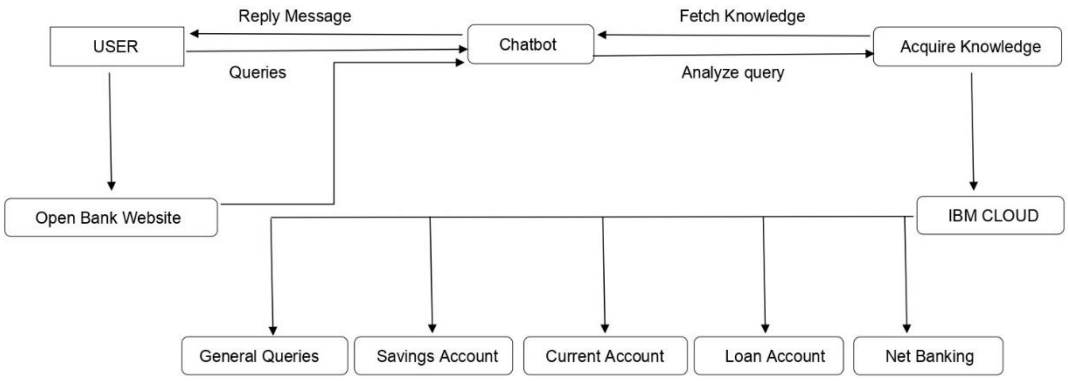
Following are the non-functional requirements of the proposed solution.

FR No.	Non-Functional Requirement	Description
NFR-1	**Usability**	Usability requirements includes language barrier. Usability can be assessed by Efficiency of use.
NFR-2	**Security**	Access permissions for the system information may only be changed by the system's data administrator.
NFR-3	**Reliability**	The database update process must rollback all related updates when any update fails.
NFR-4	**Performance**	The front-page load time must be no more than 2 seconds for users that access the website using an VoLTE mobile connection.
NFR-5	**Availability**	New module deployment must not impact frontpage, product pages, and check out pages availability and must not take longer than one hour.
NFR-6	**Scalability**	We can increase scalability by adding memory and speed, servers, or disk space and also, we can compress data.

CHAPTER – 5

PROJECT DESIGN

5.1 DATA FLOW DIAGRAMS



5.2 SOLUTION & TECHNICAL ARCHITECTURE

Technical Architecture:

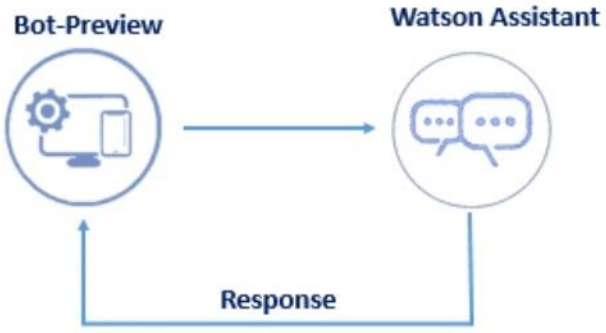


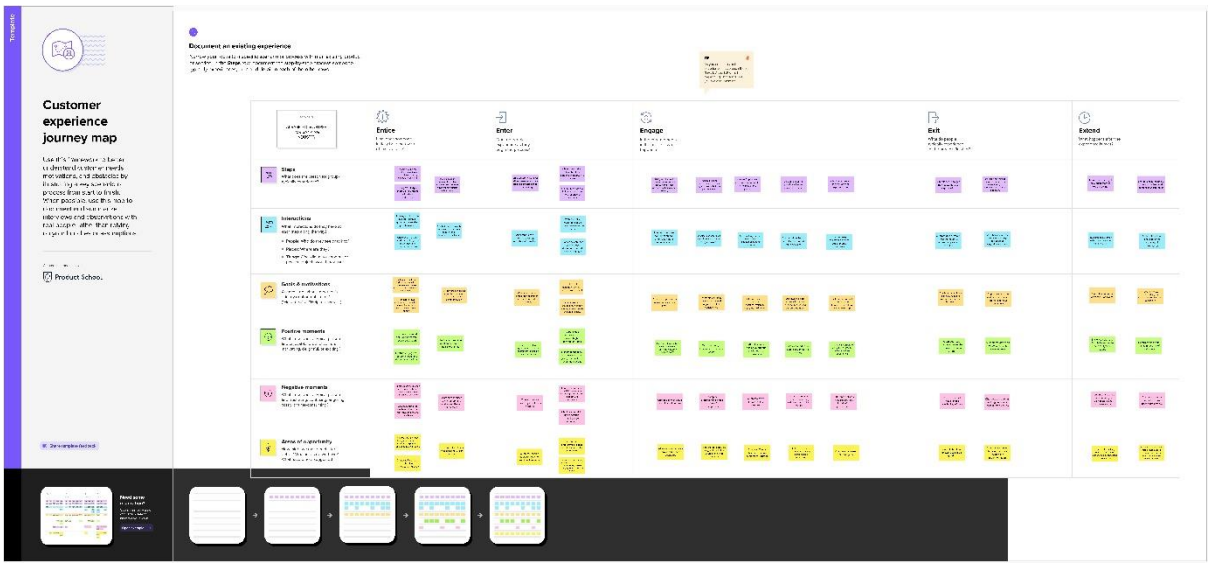
Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	User Interface	How user interacts with application e.g. Web UI, Mobile App, Chatbot etc.	HTML, CSS, JS, Flask
2.	Messaging Interface	To integrate the chatbot in another interface	Bank Website
3.	Supervised Learning	Human interference, when you want to improve its conversation flow, add new intents or enrich its knowledge base.	Entity, Intent
4.	API Integration	To integrate chatbot with third-parties via web services	REST APIs
5.	Natural Language Processing	Automatically understand the language of the user.	API.AI
6.	Cloud Database	Database Service on Cloud	IBM DB2, IBM Cloudant etc.
7.	Fluid Conversations	Interactive FAQ	QNA maker from Microsoft
8.	External API-1	To integrate the services of the bank	Corresponding bank's API
9.	Infrastructure (Server / Cloud)	Application Deployment on Local System / Cloud	Local, Cloud Foundry, Kubernetes, etc.

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Open-Source Frameworks	List the open-source frameworks used	Flask
2.	Security Implementations	List all the security / access controls implemented, use of firewalls etc.	Encryption, Decryption, IAMControls etc.
3.	Scalable Architecture	Justify the scalability of architecture (3 – tier, Micro-services)	Response time, Throughput, CPU and network usages, etc.
4.	Availability	Justify the availability of application (e.g use ofload balancers, distributed servers etc.)	All kind of users.
5.	Performance	Design consideration for the performance of the application (number of requests per sec, use of Cache, use of CDN's) etc.	Watson Assistant is used to build the chatbot.

5.3 USER STORIES



CHAPTER – 6

PROJECT PLANNING & SCHEDULING

6.1 SPRINT PLANNING & ESTIMATION

Project Milestone and Tasks/Activities:

Milestone	Task	Starting Date	Ending Date	Project Completion Status	Team Members
Create IBM Service	Creation of Banking Chatbot or Assistant using IBM Watson Assistant	24 Oct 2022	25 Oct 2022	9%	Pravin, Poomankandan
	Understanding Customer's Banking Related Queries and skills	25 Oct 2022	29 Oct 2022	15%	Pravin, Poomanikandan
Create Skills and Assistant for Chatbot	Training the Chatbot with Banking related dataset.	31 Oct 2022	01 Nov 2022	24%	Pravin, Poomanikandan
	Building action and Adding responses to Account Creation	01 Nov 2022	02 Nov 2022	29%	Ramkumar, Saravanan
	Building action and Adding responses to Banking related queries	02 Nov 2022	03 Nov 2022	34%	Ramkumar, Saravanan
	Building action and Adding responses to Net Banking	03 Nov 2022	04 Nov 2022	39%	Ramkumar, Saravanan
	Building action and Adding responses to Loan Queries	04 Nov 2022	05 Nov 2022	44%	Ramkumar, Saravanan
Testing Assistant & Integrate with Flask webpage	Testing the chatbot performance with the trained banking functionalities or conversations	07 Nov 2022	09 Nov 2022	60%	Pravin, Saravanan

	Integration of Flask webpage with the chatbot assistant to provide a framework	09 Nov 2022	12 Nov 2022	83%	Pravin, Saravanan
Deployment Of Chatbot	Final Deployment of AI based chatbot for	14 Nov 2022	19 Nov 2022	100%	Pravin, Ramkumar
	banking Industry or Running the Chatbot service in fully efficient and effective condition				

6.2 SPRINT DELIVERY SCHEDULE

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

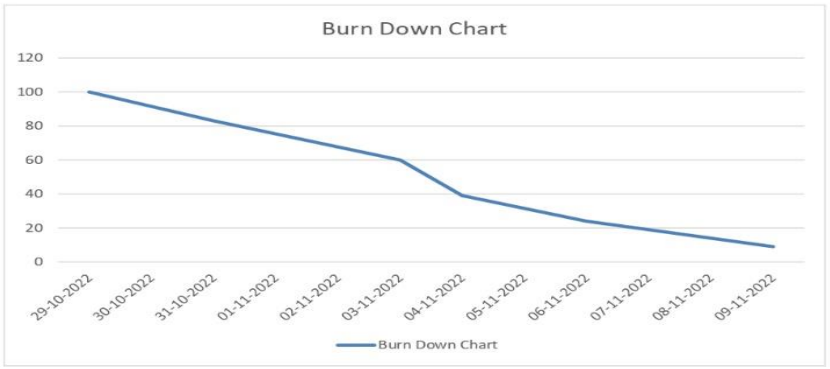
Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Create Assistant	USN-1	Creation of Banking Chatbot or Assistant using IBM Watson Assistant/ As a user, I can see a Banking Assistant.	12	High	Pravin, Poomankandan
Sprint-1		USN-2	Understanding Customer's Banking Related Queries and skills/ As a user, I can see a Chatbot with Banking skills.	8	Moderate	Pravin, Poomanikandan
Sprint-2	Feed Responses to the Assistant	USN-3	Building action and Adding responses to Account Creation/As a user, I can see a Chatbot which helps to create an account	5	High	Pravin, Poomanikandan
Sprint-2		USN-4	Building action and Adding responses to Banking related queries/As a user, I can see a Chatbot which helps to solve the banking queries.	5	High	Ramkumar, Saravanan
Sprint-2		USN-5	Building action and Adding responses to Net Banking/As a user, I can see a Chatbot which helps to access Net Banking	5	High	Ramkumar, Saravanan
Sprint-2		USN-6	Building action and Adding responses to Loan Queries/As a user, I can see a Chatbot which helps in Loan related Queries.	5	High	Ramkumar, Saravanan
Sprint-3	Testing & Deployment Phase I	USN-7	Testing the chatbot performance with the trained banking functionalities or conversations/As a user, I can know the chatbots performance level	10	High	Pravin, Saravanan

Product Backlog, Sprint Schedule, and Estimation (4 Marks)

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Create Assistant	USN-1	Creation of Banking Chatbot or Assistant using IBM Watson Assistant/ As a user, I can see a Banking Assistant.	12	High	Pravin, Poomankandan
Sprint-1		USN-2	Understanding Customer's Banking Related Queries and skills/ As a user, I can see a Chatbot with Banking skills.	8	Moderate	Pravin, Poomanikandan
Sprint-2	Feed Responses to the Assistant	USN-3	Building action and Adding responses to Account Creation/As a user, I can see a Chatbot which helps to create an account	5	High	Pravin, Poomanikandan
Sprint-2		USN-4	Building action and Adding responses to Banking related queries/As a user, I can see a Chatbot which helps to solve the banking queries.	5	High	Ramkumar, Saravanan
Sprint-2		USN-5	Building action and Adding responses to Net Banking/As a user, I can see a Chatbot which helps to access Net Banking	5	High	Ramkumar, Saravanan
Sprint-2		USN-6	Building action and Adding responses to Loan Queries/As a user, I can see a Chatbot which helps in Loan related Queries.	5	High	Ramkumar, Saravanan
Sprint-3	Testing & Deployment Phase I	USN-7	Testing the chatbot performance with the trained banking functionalities or conversations/As a user, I can know the chatbots performance level	10	High	Pravin, Saravanan

Velocity:
The team's average velocity (AV) per iteration unit (story points per day)

$$AV = 20/3 = 6.67$$



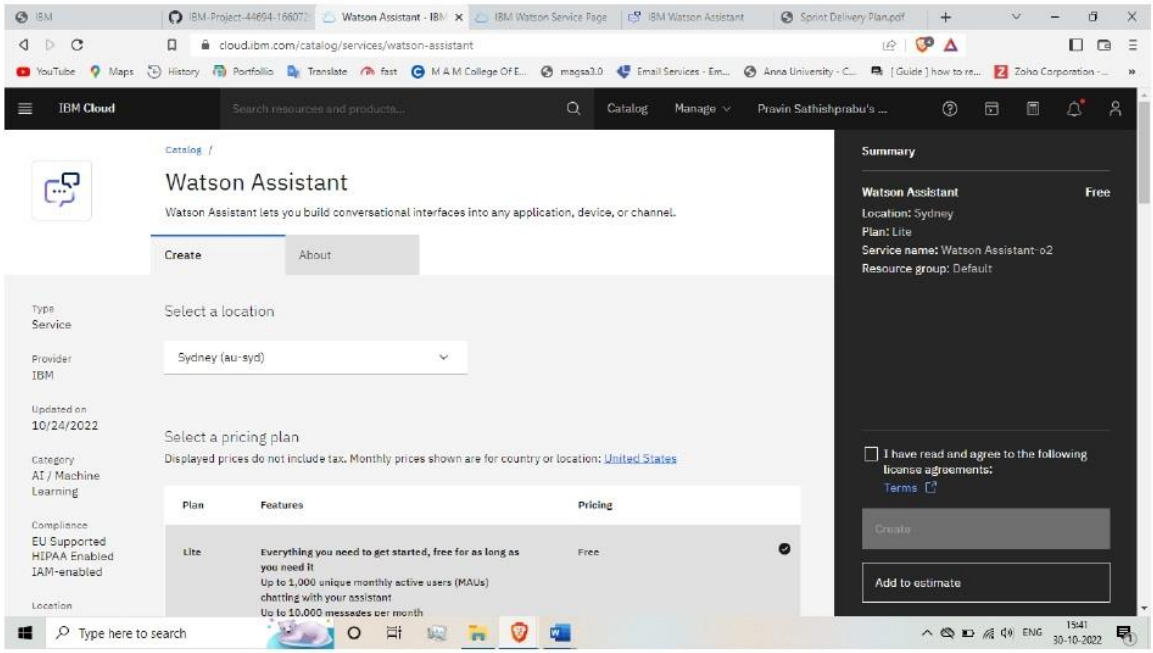
CHAPTER - 7

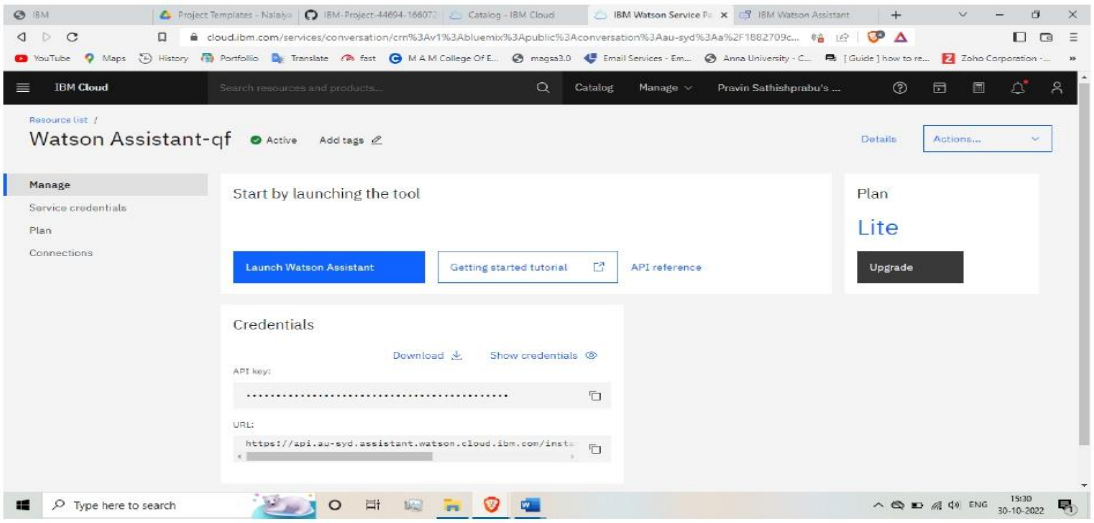
CODING & SOLUTIONING

FEATURES

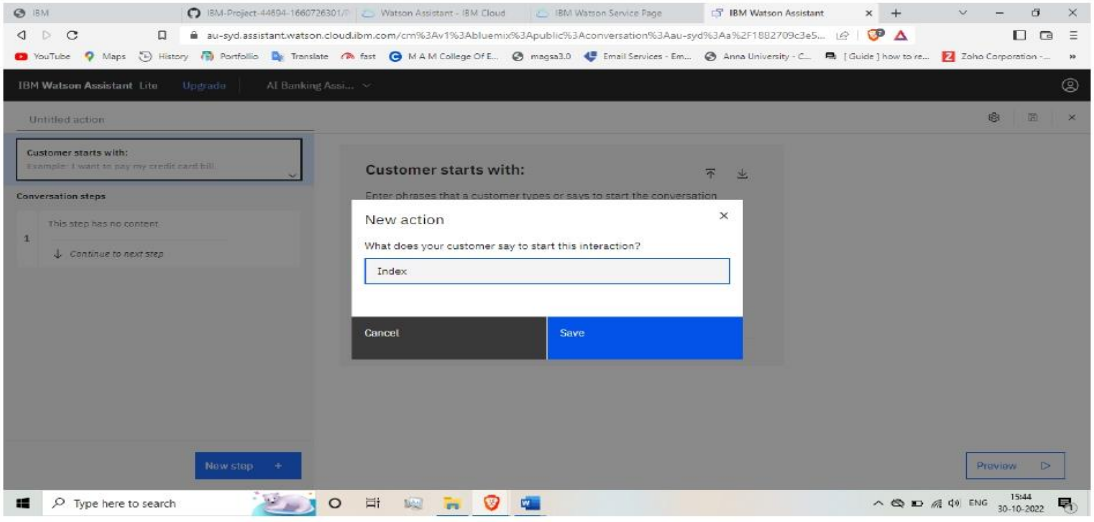
Create Watson Assistant

In this phase we are create the Watson assistant in IBM Cloud

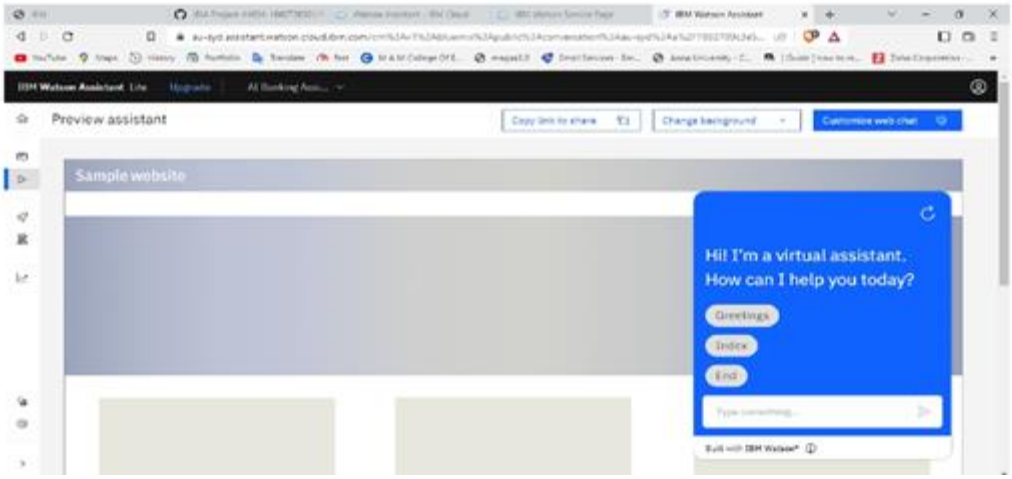




Create the New Skills

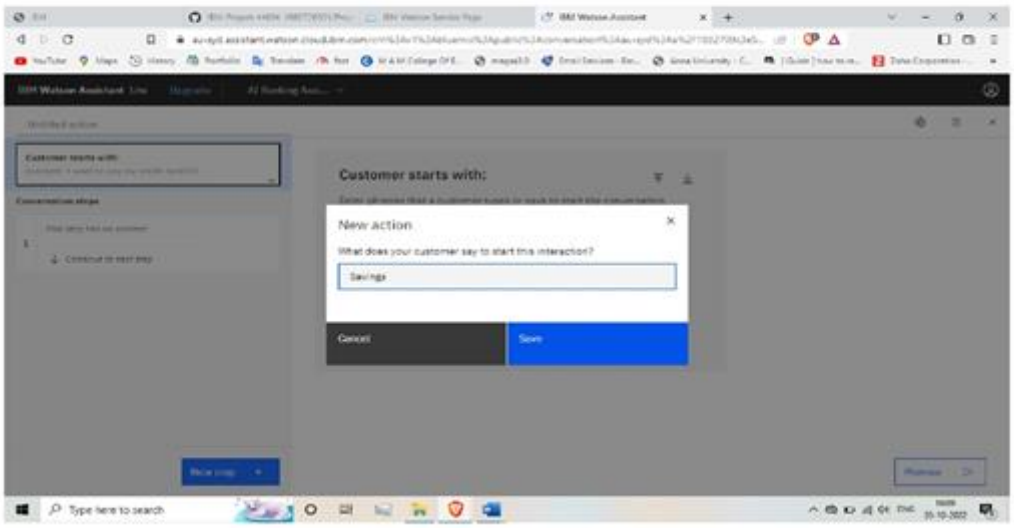


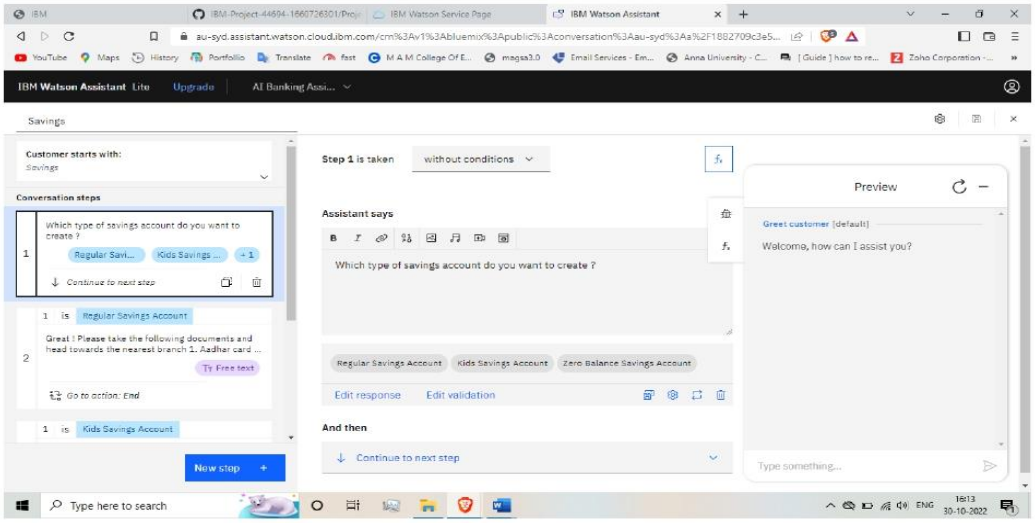
Preview



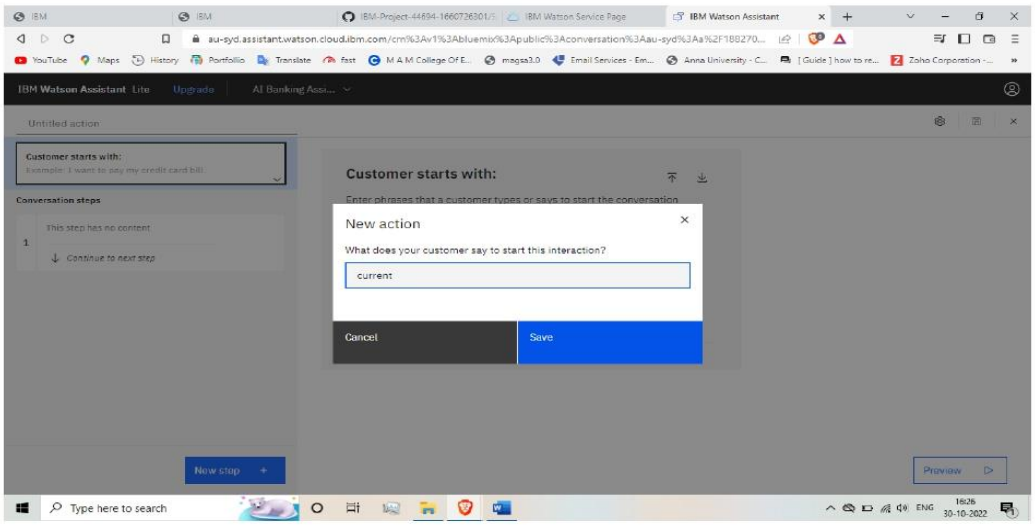
Create Action for Savings Account Queries:

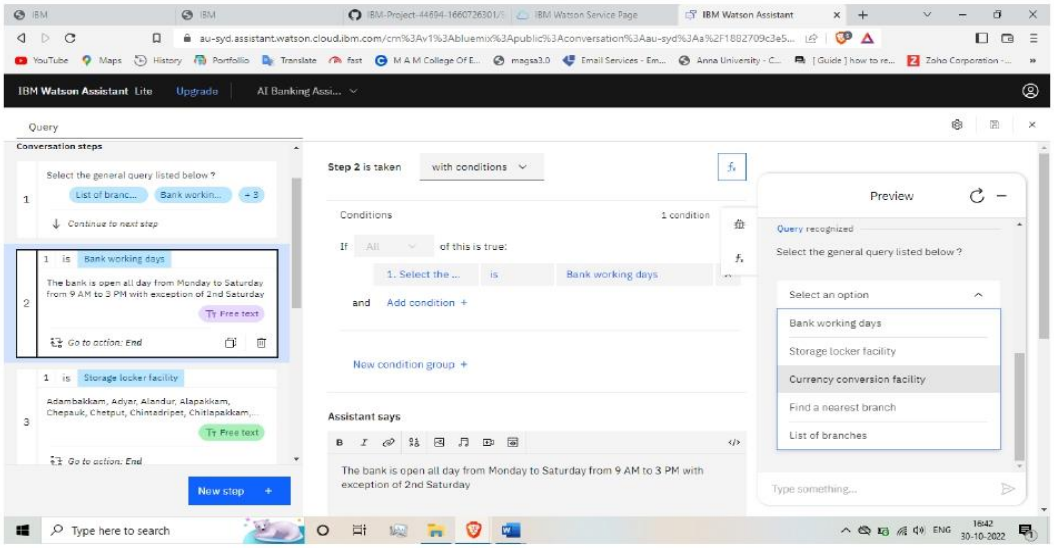
In this phase savings account creation and types of savings account information's are feed to the assistant.



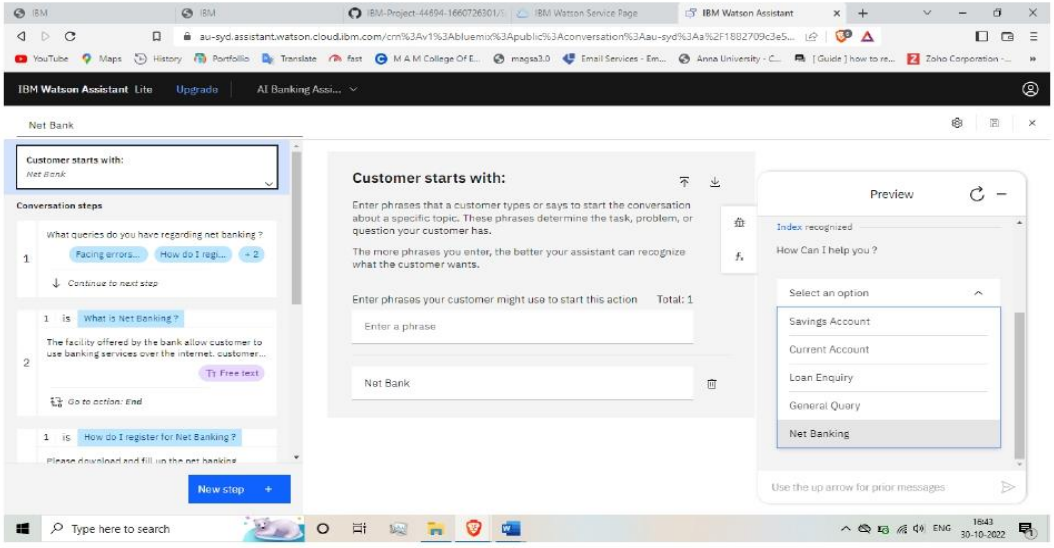


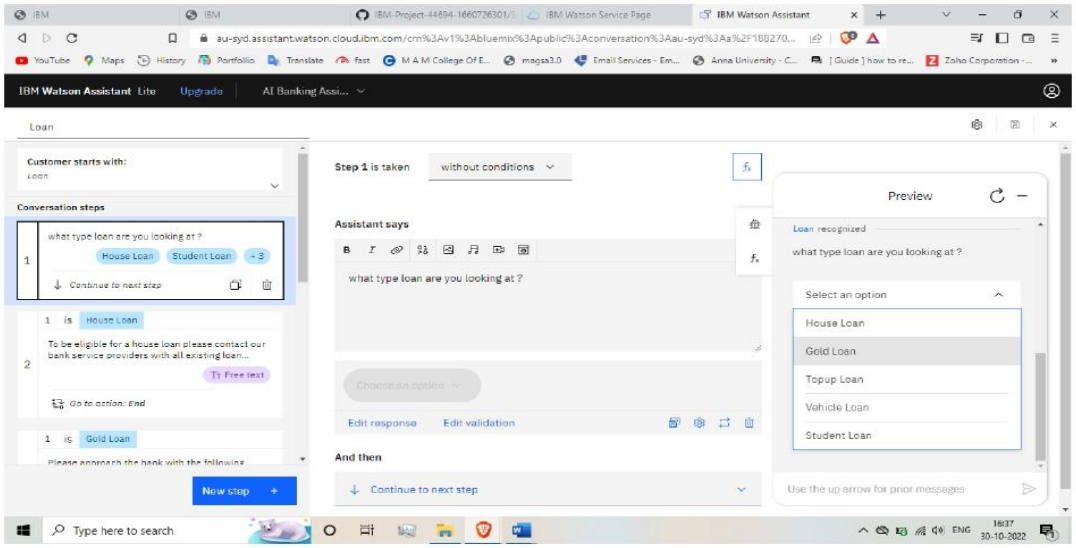
Create Action for Current Account Queries:



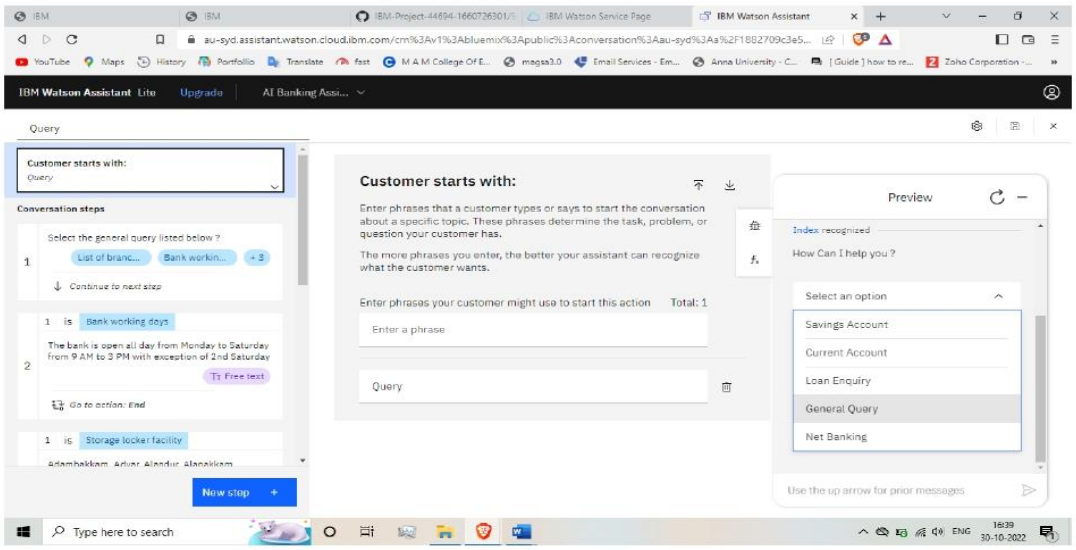


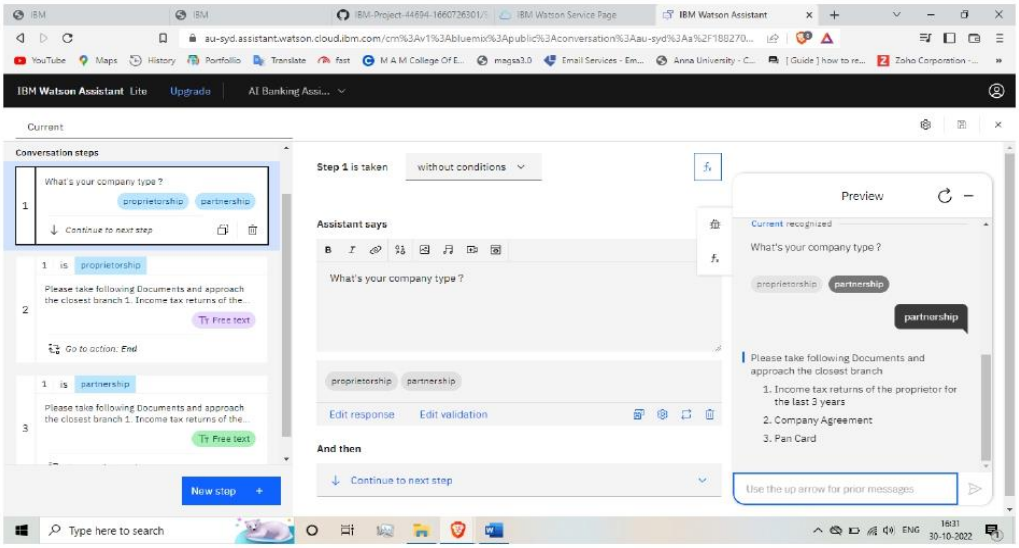
Create Action for Net banking Queries:



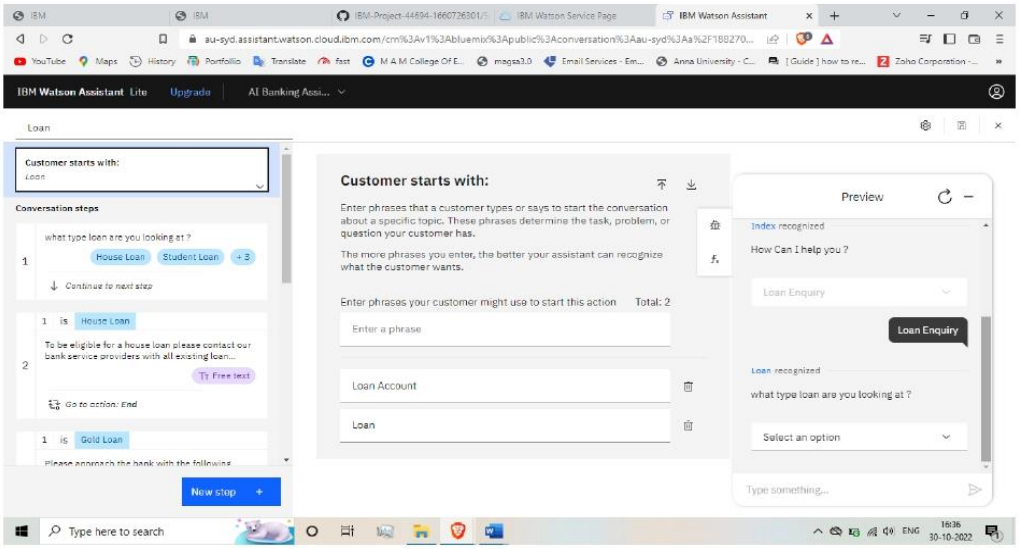


Create Action for General Queries:





Create Action for Loan Queries:



CHAPTER – 8

TESTING

8.1 TEST CASES

Test Scenarios
Verify user is able to see login page
Verify user is able to loginto application or not?
Verify user is able to navigate to create your account page?
Verify user is able to recovery password
Veriify login page elements

Search
Verify user is able to search by entering keywords in search box
Verify user is able to see suggestions based on keyword entered in search box
Verify user is able to see related auto suggestions displaying based on keyword entered in search box
Verify user is able to see no matches found message when no results are matching with entered keyword
Verify user is able to see seach detailed page when nothing entered in textbox

8.2 USER ACCEPTANCE TESTING

a) **Purpose of Document**

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

b) **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	10	8	5	3	26
Duplicate	5	1	4	0	10
External	2	3	0	1	6
Fixed	3	5	0	2	10
Not Reproduced	0	0	0	0	0
Skipped	0	0	0	0	0
Won't Fix	0	0	0	1	1
Totals	20	17	9	7	53

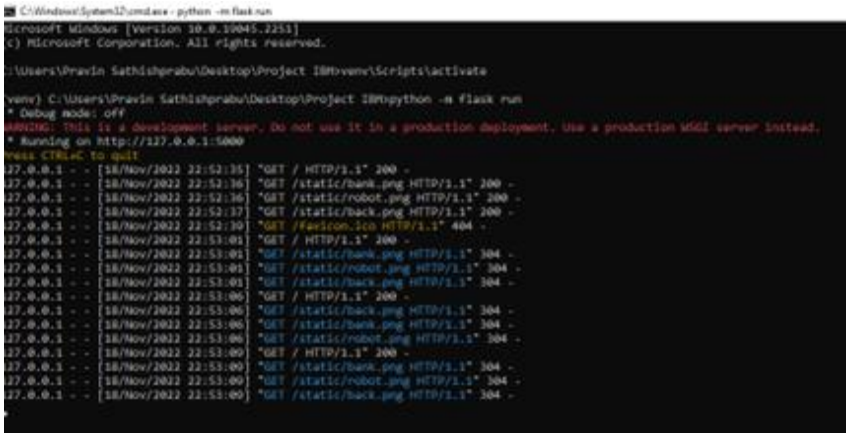
Test Case Analysis

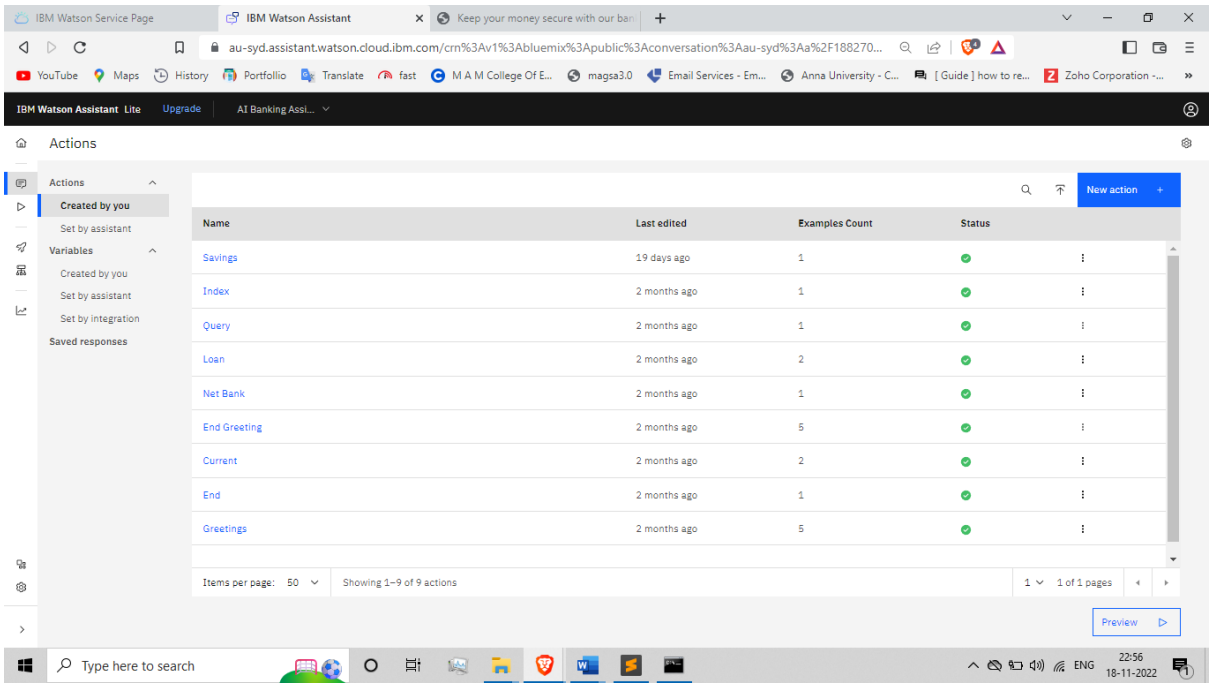
This report shows the number of test cases that have passed, failed, and untested

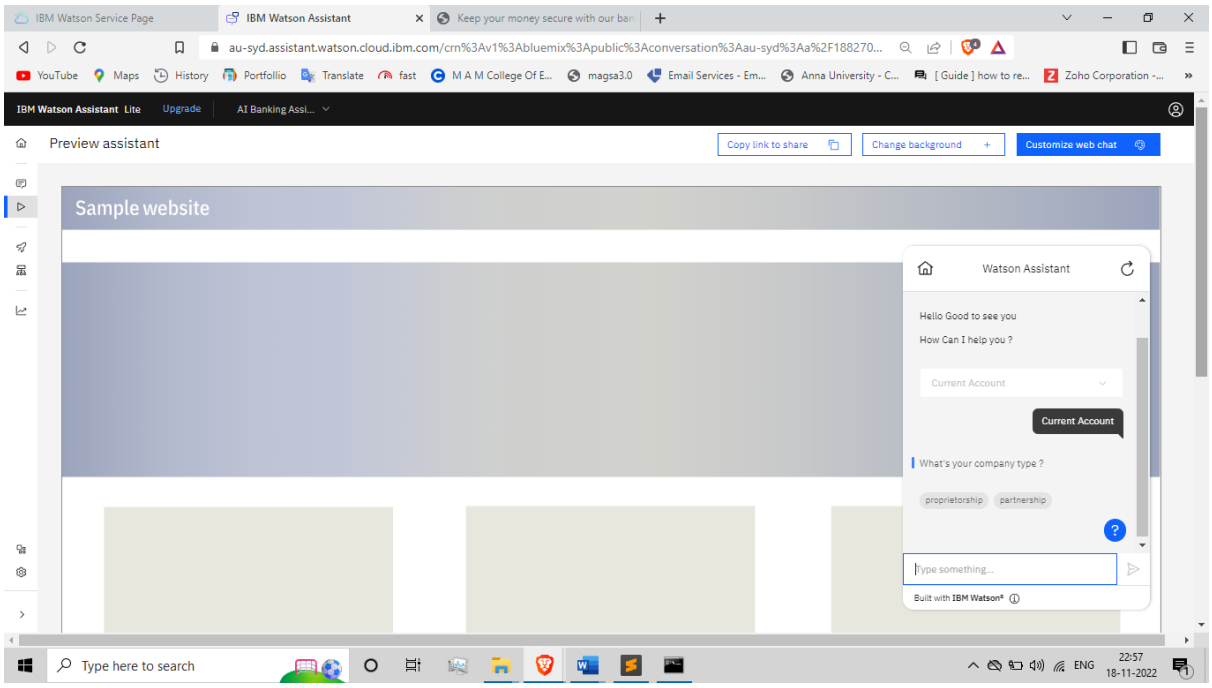
Section	Total Cases	Not Tested	Fail	Pass
Print Engine	1	0	0	1
Client Application	1	0	0	1
Security	1	0	0	1
Outsource Shipping	0	0	0	0
Exception Reporting	1	0	0	1
Final Report Output	1	0	0	1
Version Control	1	0	0	1

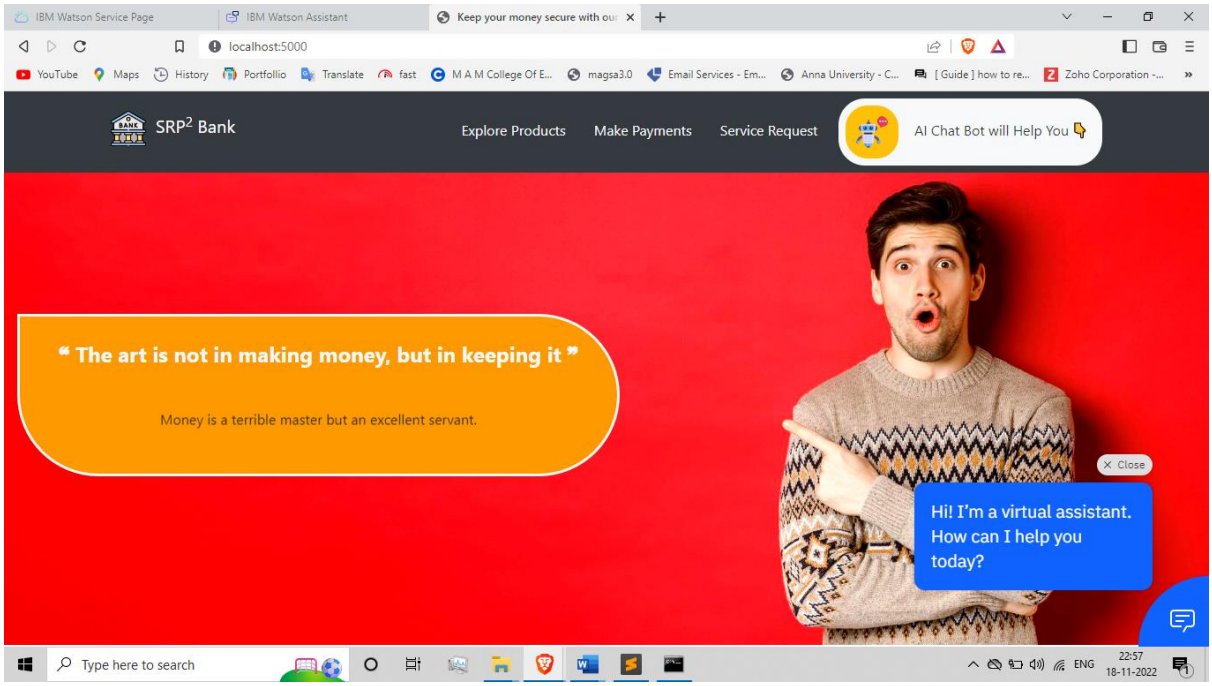
CHAPTER – 9

RESULTS






IBM Watson Service Page
IBM Watson Assistant
Keep your money secure with our ban
au-syd.assistant.watson.cloud.ibm.com/crn%3Av1%3Abluemix%3Apublic%3Aconversation%3Aau-syd%3Aa%2F188270...
YouTube
Maps
History
Portfolio
Translate
fast
M A M College Of E...
magsa3.0
Email Services - Em...
Anna University - C...
[Guide] how to re...
Zoho Corporation -...
IBM Watson Assistant Lite
Upgrade
AI Banking Assi...
Preview assistant
Copy link to share
Change background
Customize web chat
Sample website
Watson Assistant
Hello Good to see you
How Can I help you ?
Current Account
Current Account
What's your company type ?
proprietorship
partnership
Type something...
Built with IBM Watson
Type here to search
ENG
22:57
18-11-2022


IBM Watson Service Page
IBM Watson Assistant
Keep your money secure with our
localhost:5000
YouTube
Maps
History
Portfolio
Translate
fast
M A M College Of E...
magsa3.0
Email Services - Em...
Anna University - C...
[Guide] how to re...
Zoho Corporation -...
SRP² Bank
Explore Products
Make Payments
Service Request
AI Chat Bot will Help You
“ The art is not in making money, but in keeping it ”
Money is a terrible master but an excellent servant.
Close
Hi! I'm a virtual assistant. How can I help you today?
Type here to search
ENG
22:57
18-11-2022

CHAPTER - 10
ADVANTAGES & DISADVANTAGES

ADVANTAGES

- Conversational Chatbots can help you get to know your customers even more. They let you figure out what their questions and needs are, plus the products or services they are interested in, and help you make strategic decisions to improve the experience.
- One of the greatest advantages is that Chatbots are available 24/7 to help customers. Plus, they respond quickly to every question they receive. This guarantees your customers will always be able to solve their problems, no matter what time of day.
- People are all different, and so is the way they communicate. That's why it's important to offer the appropriate and empathic answer to each query.

DISADVANTAGES

- Yes, this is obvious. But you have to remember it. A conversational Chatbot isn't the same as a human agent, so it doesn't always understand a query or its selection of answers may be limited. This makes it sound “robotic.”
- This is not a disadvantage, but it's worth remembering that like all improvements implemented in a company, it takes time until everything's 100% operational and showing actual results. Implementation, setup, and learning can take a while.

CHAPTER - 11

CONCLUSION

The adoption of technologies applied in the banking industry are widely studied in the literature. However, a more and more popular and frequently implemented technology, namely chatbot technology in the context of the banking industry, has received limited attention. To address this research gap, the present study was conducted with the aim of identifying the main factors that influence customers' intention to use the banking chatbot technology. The proposed research model was built by adopting concepts from the TAM model, extending it with compatibility, customers' perceived privacy risk and awareness of the service. Data for the present analysis was collected from 287 consumers via online, applying a self-administrated survey method. The findings supported the conceptual model by predicting 48.5% of variance in the behavioral intention. Perceived usefulness and perceived compatibility significantly predicted the customers' intention to use the banking chatbot. Awareness of the service had an effect on perceived ease of use, perceived privacy risk, and it indirectly affected usage intention through perceived usefulness. Also, perceived ease of use influenced perceived usefulness, and perceived compatibility had an effect on both perceived ease of use and perceived usefulness. Yet, perceived ease of use and perceived privacy risk were not found to be significant determinants of behavioral intention. As a result, the current study was able to make a significant contribution to the field for both academics and practitioners

CHAPTER – 12

FUTURE SCOPE

As we discussed, businesses have traditionally used chatbots to communicate simple responses to their customers. This has been incredibly impactful for ecommerce businesses during the pandemic, but this shift is becoming a normal standard of communication with brands for several reasons. Businesses are incorporating better artificial intelligence capabilities for their chatbots to handle the specific issues customers bring to them and understand more complex questions. In addition, they are evolving from generic and general messaging, which could end up backfiring and frustrating their customer, to more intuitive personal responses. Chatbots have also become an omnichannel response system not just for brand websites but for their app and social media channels, especially for Facebook. Now, businesses can meet consumers' demand for 24/7 communication opportunities with their favorite brands not only can companies interact more with their customers, but chatbot integration has easy scalability to meet high volume needs Chatbots also offer the opportunity for customer behavioral prediction, which can help predict customers' intent to either provide them with more options such as purchasing or providing information on their order, or better gather information for an agent to answer their questions. Additionally, they help collect information and offer solutions faster, creating a streamlined experience for businesses with heavy call flow, chatbots provide another mode of communication to alleviate high call volume But, chatbots are becoming more valuable than just communicating with customers

CHAPTER - 13

APPENDIX

SOURCE CODE

app.py

```
from flask import Flask, render_template
app = Flask(__name__)
@app.route('/')
def bot():
    return render_template('chatbot.html')
if __name__ == '__main__':
    app.debug = True
    app.run()
```

CHATBOT.HTML

```
<!DOCTYPE html>
<html>
<head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>Keep your money secure with our bank</title>
```

```
    <link rel="stylesheet" href="https://cdn.jsdelivr.net/npm/bootstrap@4.0.0/dist/css/bootstrap.min.css" integrity="sha384-Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm" crossorigin="anonymous">

    <script src="https://code.jquery.com/jquery-3.2.1.slim.min.js" integrity="sha384-KJ3o2DKtIkvYIK3UENzmM7KCkRr/rE9/Qpg6aAZGJwFDMVNA/GpGFF93hXpG5KkN" crossorigin="anonymous"></script>

    <script src="https://cdn.jsdelivr.net/npm/popper.js@1.12.9/dist/umd/popper.min.js" integrity="sha384-ApNbgh9B+Y1QKtv3Rn7W3mgPxhU9K/ScQsAP7hUibX39j7fakFPskvXusvfa0b4Q" crossorigin="anonymous"></script>

    <script src="https://cdn.jsdelivr.net/npm/bootstrap@4.0.0/dist/js/bootstrap.min.js" integrity="sha384-JZR6Spejh4U02d8jOt6vLEHfe/JQGiRRSQQxSfFWpi1MquVdAyjUar5+76PVCmYl" crossorigin="anonymous"></script>

  </head>

  <style type="text/css">

  .dropdown-content {

    display: none;

    position: absolute;

    min-width: 200px;

    box-shadow: 10px 8px 16px 0px rgba(0,0,0,0.2);

    z-index: 1;

  }


  .dropdown-content a {

    float: none;

    color: black;
```

```
  padding: 12px 16px;
  text-decoration: none;
  display: block;
  text-align: left;
}

.dropdown-content a:hover {
  background-color: #ddd;
  color: black;
}

.dropdown:hover .dropdown-content {
  display: block;
}
.content{
  background-image: url({{ url_for ('static', filename = 'back.png') }});
  background-position: center;
  background-repeat: no-repeat;
  height: 85vh;
  min-width: 100%;
  background-size: cover;
}
.info{
  top: 40%;
  position: absolute;
  background-color: #ff9900;
  border: 3px solid white;
```

```
  border-radius: 100px;
  border-top-left-radius: 0px;
}
.quote{
  font-size: 24px;
}

@media screen and (max-width: 600px) {
  .info {
    width:90%;
    top: 52%;
    position: absolute;
  }
  .quote{
    font-size: 15px;
  }
  .content{
    background-image:  url({{ url_for ('static', filename = 'back2.png') }});
    background-position: center;
    background-repeat: no-repeat;
    background-size: cover;
  }
  .dropdown-content {
  display: none;
  position: absolute;
  min-width: 200px;
  box-shadow: 10px 8px 16px 0px rgba(0,0,0,0.2);
```

```
  z-index: 1;
}

}

</style>
<body>
<!--Navbar-->

<div class="bg-dark text-light">
<nav class="container navbar navbar-expand-lg navbar-dark bg-dark p-2">
  <p class="navbar-brand mt-2">
  <img src="{{url_for('static', filename='bank.png')}}" align="middle" width="40px" height="40px" />  SRP<sup>2</sup> Bank </p>
  <button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarSupportedContent" aria-controls="navbarSupportedContent" aria-expanded="false" aria-label="Toggle navigation">
    <span class="navbar-toggler-icon"></span>
  </button>

  <div class="collapse navbar-collapse" id="navbarSupportedContent">
    <ul class="navbar-nav ml-auto">
      <div class="dropdown">
        <li class="nav-item p-3 mt-2  dropbtn">Explore Products</li>
        <div class="dropdown-content bg-light text-dark">
          <a href="#">Accounts</a>
          <a href="#">Loans</a>
          <a href="#">Transactions</a>
```

```
      <a href="#">Deposit</a>
      <a href="#">Cards</a>
    </div>
  </div>
  <div class="dropdown">
    <li class="nav-item p-3 mt-2  dropbtn">Make Payments</li>
     <div class="dropdown-content bg-light text-dark">
      <a href="#">Money Transfer</a>
      <a href="#">Bill Payments</a>
      <a href="#">Card Payment</a>
    </div>
  </div>
  <div class="dropdown">
    <li class="nav-item p-3 mt-2  dropbtn">Service Request</li>
     <div class="dropdown-content bg-light text-dark">
      <a href="#">Update Profile</a>
      <a href="#">Saving and Current Account</a>
      <a href="#">Debit and Credit Card</a>
    </div>
  </div>


  <li class="nav-item p-2 ml-2 bg-light" style="border-radius: 30px">
  <img src="{{url_for('static', filename='robot.png')}}" align="middle" width="40px" height="40px" style="width:60px;height: 60px;padding: 10px; border-radius: 25px;" class="bg-warning"/>
    <span class="text-dark typewrite">   AI Chat Bot will Help You  &#128071;  </span></li>
 </ul>
```

```
  </div>
 </nav>
 </div>


 <div class="content container">
  <div class="col-sm-6 info p-4 p-3">
   <center><b class="text-light quote"> ❝ The art is not in making money, but in keeping it ❞</b></center>
    <marquee
     behavior="slide"
     direction="up"
     scrollamount="1"
     class="mt-2"
    >
    <center>
     <p>Money is a terrible master but an excellent servant.</p>
     <p>❛ Keep your money secure with our bank ❜</p>
    </center>
    </marquee>
  </div>
 </div>
 <script>
  window.watsonAssistantChatOptions = {
   integrationID: "508444e6-3d40-4b32-a4bc-75424ab2cd1c", // The ID of this integration.
```

```
        region: "au-syd", // The region your integration is hosted in.
        serviceInstanceID: "6e1377cd-ed8b-4bd1-8137-5e10d7c41b74", // The ID of your service instance.
        onLoad: function(instance) { instance.render(); }
      };
      setTimeout(function(){
        const t=document.createElement('script');
        t.src="https://web-chat.global.assistant.watson.appdomain.cloud/versions/" + (window.watsonAssistantChatOptions.clientVersion || 'latest') + "/WatsonAssistantChatEntry.js";
        document.head.appendChild(t);
      });
    </script>
    <body>
    </html>
```

GitHub Link

https://github.com/IBM-EPBL/IBM-Project-44694-1660726301

Project Demo Link

https://drive.google.com/file/d/1ZLXf9P5ZVYZI9IwwCK99VdrdNcyhfBg_/view?usp=share_link