

**AI BASED DISCOURSE FOR BANKING
INDUSTRY
IBM -DOCUMENTATION**

UNDER THE GUIDANCE OF

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TEAM ID:PNT2022TMID38920

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ANNA UNIVERSITY -2019-2023

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.

- Net banking websites are complex and involve navigating through a lot of pages to find the information you need. Bank staff undergoes a lot of stressful situations when communicating with clients directly. Such situations can be avoided gracefully by using chatbots.
- Only 32% of companies in the finance industry currently use AI chatbots, and 37% are planning to start using them within 18 months said a report from Salesforce. This results in a potential growth rate of 118% which indicates the demand in the industry.
- 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 using natural language processing techniques that can be used in the banking industry.

1.2 PURPOSE

- Artificial Intelligence is a fast-developing technology across the world. The banking sector is becoming one of the first adopters of artificial intelligence.
- The purpose of the LR is to evaluate the usage and challenges faced by the banks in handling operations linked with Artificial Intelligence with special reference to SBI Cantonment Branch.
- The LR focused on operations of banks handling with Artificial Intelligence such as cybersecurity and fraud detection, customer services, financing and credit decision, process automation etc.
- Analysis was made by the use of statistical tools like. This LR clearly shows the usage and challenges faced by the banking handling the Artificial Intelligence with operations of the bank.

2 LITERATURE SURVEY

2.1 Existing Problem

- This paper [1] presents the use of the RASA framework for building smart context-remembering chatbots, it also describes how Rasa NLU works and

how its performance is elevated by using intent recognition and entity extraction. It also compares the accuracies of entity extraction using Rasa NLU and a NN, results show Rasa NLU performs better to extract entities when whole sentences are provided as compared to neural networks which require segmented inputs. This paper discusses Rasa by implementing a chatbot related to the finance domain, using which the users can inquire about stock-related information.

- RASA NLU can introduce a vital component in intelligent chatbot systems. We can compose the system to extract the entity after intent recognition. This can be further improved for complicated sentences and more entities.
- This paper [2] briefly discusses advancements in the field of AI and how this has led to major shifts in some organizations about how they operate. It further mentions how the banking industry has moved to use chatbots for providing an interface to customers so that they can have an assistant throughout the day for service. This paper also gauges the ability of current chatbots to provide all the services that a user needs.
- It includes several strategies for managing dialogue in the banking and finance industry based on ontology. Although further use of AI can make the chatbot not only respond to questions but also self-learning to improve itself in more stages, improving user service quality and also reducing human load.

2.2 References

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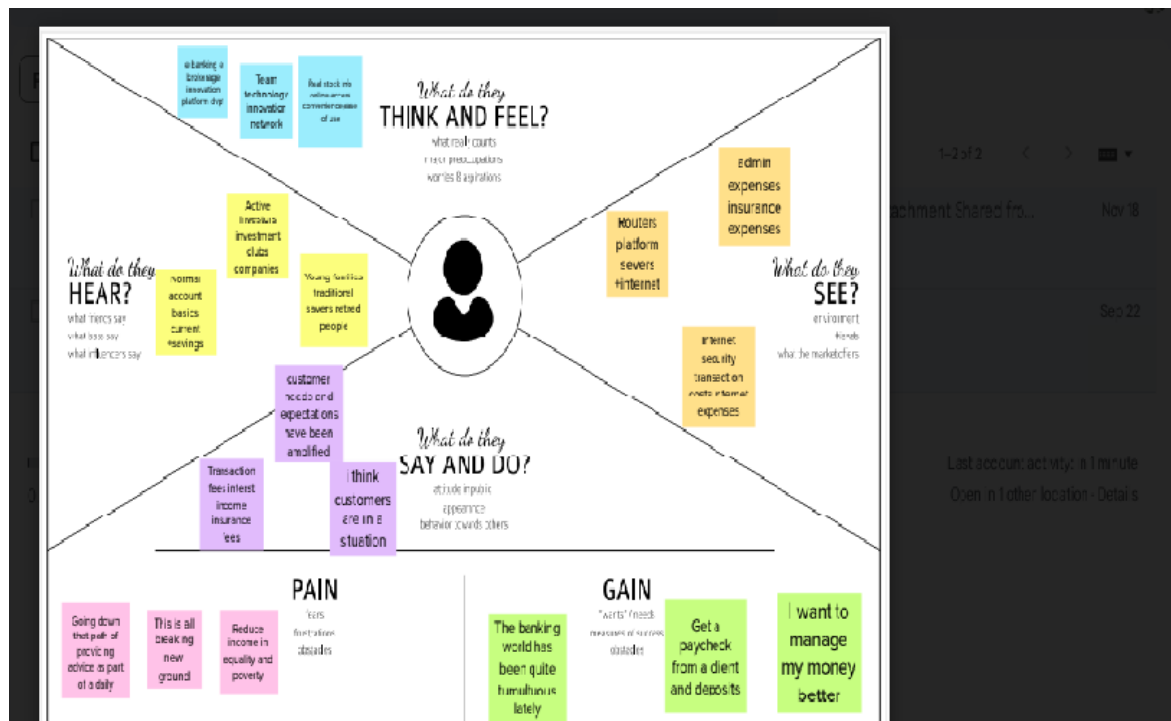
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- Cahn, Jack. "CHATBOT: Architecture, design, & development." University of Pennsylvania School of Engineering and Applied Science Department of Computer and Information Science (2017).
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- Pal, Singh Netra, and Devender Singh. "Chatbots and virtual assistant in Indian banks." Industrija 47, no. 4 (2019): 75-101.

2.3 Problem statement definition

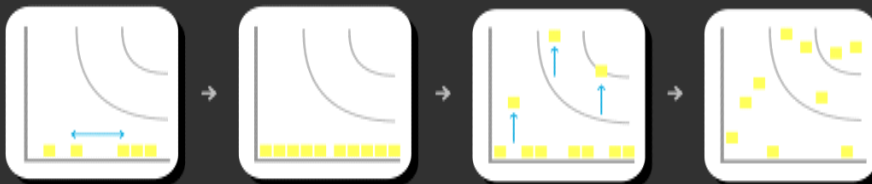
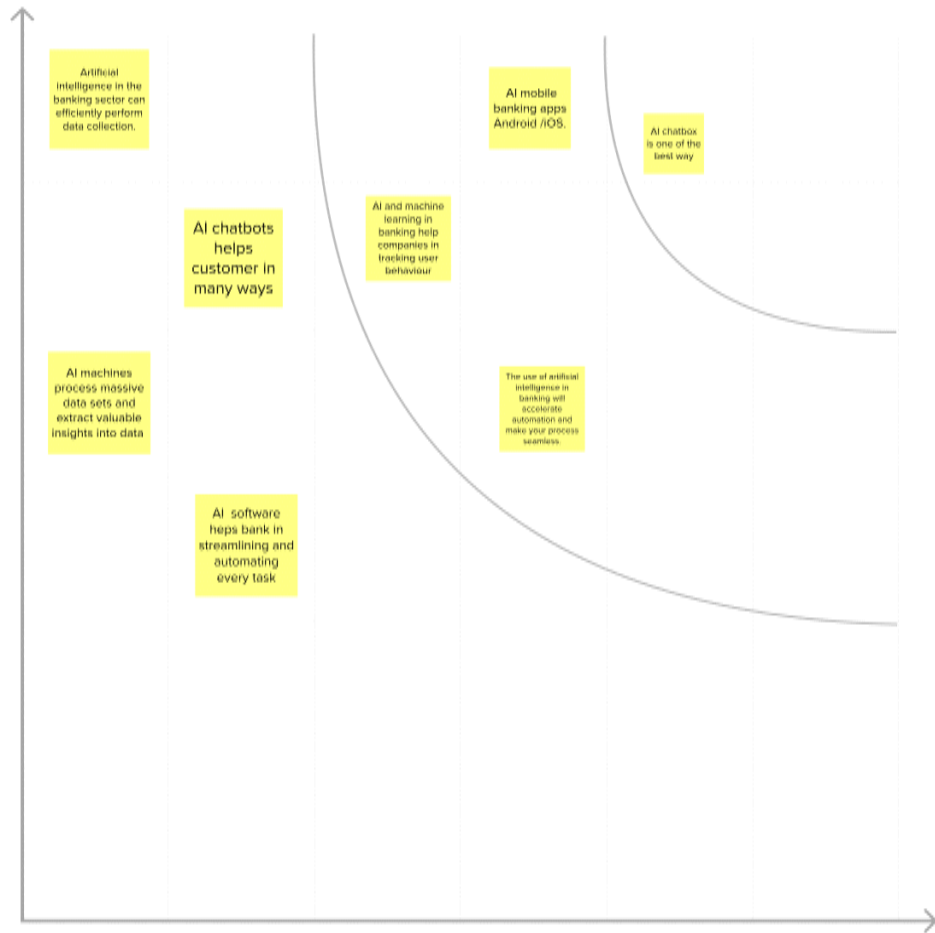
The banking industry has been quite resistant to change ever since its beginnings. But financial services are not immune to the biggest technological revolution the world has attested caused by AI. Apart from being under pressure to adapt to the digital economy, banks have started to discover some really valuable AI use cases. AI has made progressive inroads in the financial sector and is reshaping banks' approach to their people, processes and data

3. IDEATION & PROPOSED SOLUTION

3.1 Empathy map canvas



3.2 Ideation & Brainstorming





D.SUJATHA

- AI enables firms use all the advantages of young and agile intelligence
- AI enables tasks, activities & data every firm uses, makes access for business activity
- AI enables in banking and modernizing the way
- It describes how business provide services to their customers

D.AARTHI

- AI Revolution: Revolutionizing experiences AI helps with the business
- AI enables banking with its capabilities for access of data, making decisions and better service
- Implementation of AI in various business including the concept of making new business
- To deliver highly personalized services to customers

K.SOWMIYA

- How business and customers use the power of AI to make their business more efficient
- Automation is one of the best AI use cases in finance and banking
- AI enables tasks such as processing and monitoring money and is also for business
- To making the entire business simple and virtual

M.Vaishnavi

- Data collection and analysis: How are many big loads of AI in banking
- AI enables banking with its capabilities for access of data, making decisions and better service
- To analyze and process the data
- AI enables various services with data and processing, making the way



3.3 Proposed solution

- The solution to the problem is Artificial intelligence in the banking sector makes banks efficient, trustworthy, helpful, and more understanding. It is strengthening the competitive edge of modern banks in this digital era. The growing impact of AI in banking sector minimizes operational costs improves customer support and process automation.
- Nearly 40% to 50% of financial and banking service providers are using AI in their processes to harness the power of next-generation AI capabilities. The companies believe that AI is the future of banking sector which can perform a range of banking operations in faster, easier, and more secure ways.
- AI banking Chatbots help customers in many ways. AI-based chatbot service for financial industry is one of the significant use cases of AI in banking sector. AI chatbots in banking are modernizing the way how businesses provide services to their customers
- AI chatbots in the banking industry can assist customers 24*7 and give accurate responsesto their queries. These chatbots provide a personalized experience to users.
- AI chatbots in banking is providing a better customer experience.
- Hence, AI chatbots for banking and finance operations let banks attract customerattention, optimize service quality, and expand the brand mark in the market.

3.4 Problem soluion fit

Project Title: AI-based discourse for Banking Industry

Project Design Phase-I - Solution Fit Template

Team ID: PNT2022TMID38920

Define CS, fit into CC	1. CUSTOMER SEGMENT(S) CS Bank customers (18+ old account holders)	6. CUSTOMER L <ul style="list-style-type: none"> • Security constraint • Available devices • Technology awareness • Spending power 	5. AVAILABLE SOLUTIONS AS Over-the-phone customer service is the most popular option for service companies all over the world. Phone customer service is useful in a variety of private and public sectors, including healthcare, government, banking, eCommerce, SaaS, and IT. Pros Quickly solve complex problems Almost everyone owns a telephone. Emotions of customers can be assessed more easily. A difficult problem can be presented more easily and quickly. Some customers prefer face-to-face interaction. Cons Trends change over time; for example, the younger generation prefers texting to phone conversations. Hold times are long when there is insufficient service staff.	Explore AS, differentiate
	2. JOBS-TO-BE-DONE / PROBLEMS J&P Which jobs-to-be-done (or problems) do you address fit	9. PROBLEM ROOT* L	7. BEHAVIOUR L What does your customer do to address the problem and get the job done?	
Focus				Focus

4.REQUIREMENTS ANALYSIS

4.1 Functional Requirements

- Ways to approach the chatbot
- Handling complex dialogues
- User Registration
- User Confirmation
- User login
- Getting information
- Getting transaction details
- Assisting Users
- Conversing with the user
- Maintaining conversational state

4.2 Non Fuctional Requirements

- It should also have predefined questions and keywords with their expected answers
- It should be able to identify the intent of a question to provide an accurate answer and suggest options to confirm or resolve the issue
- It should allow unregistered users to register on the application and save their details to the database
- It should be able to provide confirmation notifications through either SMS or email.
- Registered users should be able to login. Once login details are submitted to the database the user will be presented with a QR code implemented through Google's Two-Factor Authentication and then a unique code will be generated and sent to the user's mobile device
- The chatbot must allow users to view information about accounts held by them i.e. savings, loans, current account
- The chatbot must allow users to view their transactions through a transaction statement sent to the user's email
- The chatbot should be able to assist users with their queries and carry out appropriate actions such as scheduling appointments with finance consultants
- The users should be able to converse with the chatbot through voice or text commands and it should understand what the user is saying with the help of natural language processing.
- The chatbot should be able to maintain the conversational state when the context may be unclear through previous messages .

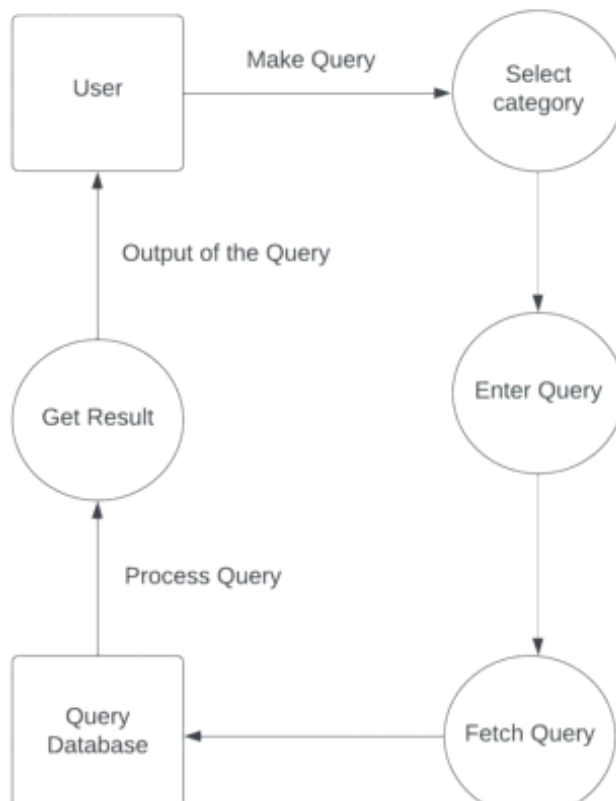
5.PROJECT DESIGN

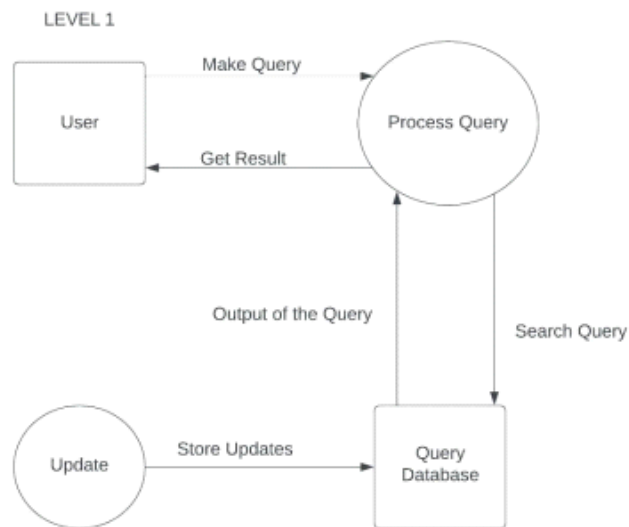
5.1 Data Flow Diagram

LEVEL 0



LEVEL 2





5.2 Solution and technical architecture

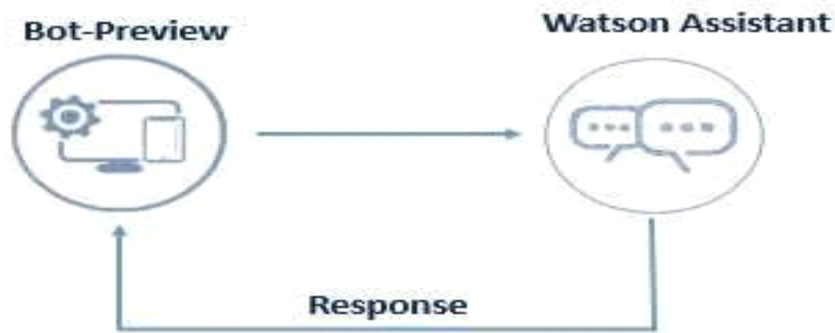
Services Used:

- IBM Watson Assistant

Watson Assistant



Block diagram:



5.2 User Stories

- As a user, in the Savings Account option, I can select Types of Savings Account to get details regarding documents required for creating that savings account
- As a user, I can check the Interest Rates of Savings Account
- As a user, I can check the Minimum Balance
- As a user, I can choose the Type of Company to know the information on documents to be submitted for creating current account

Hardware / Software designing:

To complete this project, you should have the following software and packages.

Softwares:

- Visual studio code
- IBM Watson studio

Packages:

- Flask

FLOWCHART:

To accomplish the above task, you must complete the below activities and tasks:

- Create IBM Services.
- Creating skills & Assistant for Chatbot.
- Creating Savings account action.
- Creating Current account action.
- Creating Loan account action.
- Creating a general query action.
- Creating a Net banking action.
- Create HTML web page.
- Integrate the Watson Chatbot with web page.

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	Creation of banking Chatbot	USN-1	Creation of Banking Chatbot using IBM Watson Assistant/ As a user, I can see a Banking Assistant.	12	High	sujatha aarthi sowmiya vaishnavi
Sprint-1		USN-2	As a user, I will see the Chatbot having banking related options	4	Moderate	aarthi sowmiya vaishnavi
Sprint-1	Options creation	USN-3	As a user, I can add new action options to resolve customer queries	4	Moderate	sujatha sowmiya vaishnavi
Sprint-2	Designing of Assistant	USN-4	As a user, I can see a Chatbot which helps to create an account.	10	High	sujatha aarthi
Sprint-2		USN-5	As a user, I can discourse with the chatbot regarding saving account-related queries.	5	High	sowmiya vaishnavi

Sprint-2	Loan Account	USN-6	As a user, I can see a Chatbot which helps in Loan related Queries.	5	High	sujatha aarthi
Sprint-3	Queries Action	USN-7	As a user, I can converse with the chatbot about general queries.	10	High	vaishnavi sujatha sowmiya
Sprint-3		USN-8	As a user, I can converse with the chatbot about Net banking queries.	5	Moderate	sujatha aarthi vaishnavi
Sprint-3	Testing	USN-9	As a user, I can know the chatbots performance level.	5	High	sujatha aarthi sowmiya
Sprint-4	Web Application	USN-10	As a user, I want to access the chatbot in a web browser.	10	High	vaishnavi sujatha

6.2 Sprint Delivery Schedule

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	20	29 Oct 2022
Sprint-2	20	6 Days	31 Oct 2022	05 Nov 2022	20	05 Nov 2022
Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022

Velocity:

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

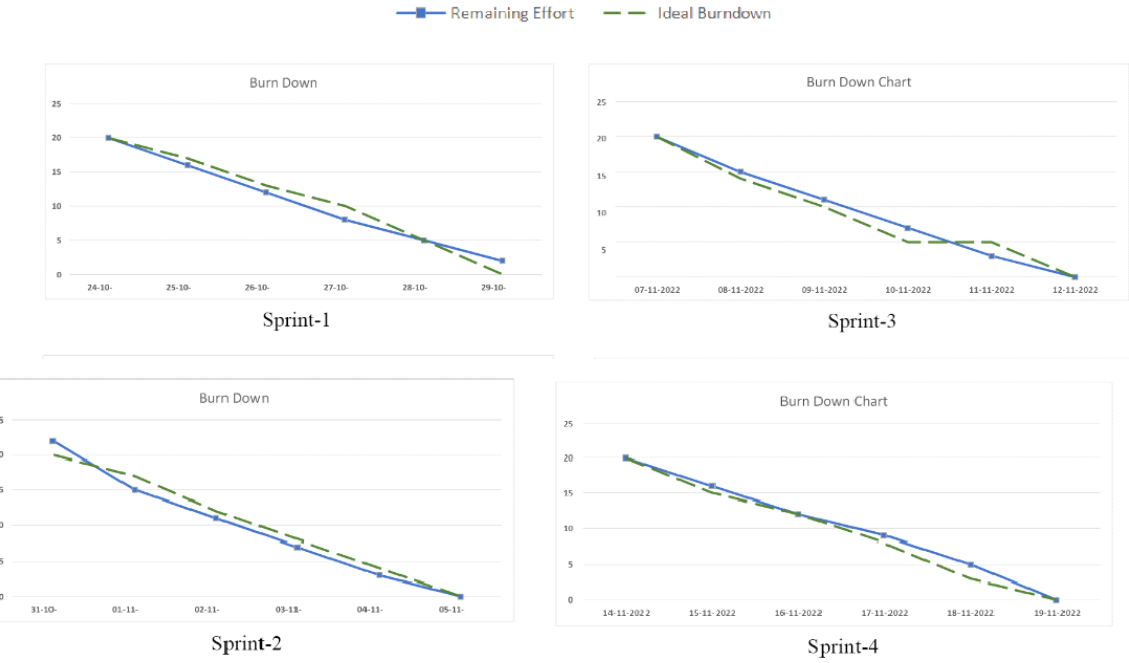
$$AV = 25/6 = 4.16$$

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Sprint-3	20	6 Days	07 Nov 2022	12 Nov 2022	20	12 Nov 2022
Sprint-4	20	6 Days	14 Nov 2022	19 Nov 2022	20	19 Nov 2022








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

$AV = 25/6 = 4.16$

Burndown Chart:



7 CODING &SOLUTION

Scenario				
A customer using an AI-based Banking Discourse (ChatBot)	 Awareness How does someone initially become aware of this process?	 Enter What do people experience as they begin the process?	 Exit What do people typically experience as the process finishes?	 Extend What happens after the experience is over?
 Doing What does the person (or group) typically experience?	Customer identifies the need and searches for a solution. Customer is aware of the ChatBot's existence.	Navigates to the ChatBot window. Explores the options of the ChatBot.	Get queries resolved by the ChatBot or transfer to a human agent to provide an answer. Close the ChatBot window and move into the required actions.	Customer seeks feedback about the ChatBot.
 Touchpoints What interactions do they have at each step along the way? • People: Who do they see or talk to? • Places: Where are they? • Things: What digital touchpoints or physical objects would they use?	Visit customer service website to chat with the ChatBot. Chatbots are available through the app or web to the bank's app. Customer will have a chat with the ChatBot, asking for recommendations.	Customer may get used to the ChatBot, based on instructions from bank employees.	Customer receives customer service from the ChatBot. Customer gets application results after passing the required answers.	Customer receives feedback from the ChatBot.
 Thinking At each step, what is a person's primary goal or motivation? ("Help me..." or "Help me avoid...")	"I want to know if my question is answered." "I want to avoid further interaction."	Customer will have a chat with the ChatBot and get a response.	Customer's primary goal is to get the ChatBot to solve the problem.	Customer's primary goal is to get the ChatBot to solve the problem.

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="utf-8">

<meta content="width=device-width, initial-scale=1.0" name="viewport">

<title>Gp Bootstrap Template - Index</title>

<meta content="" name="description">

<meta content="" name="keywords">

<!-- Favicons -->

<link href="assets/img/favicon.png" rel="icon">

<link href="assets/img/apple-touch-icon.png" rel="apple-touch-icon">

8 ADVANTAGES & DISADVANTAGES

8.1 Advantages

- Round-the-clock service.
- Brand Consistency.
- Increased Productivity.
- Reduced Staffing Needs.
- Consistent Response Rate and Availability.

- Helps with Fraud Prevention.
- Chats can be saved.
- Lower costs.

8.2 Disadvantages

- Questions must be programmed beforehand.
- Impersonal
- Must keep information up-to-date.
- Technology issues.
- Needs additional measures to protect identities.

APPLICATIONS:

- Banking chatbots have all the data to predict the spending habits of customers and help them keep their finances on track.

CONCLUSION

Artificial Intelligence is gaining acceptance day by day and banks are discovering and executing this technology in changing the way customers are supported. So, the future of Artificial Intelligence in banking sector is very bright, it makes it even easier for a customer to do transactions from any place and at any time without waiting in lengthy queues at the bank. Hence, the aim of Artificial Intelligence is to provide personalized and high quality of customer fulfilment along with effective and time saving services.

FUTURE SCOPE

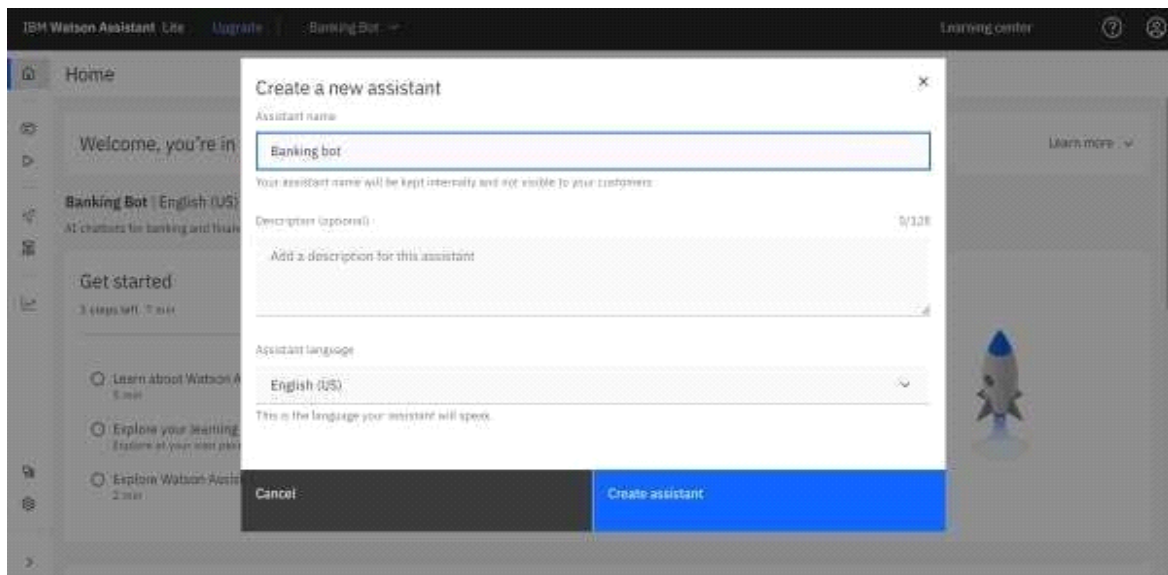
While every fact of industry stands to be changed to easier form of using banking, everyone must use the bank sector conveniently. Chatbot is very helpful for customers to enhance their queries.

APPENDIX:

Create IBM Service

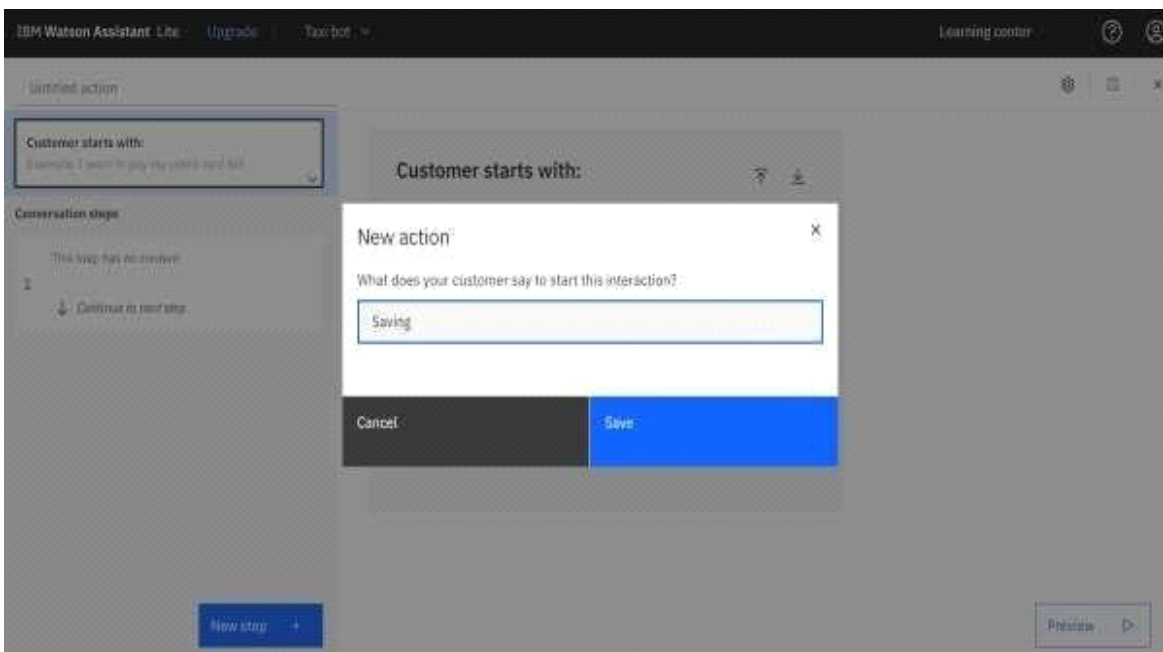
In this activity, you will be creating the Necessary IBM service. The following are the services that you have to create.

- **Watson Assistant**

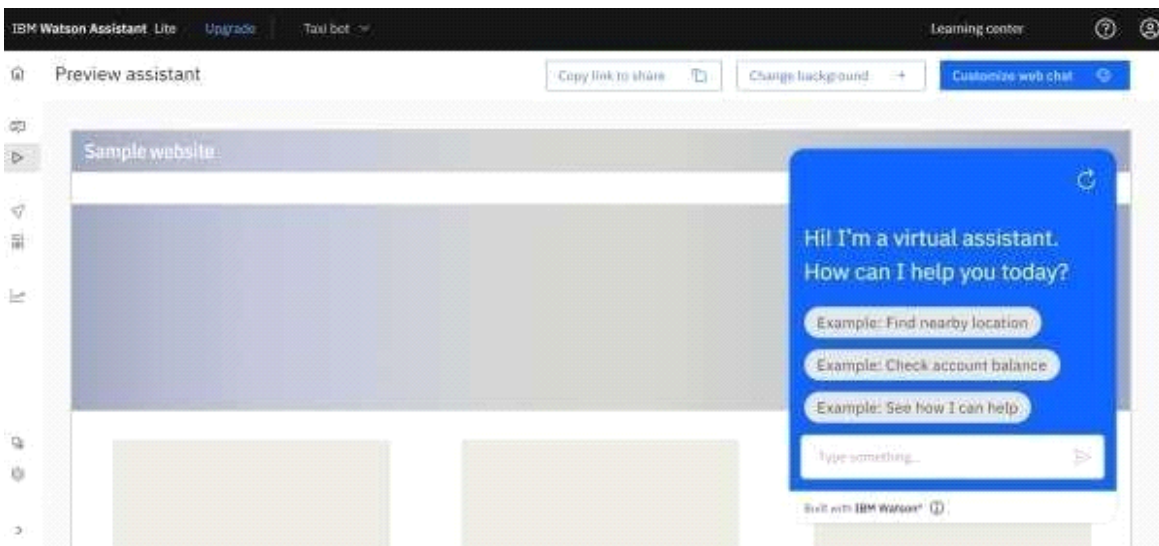
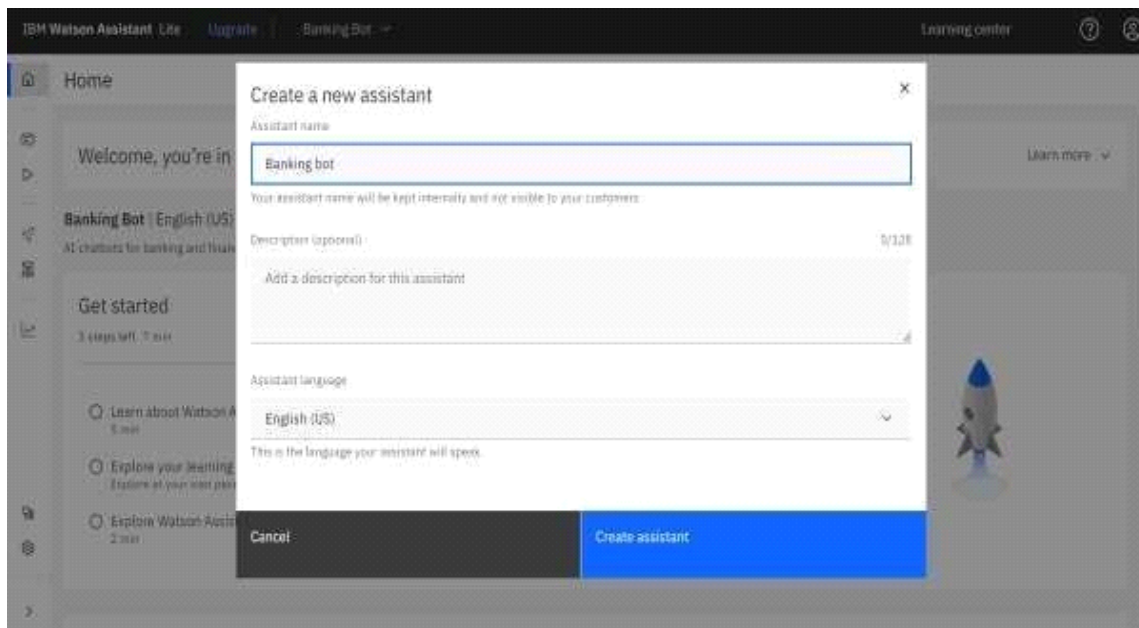


Creating Skills & Assistant For Chatbot

Skills are nothing but actions and steps. Steps are the subset of actions where conversations are built and Assistant is used to integrate skills.

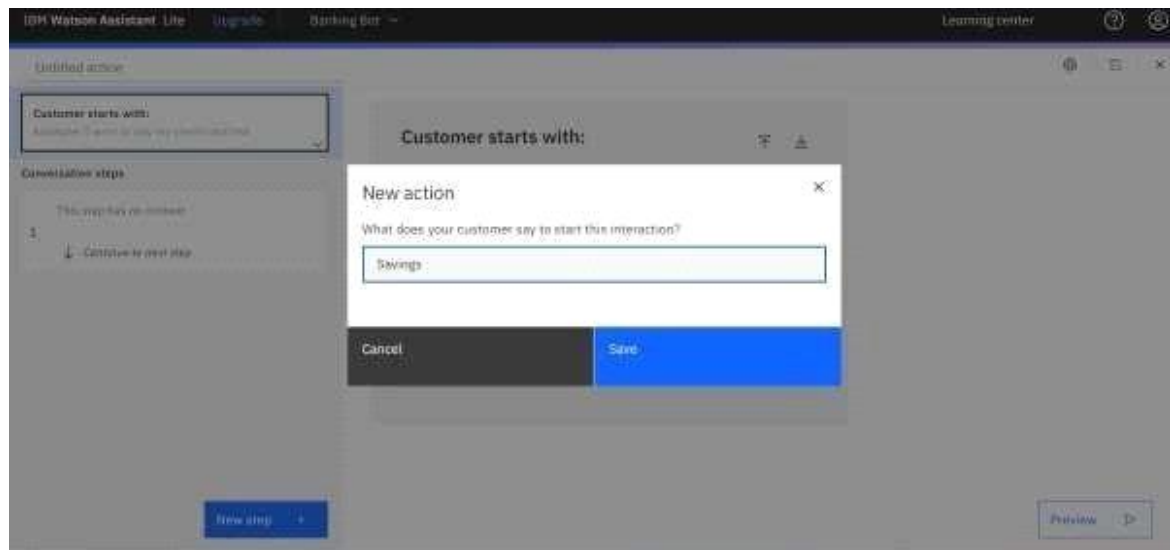


A default template chatbot is created. Need to add actions.

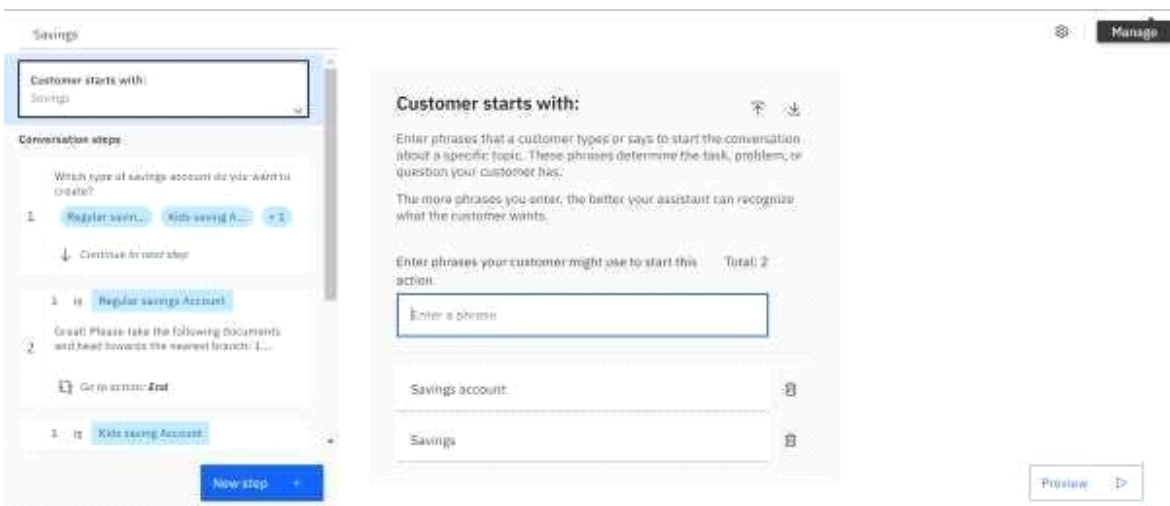


Creating Saving Account Action

Create a saving account in IBM Watson. Create new **Action** Saving.

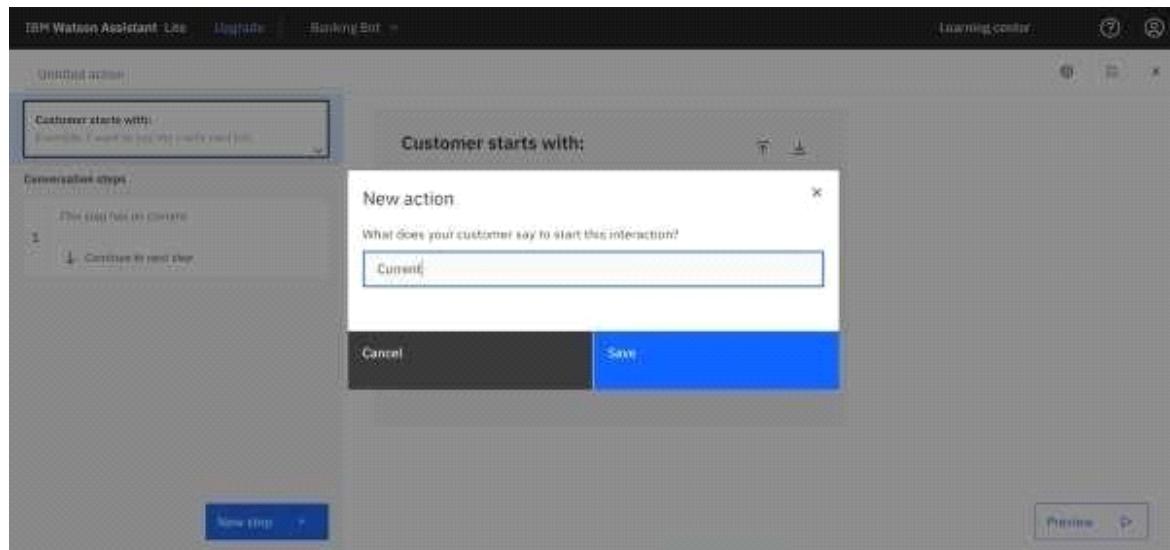


Add steps in savings action.

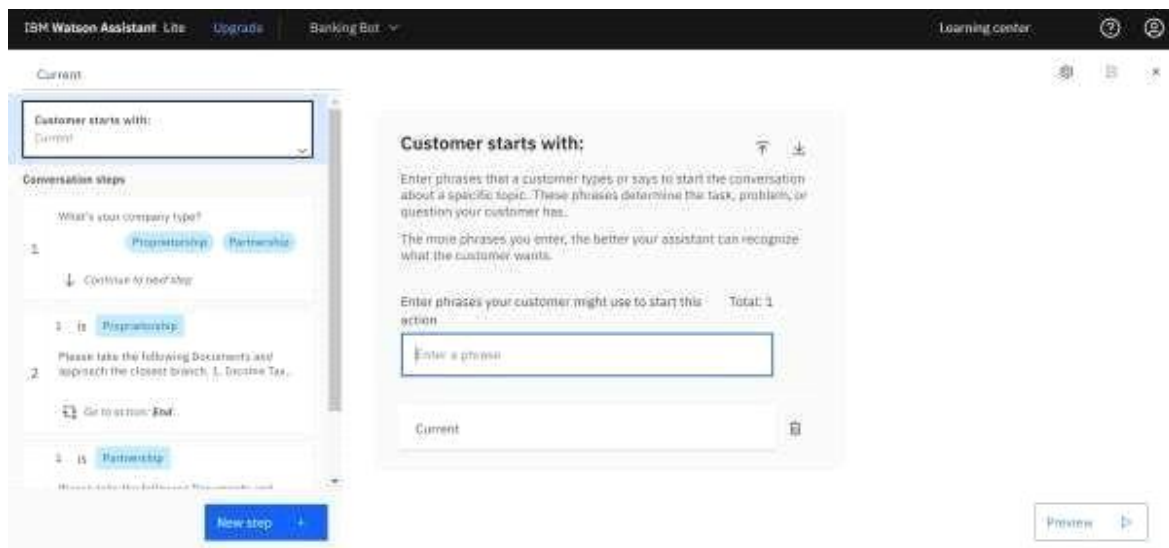


Creating Current Account Action

Create a new **Action** Current for the current account action.

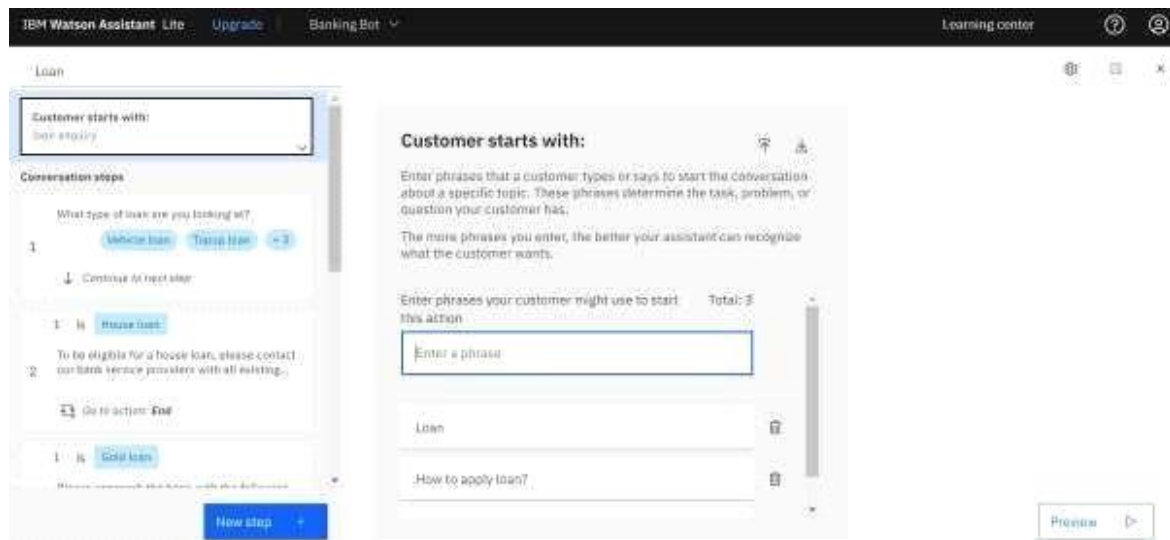


Add steps in savings action.



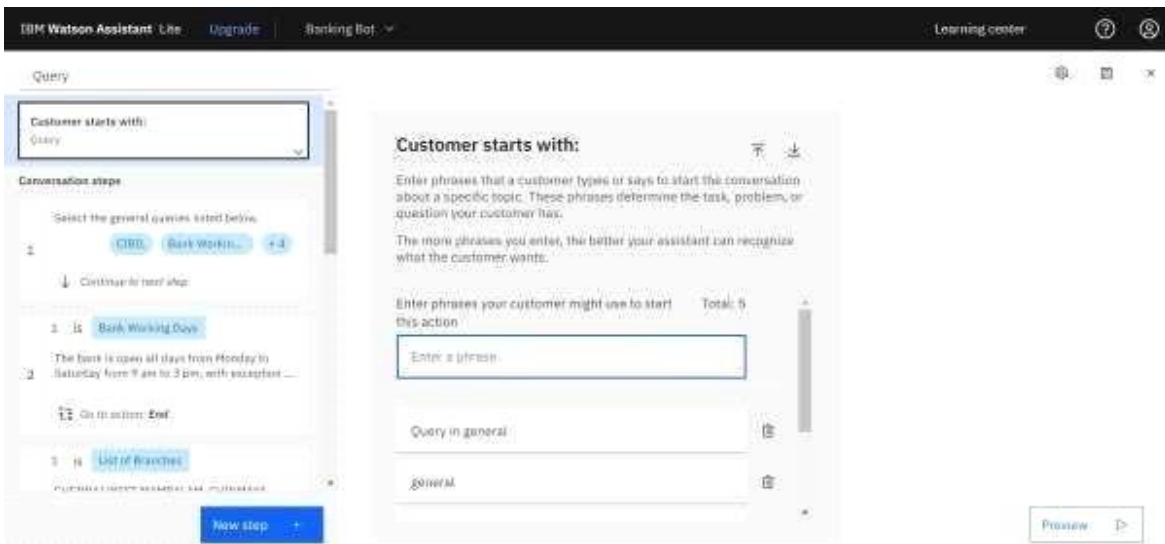
Creating Loan Account Action

Loan action is created with the necessary steps.



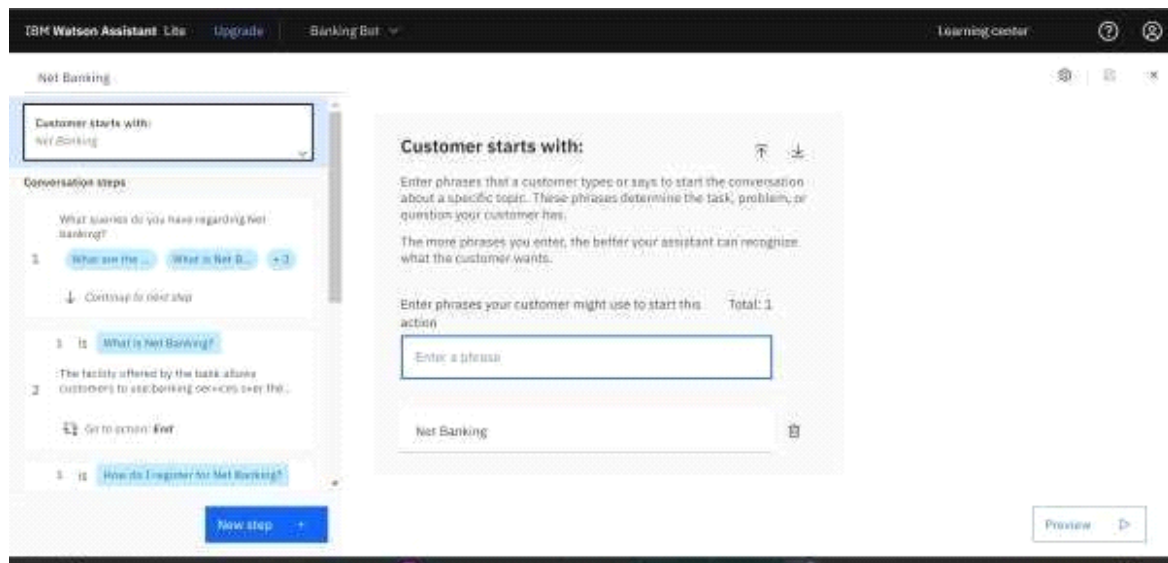
Creating General Query Action

General query action is created with the necessary steps.








Creating Net Banking Action

Net banking action is created with the necessary steps.



In addition to this greeting, end greeting ,index and end actions are also created.

Name	Last edited	Status	
Current	2 days ago	✓	⋮
Index	2 days ago	✓	⋮
Register	3 days ago	✓	⋮
Greeting	2 days ago	✓	⋮
End Greeting	2 days ago	✓	⋮

			  New action +
Name	Last edited	Status	
Net Banking	3 minutes ago		
End	2 days ago		
Loan	2 days ago		
Query	a few seconds ago		
Savings	16 minutes ago		
Current	2 days ago		
Items per page: 50 ▾ Showing 1–10 of 10 actions			1 ▾ 1 of 1 pages ◀ ▶

Creating Assistant & Integrate With Flask Web Page

You will be creating a banking bot in this activity that has the following capabilities

- The Bot should be able to guide a customer to create a bank account.
- The Bot should be able to answer loan queries.
- The Bot should be able to answer general banking queries.
- The Bot should be able to answer queries regarding net banking.
- With the help of this bot, you can get all the required details related to banking.

Let us build our flask application which will be running in our local browser with a user interface.

In the flask application, users will interact with the chatbot, and based on the user queries they will get the outcomes.

Build Python Code

1: Importing Libraries

The first step is usually importing the libraries that will be needed in the program.

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

Importing the flask module into the project is mandatory. An object of the Flask class is our WSGI application. Flask constructor takes the name of the current module (name).

2: Creating our flask application and loading


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

3: Routing to the Html Page

Here, the declared constructor is used to route to the HTML page created earlier.

The '/' route is bound with the bot function. Hence, when the home page of a web server is opened in the browser, the HTML page will be rendered.

```
@app.route('/')
def bot():
    return render_template('chatbot.html')
```

Main Function

This is used to run the application in localhost.

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

Build HTML Code

- We use HTML to create the front-end part of the web page.
- Here, we have created 1 HTML page-Chatbot.html
- Chatbot.html displays the home page which integrates with Watson Assistant.
- A simple HTML page is created. Auto-generated source code from IBM WatsonAssistants is copied and pasted inside the body tag

Run The Application

- Open the anaconda prompt from the start menu.
- Navigate to the folder where your app.py resides.
- Now type the “python app.py” command.
- It will show the local host where your app is running on <http://127.0.0.1:5000/>
- Copy that localhost URL and open that URL in the browser. It does navigate me to where you can view your web page.

Source Code


```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="utf-8">

  <meta content="width=device-width, initial-scale=1.0" name="viewport">


  <title>Gp Bootstrap Template - Index</title>

  <meta content="" name="description">

  <meta content="" name="keywords">


  <!-- Favicons -->

  <link href="assets/img/favicon.png" rel="icon">

  <link href="assets/img/apple-touch-icon.png" rel="apple-touch-icon">


  <!-- Google Fonts -->

  <link
href="https://fonts.googleapis.com/css?family=Open+Sans:300,300i,400,400i,600,600i,700,700i|Raleway:300,300i,400,400i,500,500i,600,600i,700,700i|Poppins:300,300i,400,400i,500,500i,600,600i,700,700i" rel="stylesheet">


  <!-- Vendor CSS Files -->

  <link href="assets/vendor/aos/aos.css" rel="stylesheet">

  <link href="assets/vendor/bootstrap/css/bootstrap.min.css" rel="stylesheet">

  <link href="assets/vendor/bootstrap-icons/bootstrap-icons.css" rel="stylesheet">

  <link href="assets/vendor/boxicons/css/boxicons.min.css" rel="stylesheet">

  <link href="assets/vendor/glightbox/css/glightbox.min.css" rel="stylesheet">

  <link href="assets/vendor/remixicon/remixicon.css" rel="stylesheet">

  <link href="assets/vendor/swiper/swiper-bundle.min.css" rel="stylesheet">


  <!-- Template Main CSS File -->

  <link href="assets/css/style.css" rel="stylesheet">
```

```
</head>
```

```
<body>
```

```
<script>
```

```
    window.watsonAssistantChatOptions
```

```
    = {
```

```
      integrationID: "fafa4141-555c-427c-9e44-66a101cbb178", // The ID of this
```

```
      integration.region: "us-south", // The region your integration is hosted in.
```

```
      serviceInstanceID: "785992fb-b6cf-4d51-b222-23f37f3cee20", // 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')
```

```
      +"/WatsonAssi
```

```
      document.head.appendChild(t);
```

```
    });
```

```
</script>
```

```
<!-- ===== Header ===== -->
```

```
<header id="header" class="fixed-top ">
```

```
<div class="container d-flex align-items-center justify-content-lg-between">
```

```
<h1 class="logo me-auto me-lg-0"><a href="index.html">Bot<span>.</span></a></h1>
```

```
<!-- Uncomment below if you prefer to use an image logo -->
```

```
<nav id="navbar" class="navbar order-last order-lg-0">
```

```
<ul>
```

```

    <li><a class="nav-link scrollto active" href="#hero">Home</a></li>
    <li><a class="nav-link scrollto" href="#about">About</a></li>
    <li><a class="nav-link scrollto" href="#services">Services</a></li>
    <li><a class="nav-link scrollto" href="#team">Team</a></li>
    <li><a class="nav-link scrollto" href="#contact">Contact</a></li>
  </ul>

  <i class="bi bi-list mobile-nav-toggle"></i>

</nav><!-- .navbar -->

<a href="#about" class="get-started-btn scrollto">Get Started</a>

</div>

</header><!-- End Header -->

<!-- ===== Hero Section ===== -->
<section id="hero" class="d-flex align-items-center justify-content-center">
  <div class="container" data-aos="fade-up">

    <div class="row justify-content-center" data-aos="fade-up" data-aos-delay="150">
      <div class="col-xl-6 col-lg-8">
        <h1>AI Based Discourse for Banking Industry<span>.</span></h1>
        <h2>Chatbots for banking and finance operations.</h2>
      </div>
    </div>

  </div>

  <div class="row gy-4 mt-5 justify-content-center" data-aos="zoom-in" data-aos-delay="250">
    <div class="col-xl-2 col-md-4">
      <div class="icon-box">
        <i class="ri-store-line"></i>
        <h3><a href="">Loan</a></h3>
      </div>
    </div>
  </div>

```

</div>

<div class="col-xl-2 col-md-4">

<div class="icon-box">

<i class="ri-bar-chart-box-line"></i>

<h3>Net-Banking</h3>

</div>

</div>

<div class="col-xl-2 col-md-4">

<div class="icon-box">

<i class="ri-calendar-todo-line"></i>

<h3>24*7 </h3>

</div>

</div>

<div class="col-xl-2 col-md-4">

<div class="icon-box">

<i class="ri-paint-brush-line"></i>

<h3>Locker</h3>

</div>

</div>

<div class="col-xl-2 col-md-4">

<div class="icon-box">

<i class="ri-database-2-line"></i>

<h3>Data Security</h3>

</div>

</div>

</div>

</div>

</section><!-- End Hero -->

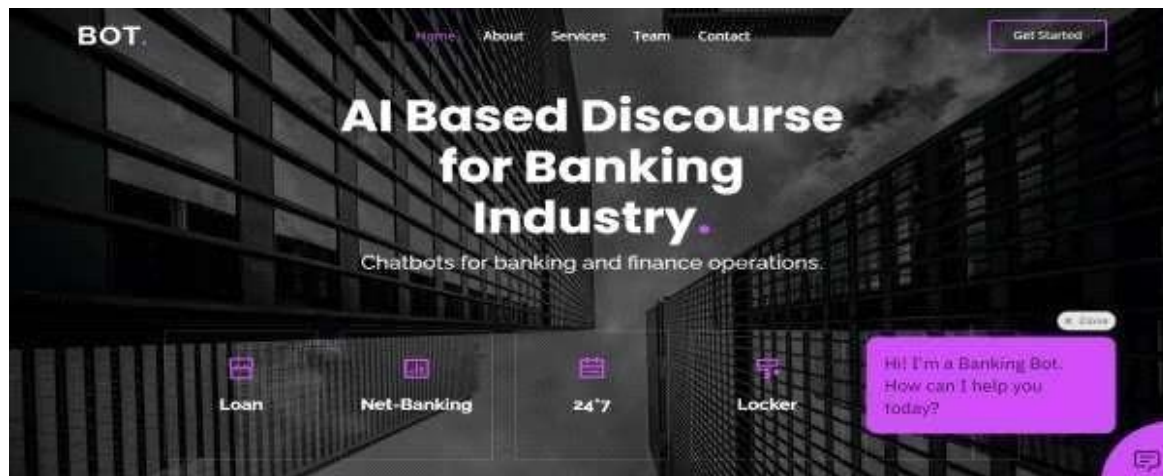
```
<div id="preloader"></div>

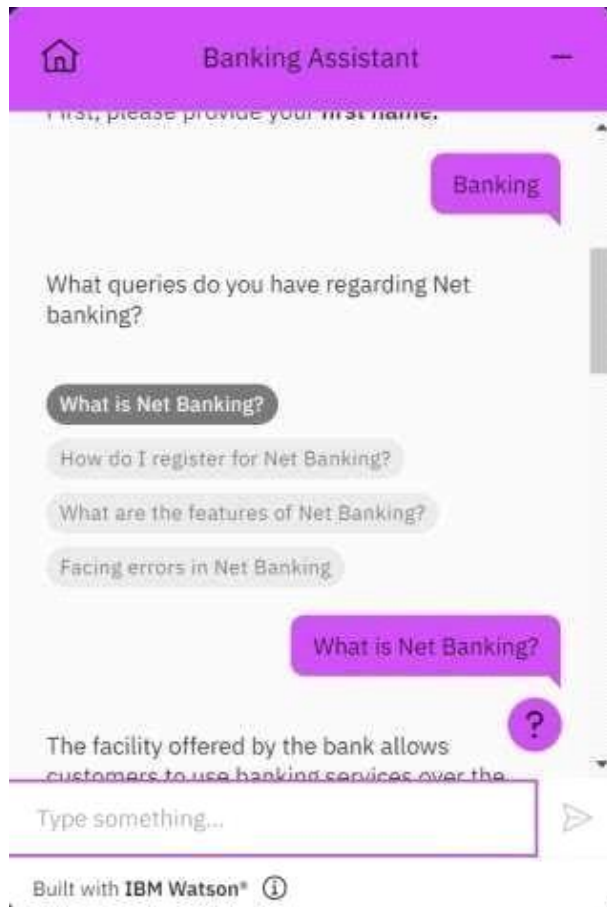
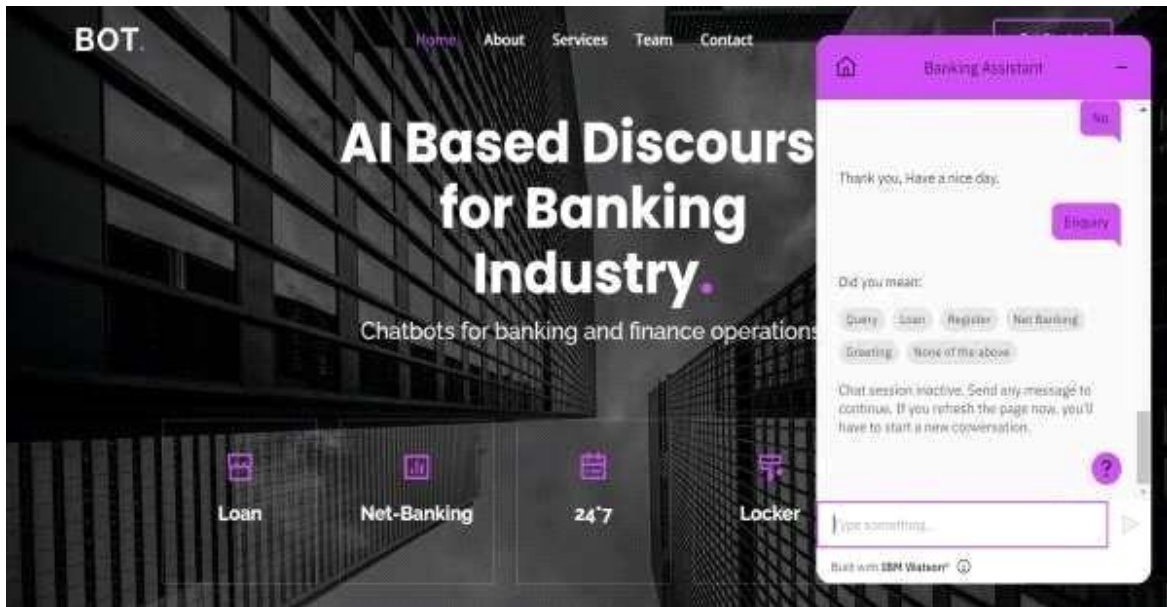
<a href="#" class="back-to-top d-flex align-items-center justify-content-center"><i class="bi
bi-arrow-up-short"></i></a>

<!-- Vendor JS Files -->

<script src="assets/vendor/purecounter/purecounter_vanilla.js"></script>
<script src="assets/vendor/aos/aos.js"></script>
<script src="assets/vendor/bootstrap/js/bootstrap.bundle.min.js"></script>
<script src="assets/vendor/glightbox/js/glightbox.min.js"></script>
<script src="assets/vendor/isotope-layout/isotope.pkgd.min.js"></script>
<script src="assets/vendor/swiper/swiper-bundle.min.js"></script>
<script src="assets/vendor/php-email-form/validate.js"></script>
<script src="assets/js/main.js"></script>
</body>
</html>
```

RESULT





Github& Project Link

<https://chatbotprojectibm.000webhostapp.com/>

PREVIEW OF CHATBOT:

[https://web-
chat.global.assistant.watson.appdomain.cloud/preview.html?backgroundImage
U RL=https%3A%2F%2Fus-
south.assistant.watson.cloud.ibm.com%2Fpublic%2Fimages%2Fupx-
785992fb- b6cf-4d51-b222-23f37f3cee20%3A%3A33c532ec-f7b3-46f0-becb-
d89ad77b3d68&integrationID=fafa4141-555c-427c-9e44-
66a101cbb178®ion=us-south&serviceInstanceID=785992fb-b6cf-4d51-
b222- 23f37f3cee20](https://web-chat.global.assistant.watson.appdomain.cloud/preview.html?backgroundImageURL=https%3A%2F%2Fus-south.assistant.watson.cloud.ibm.com%2Fpublic%2Fimages%2Fupx-785992fb-b6cf-4d51-b222-23f37f3cee20%3A%3A33c532ec-f7b3-46f0-becb-d89ad77b3d68&integrationID=fafa4141-555c-427c-9e44-66a101cbb178®ion=us-south&serviceInstanceID=785992fb-b6cf-4d51-b222-23f37f3cee20)