

## Project Development Phase

### Delivery of Sprint - 4

Date	04 November 2022
Team ID	PNT2022TMID50565
Project Name	AI based discourse for Banking Industry

### Creating Assistant & Integrate With Flask Web Page

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

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

### Building 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 create dearlier.

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 local host.

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

### Building HTML Code

We have used HTML to create the front-end part of the web page.

Here, we have created "index.html" displays the home page which gets integrated with Watson Assistant.

Auto-generated source code which contains the Integration ID of IBM Watson Assistants is copied and pasted inside the body tag.

### Run the application

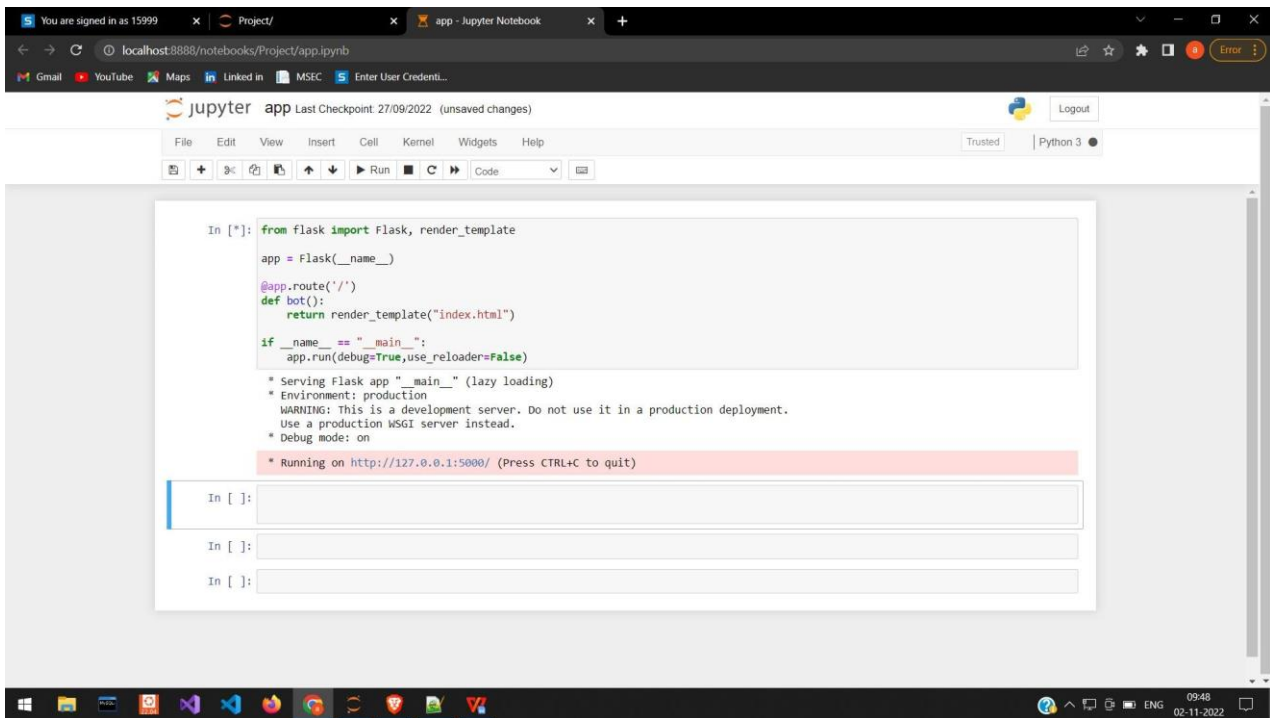
Open Jupyter notebook (anaconda3)

Navigate to the folder where app.ipynb resides.

Run the python code

Open a browser and type this URL <http://127.0.0.1:5000/>

It launches the application integrated with IBM Watson Assistant.

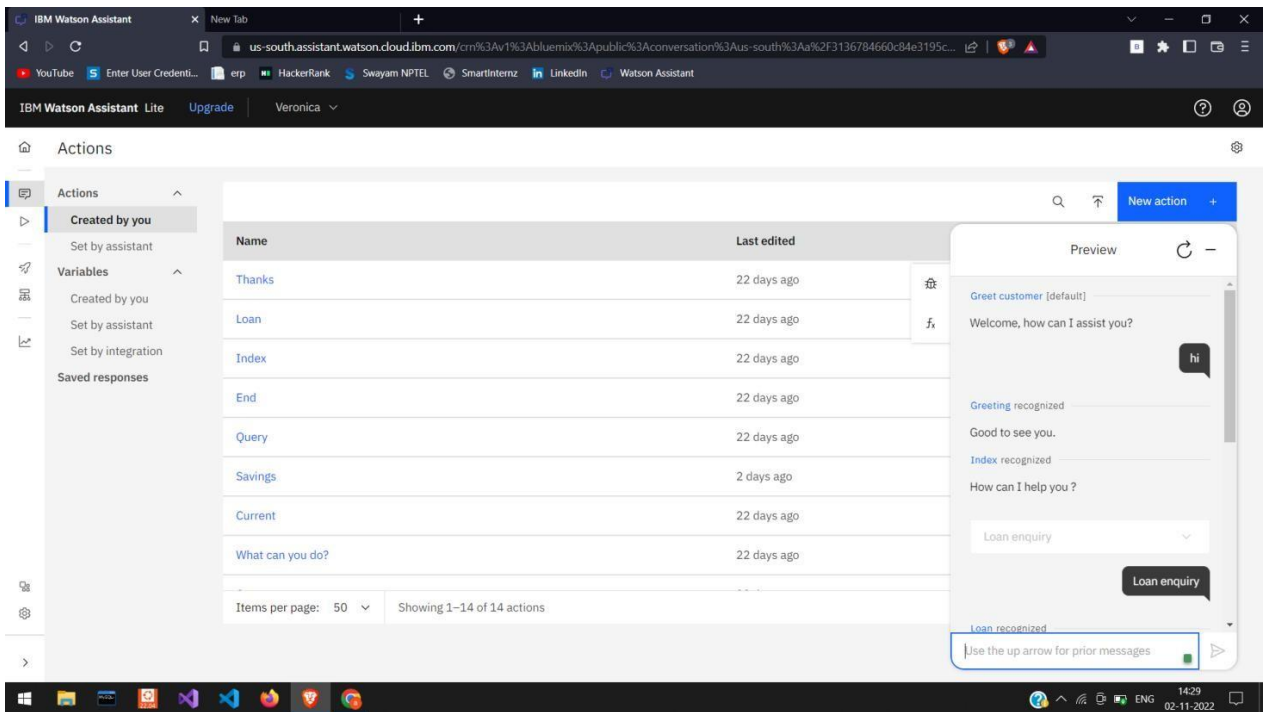


The screenshot shows a Jupyter Notebook interface in a web browser. The browser's address bar displays `localhost:8888/notebooks/Project/app.ipynb`. The notebook's title bar indicates it is a Python 3 environment. The code cell contains the following Python code:

```
In [*]: from flask import Flask, render_template
        app = Flask(__name__)
        @app.route('/')
        def bot():
            return render_template("index.html")
        if __name__ == "__main__":
            app.run(debug=True, use_reloader=False)

        * Serving Flask app "main_" (lazy loading)
        * Environment: production
        WARNING: This is a development server. Do not use it in a production deployment.
        Use a production WSGI server instead.
        * Debug mode: on
        * Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
```

Below the code cell, there are three empty input fields for the next steps in the notebook.



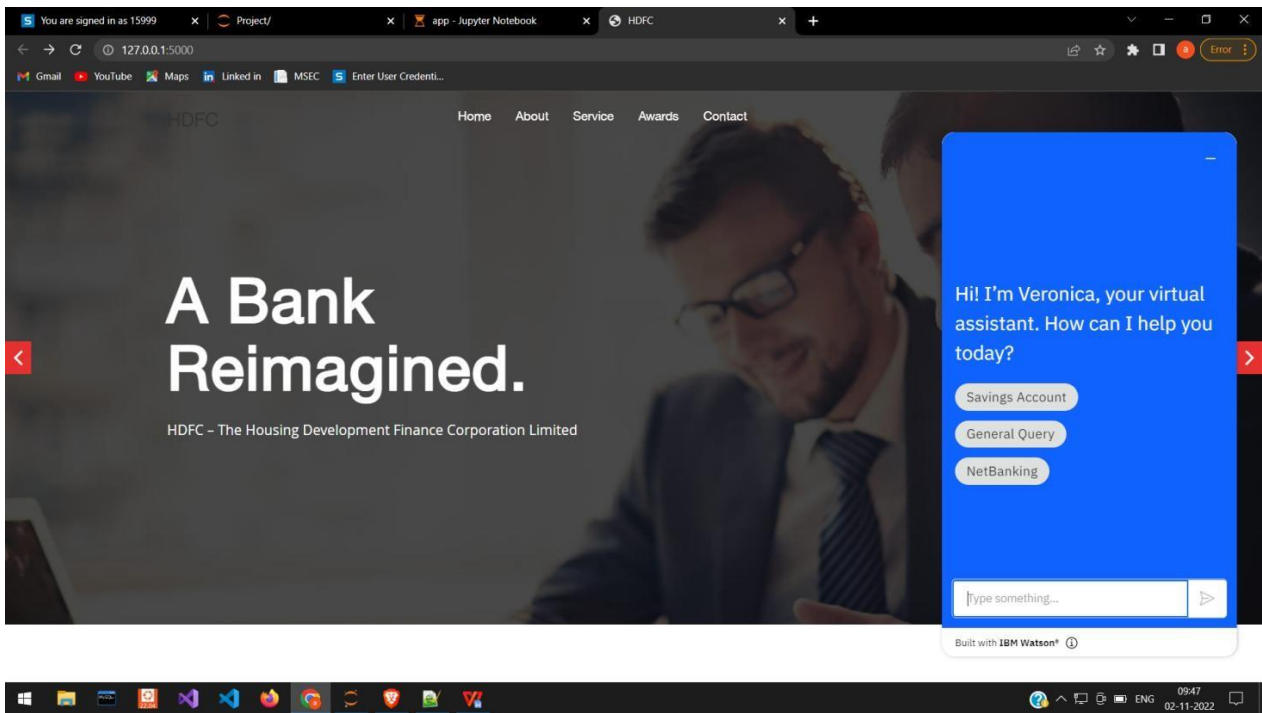
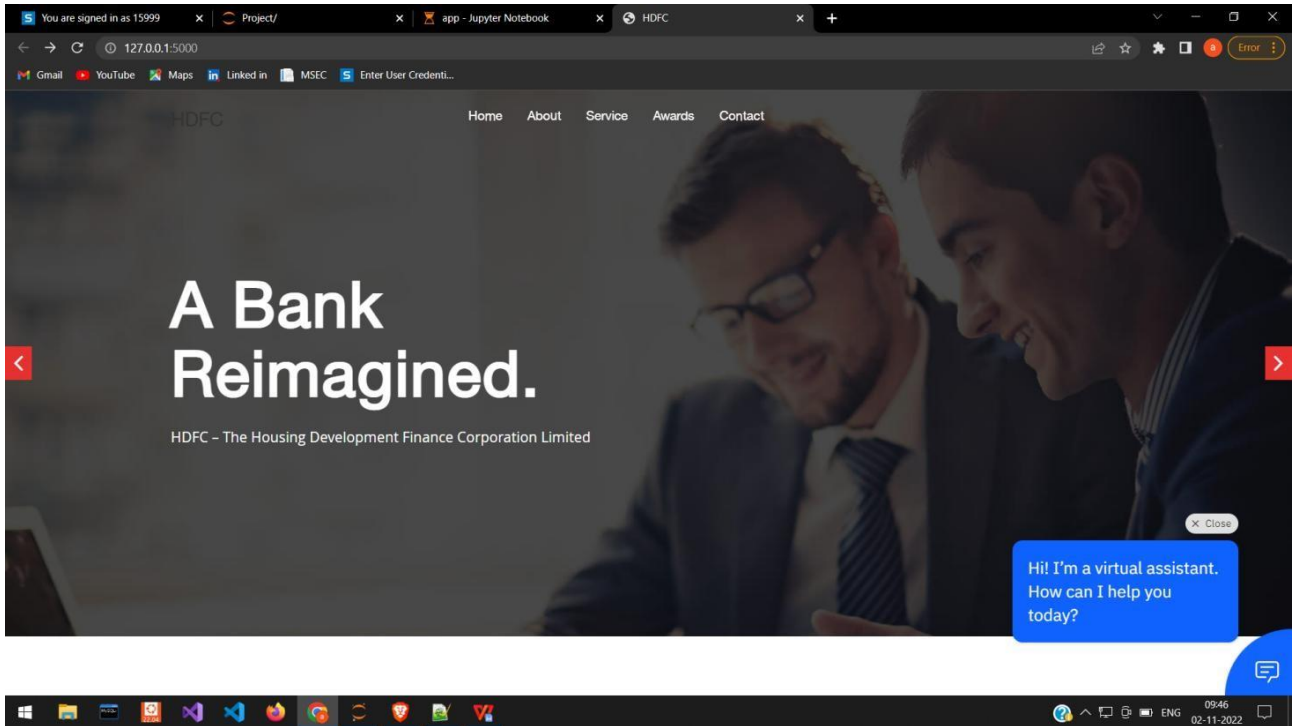
The screenshot displays the IBM Watson Assistant interface. The left sidebar shows the 'Actions' section, which is expanded to show a list of actions created by the user. The main area displays a table of these actions, including 'Thanks', 'Loan', 'Index', 'End', 'Query', 'Savings', 'Current', and 'What can you do?'. A 'Preview' window is open on the right, showing a chat conversation with the assistant. The chat history includes a greeting, a loan enquiry, and a confirmation of the loan enquiry.

Name	Last edited
Thanks	22 days ago
Loan	22 days ago
Index	22 days ago
End	22 days ago
Query	22 days ago
Savings	2 days ago
Current	22 days ago
What can you do?	22 days ago

Items per page: 50 Showing 1-14 of 14 actions

Preview chat history:

- Greet customer [default]
- Welcome, how can I assist you?
- hi
- Greeting recognized
- Good to see you.
- Index recognized
- How can I help you?
- Loan enquiry
- Loan enquiry
- Loan recognized
- Use the up arrow for prior messages



You are signed in as 15999

Project/

app - Jupyter Notebook

HDFC

127.0.0.1:5000

Gmail

YouTube

Maps

Linked in

MSEC

Enter User Credi...

HDFC

HomeAboutServiceAwardsContact

A Bank Reimagined.

HDFC - The Housing Development Finance Corporation Limited

Watson Assistant

Savings Account

Which type of savings account do you want to create?

Regular savings AccountKids saving Account

Zero Balance saving Account

Regular savings Account

Great! Please take the following documents and head towards the nearest branch.  
1. Aadhar card  
2. Pan card  
3. Passport-size photos

Would you like to learn more about our other services?

Type something...

Built with IBM Watson®

09:47

02-11-2022