

## Project Development Phase

### Delivery of Sprint - 4

Date	09 November 2022
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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 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 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 WatsonAssistant.

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.

You are signed in as 15999 x Project/ x app - Jupyter Notebook x +

localhost:8888/notebooks/Project/app.ipynb

jupyter app Last Checkpoint: 27/09/2022 (unsaved changes)

File Edit View Insert Cell Kernel Widgets Help Trusted Python 3

```
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)
```

In [ ]:

In [ ]:

In [ ]:

IBM Watson Assistant

us-south.assistant.watson.cloud.ibm.com/cm%3A%3Ay1%3A%3Abluemix%3Apublic%3Aconversation%3Aus-south%3Aa%2F3136784660c84e3195c...

IBM Watson Assistant Life Upgrade Veronica

### Actions

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

Greet customer [default]

Welcome, how can I assist you?

hi

Greeting recognized

Good to see you.

Index recognized

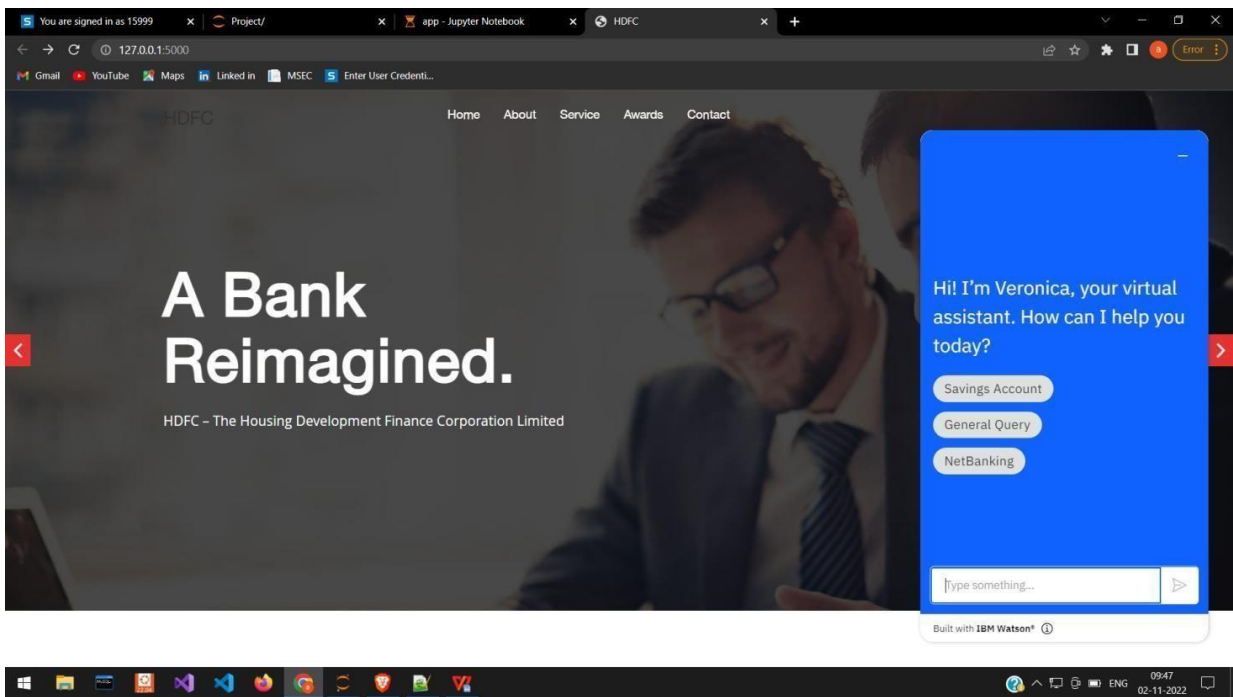
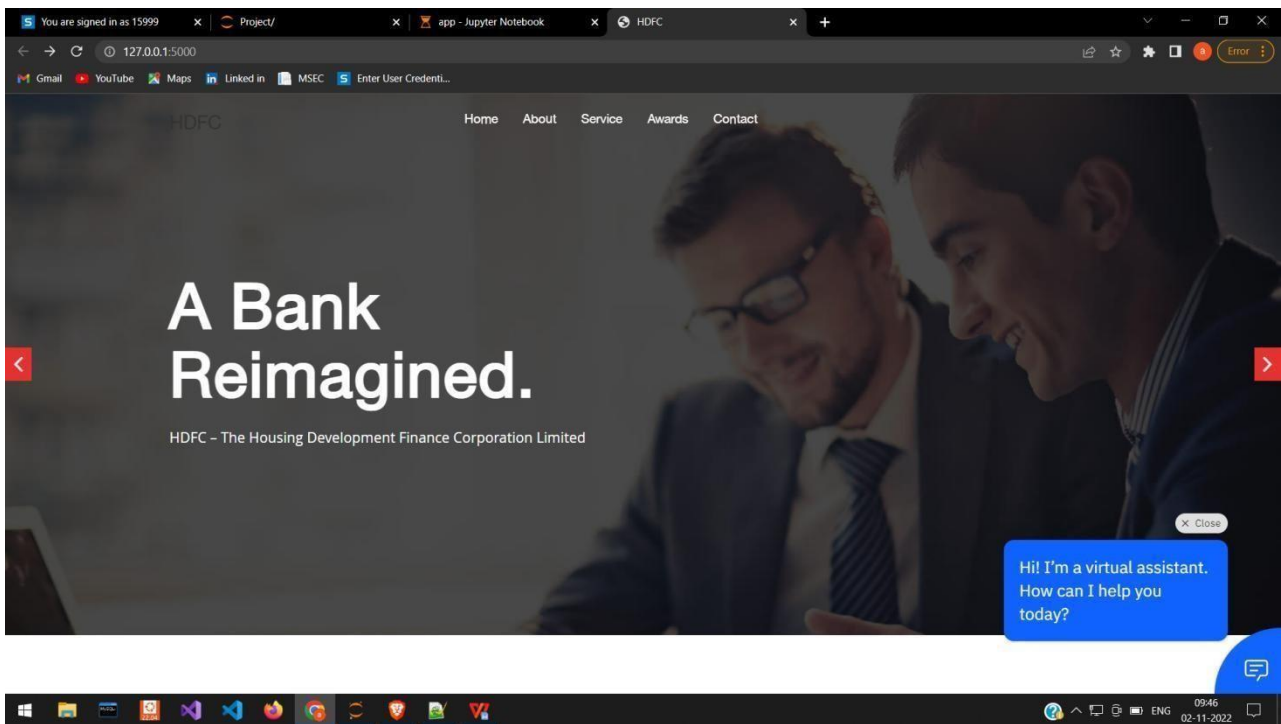
How can I help you?

Loan enquiry

Loan enquiry

Loan recognized

Use the up arrow for prior messages



The image is a screenshot of a web browser window. The top part of the browser shows the address bar with the URL '127.0.0.1:5000' and several open tabs including 'Project/', 'app - Jupyter Notebook', and 'HDFC'. Below the browser window, the main content is a dark-themed image of a smiling man and woman in business attire. Overlaid on this image is the HDFC logo and the text 'A Bank Reimagined.' followed by 'HDFC - The Housing Development Finance Corporation Limited'. To the right, there is a white chatbot interface titled 'Watson Assistant'. The chatbot has a home icon and a minus sign. The conversation starts with a message from the assistant: 'Savings Account'. The user asks: 'Which type of savings account do you want to create?'. The assistant responds with three options: 'Regular savings Account', 'Kids saving Account', and 'Zero Balance saving Account'. The user selects 'Regular savings Account'. The assistant then says: 'Great! Please take the following documents and head towards the nearest branch.' followed by a list: '1. Aadhar card', '2. Pan card', and '3. Passport-size photos'. The user asks: 'Would you like to learn more about our other services?'. The assistant responds with a question mark icon. At the bottom of the chatbot interface, there is a text input field with the placeholder 'Type something...' and a send button. The bottom of the browser window shows the Windows taskbar with various application icons and the system clock showing '09:47 02-11-2022'.