

# CREATE A DIABETIC CHATBOT IN PYTHON

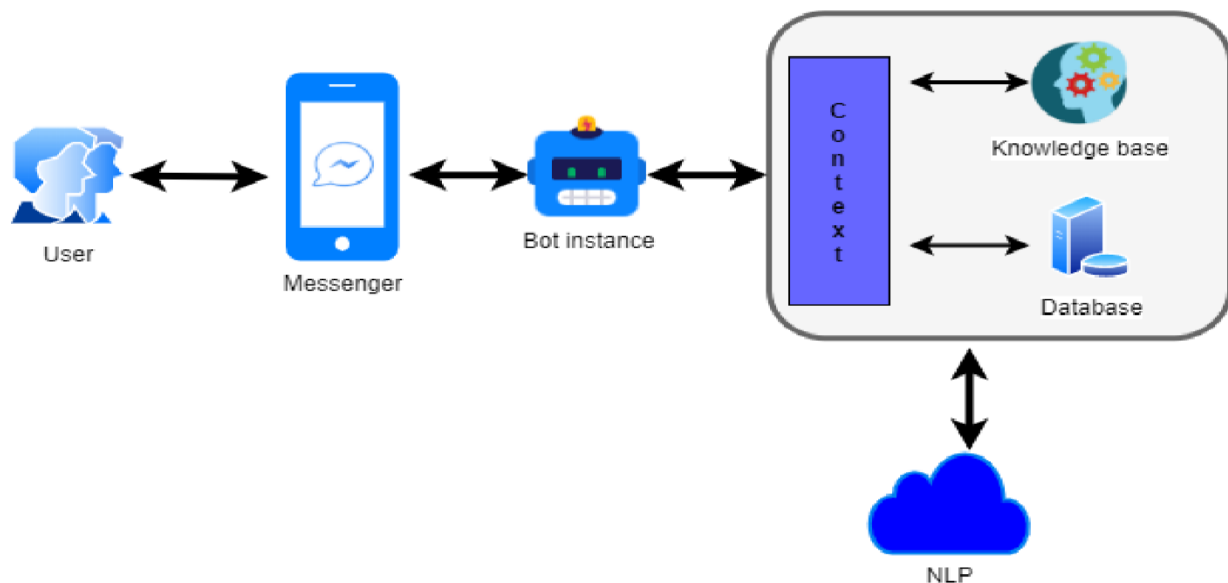
## TEAM MEMBER

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Phase-1: Document Submission

## SYNOPSIS

- Introduction
- Objective
- Design Thinking
  - 1.Functionality
  - 2.User interface
  - 3.Natural Language Processing
  - 4.Response
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- Conclusion



## **INTRODUCTION:**

Building a chatbot that is both intelligent and user-friendly and incorporates a diabetes prediction system is the issue at hand. To estimate users' risk of developing diabetes, the chatbot will make use of predictive models based on health data. Users will also learn about healthy lifestyle options, diabetes prevention strategies, and other topics. Additionally, if users are thought to be in danger, the chatbot will advise them to consult medical experts for additional assessment and guidance.

## **OBJECTIVES:**

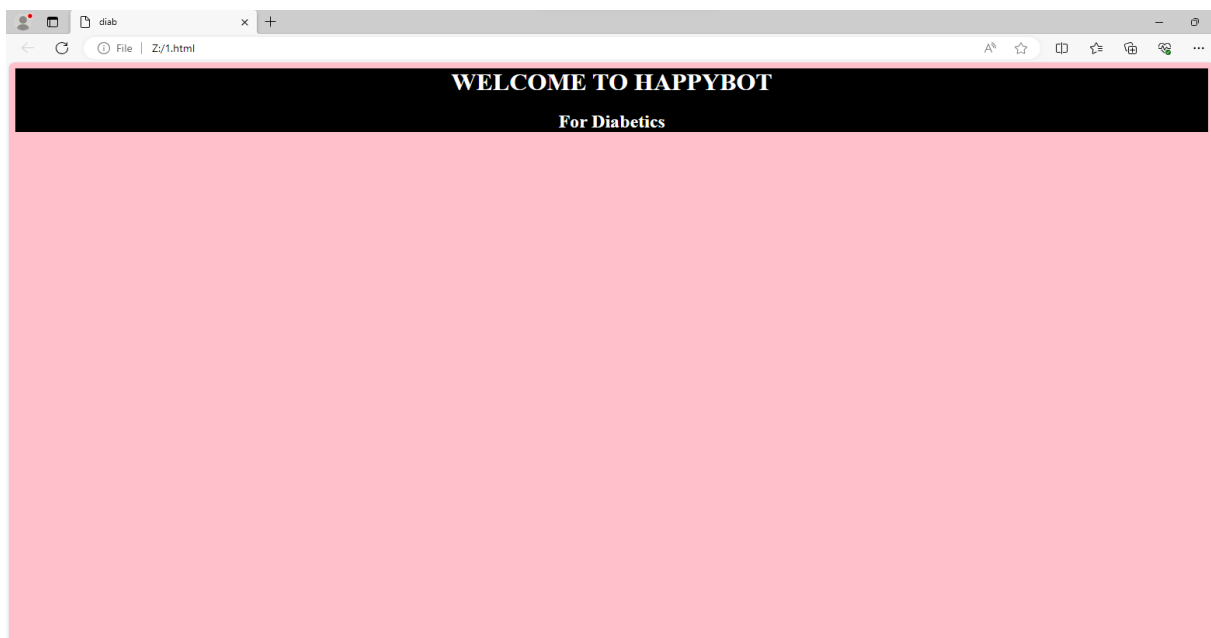
Diabetes Prediction Chatbot project are used to create a user-friendly Chatbot for diabetes risk prediction. It gather user health data and employ machine learning models. It Provide personalized risk assessments, proactive health management .

## **DESIGN THINKING:**

### **1.Functionality**

The chatbot's scope encompasses answering common diabetes-related inquiries, offering guidance on lifestyle choices, dietary habits, and exercise routines conducive to diabetes prevention.

### **2.User Interface**



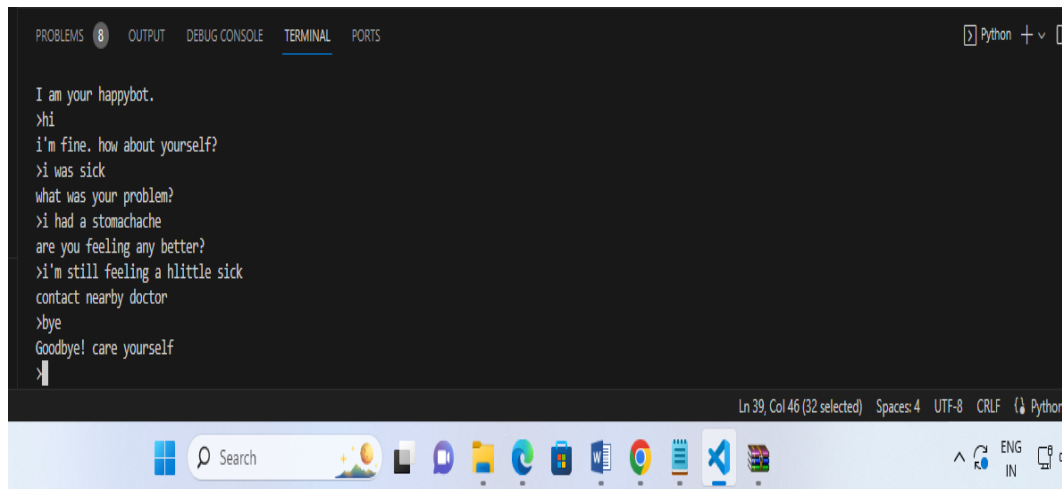
### **3.Natural Language Processing**

Using Tokenization NLP techniques to process and understand the user input.

## Tokenization:

```
def tokenizer(text):  
    text = text.lower()  
    tokens = word_tokenize(text)  
    tokens = [lemmatizer.lemmatize(token) for token in tokens]  
    tokens = [token for token in tokens if token not in stop_words]  
    return tokens
```

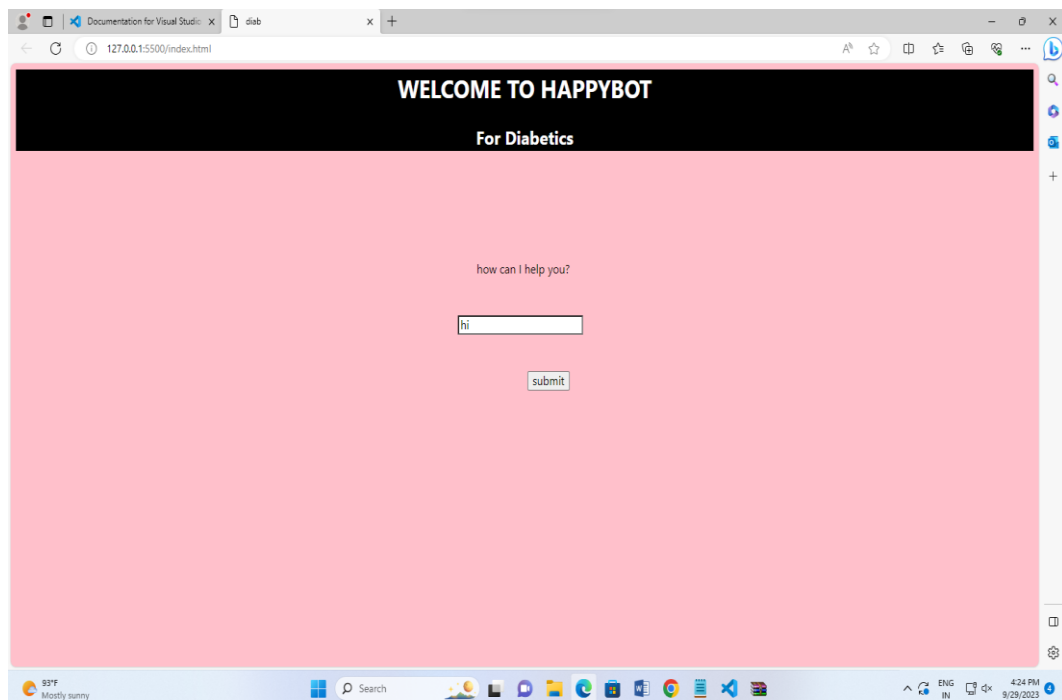
## 4.Response



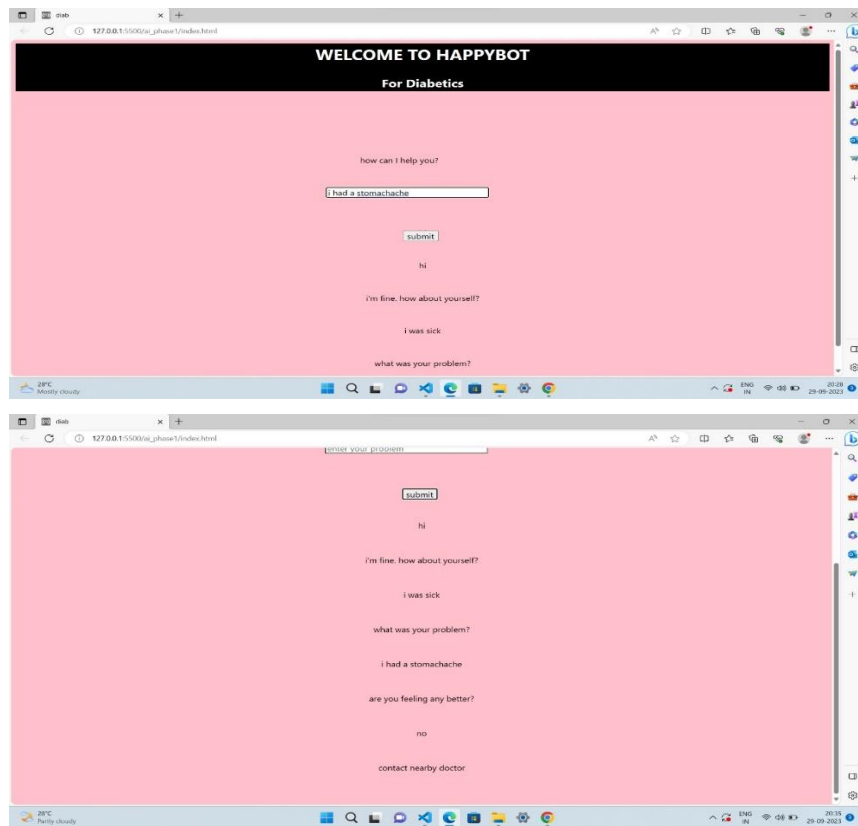
A screenshot of a terminal window with a dark background. The window title bar shows 'PROBLEMS 8 OUTPUT DEBUG CONSOLE TERMINAL PORTS' and a Python icon. The terminal displays a chatbot conversation. The chatbot's responses are: 'I am your happybot.', 'i'm fine. how about yourself?', 'i was sick', 'what was your problem?', 'i had a stomachache', 'are you feeling any better?', 'i'm still feeling a hlittle sick', 'contact nearby doctor', and 'Goodbye! care yourself'. The user's inputs are: '>hi', '>i was sick', '>i had a stomachache', '>i'm still feeling a hlittle sick', and '>bye'. The cursor is at the end of the last line. The status bar at the bottom shows 'Ln 39, Col 46 (32 selected) Spaces: 4 UTF-8 CRLF Python'.

```
I am your happybot.  
>hi  
i'm fine. how about yourself?  
>i was sick  
what was your problem?  
>i had a stomachache  
are you feeling any better?  
>i'm still feeling a hlittle sick  
contact nearby doctor  
>bye  
Goodbye! care yourself  
>
```

## 5.Integration



## 6. Testing and Improvement



## CONCLUSION

The diabetic chatbot highlights the power of Python-based programming in healthcare. It provides diabetic patients with useful guidance and information because to its user-friendly interface and clever replies. This chatbot promotes the use of technology for personalised patient help by exploiting Python's capabilities.