LOVELY PROFESSIONAL UNIVERSITY

ARTIFICIAL INTELLIGENCE(INT404)
PROJECT REPORT

HEALTH CARE CHATBOT USING PYTHON AND HTML TEMPLATE

GROUP MEMBERS

DEEPAK GAJWAL	4	11801993
AVDHOOTH PATIL	13	11802010
GILBERT RAJU	22	11801980
ABHISHEK MOHANTY	23	11801983

SUBMITTED TO : SHABNAM MAM

INTRODUCTION

Chatbots are typically used in dialog systems for various purposes including customer service, request routing, or for information gathering. While some chatbot applications use extensive word-classification processes, Natural Language processors, and sophisticated AI, others simply scan for general keywords and generate responses using common phrases obtained from an associated library or database.
Chatbots are also appearing in the healthcare industry. A study suggested that physicians in the United States believed that chatbots would be most beneficial for scheduling doctor appointments, locating health clinics, or providing medication information.
We all wanted to work with the healthcare consultant aspect of the chatbot .We wanted it to give a salutation in the beginning you are asked to elaborate the symptoms .We were hugely inspired the play store app Ada the personal healthcare assistant which had all these qualities which we wanted our chat bot to possess .We know that a chatbot can't replace a doctor but still it can be helpful as it can help identify the problem a person is facing.

NEED OF CHATBOTS

- Chatbots are mainly used to provide customer support.
- It helps in catering a huge amount of target audience at the same time 24/7
- Can Schedule meetings, Broadcast newsletters, auto-sequences
- Acquire leads from Comments
- Create conversational forms and saving all the data on spreadsheets
- Chatbots are very intelligent. You train them once and they will communicate with your target audience in their language. Multilingual chatbots have saved you from investing much on hiring different languages resources

USAGE IN HEALTHCARE

- Chatbot as a Hospital Administrator: Scheduling appointments and answering typical questions is what most healthcare administrators spend their day doing
- Chatbot as Healthcare Consultant: Helping the people who is having health related queries
- Chatbot as an Elderly Care Provider: Giving health supports to the elderly
- Chatbot as Medicine Reminders: Helping the patients to take madicine without forgetting

PACKAGES AND ADD-ONS USED

1. Flask (web framework)

• Flask is a micro web framework written in Python.
• It is classified as a microframework because it does not require particular tools or libraries.
• It has no database abstraction layer, form validation, or any other components where pre-existing third-party libraries provide common functions.
• However, Flask supports extensions that can add application features as if they were implemented in Flask itself.

• Extensions exist for object-relational mappers, form validation, upload handling, various open authentication technologies and several common framework related tools.
• Extensions are updated far more frequently than the core Flask program.

2. ChatterBot Package

• ChatterBot is a Python library that makes it easy to generate automated responses to a user's input. ChatterBot uses a selection of machine learning algorithms to produce different types of responses. This makes it easy for developers to create chat bots and automate conversations with users.
For more details about the ideas and concepts behind ChatterBot see the process flow diagram

3. HTML

• An HTML file is a webpage coded in HTML that can be displayed in a web browser.
• It is used to format text, tables, images, and other content that is displayed on a webpage.
• HTML files are widely used on the web as most pages within static websites have an ".html" extension.

4. YML FILE

• The YML file type is primarily associated with Javascript by YAML.
• YAML stand for "YAML Ain't Markup Language;".
• It uses a text file and organizes it into a format which is Human-readable.
• YAML may be used with multiple platforms of programming languages such as PHP, Python, Ruby, Perl, Javascript amongst others.
• Here JQuery is used to associate Yml with the program.

HOW THE PROGRAM RUNS

- In this project the back end and the frame is made by using the python language and in the project, we had used flask package which provide us the web framework.

• Along with the python we had used some data files in order to fulfil the adaptations of a chatbot and these files are made using the yml editor in the PyCharm ide.

• The next package was the chatterbot, which help us to provide automated responses and also it connects the code with the yml data files.

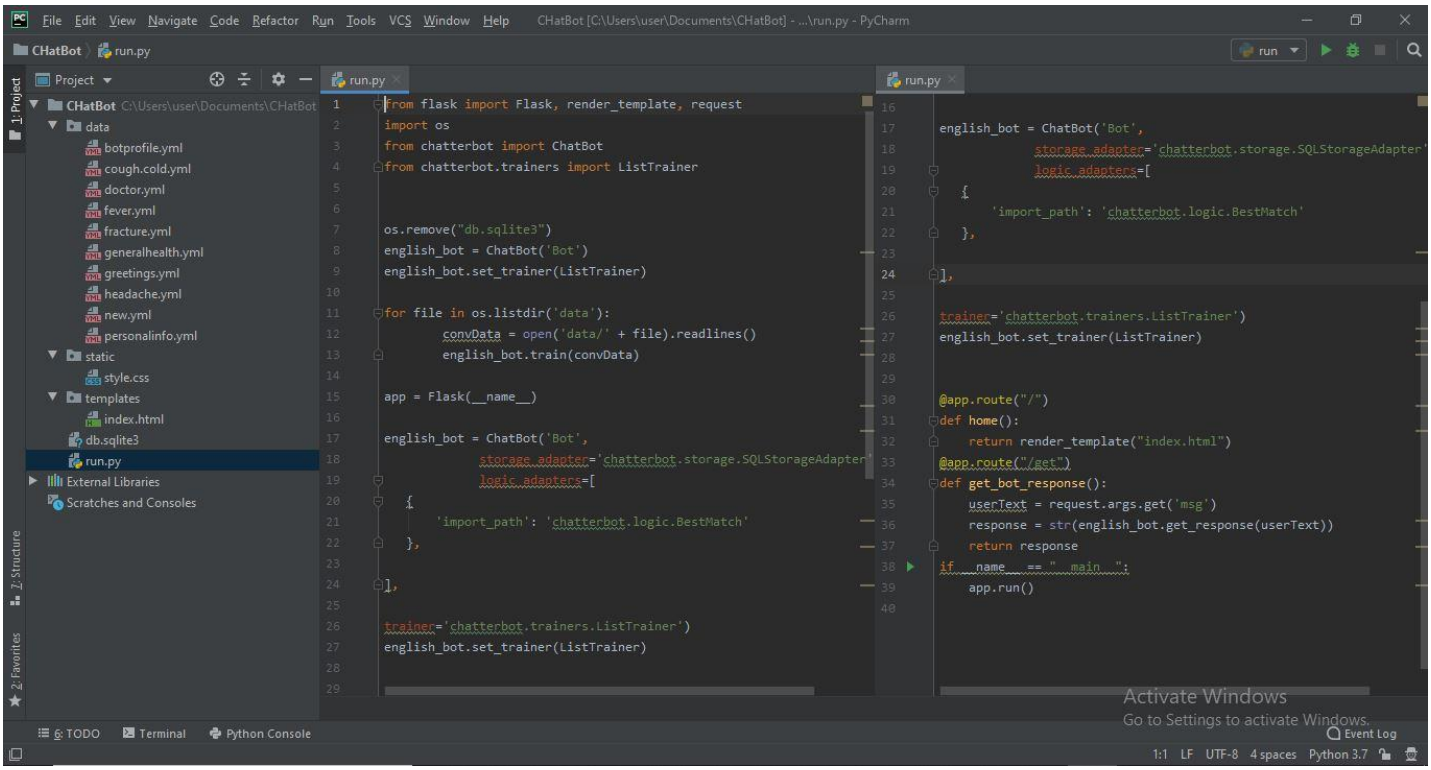
• To start the chatterbot first, we need to run the python code and after that we need to click on the host address and the chatbot will be opening in the default browser by the help of the html template

• Then we can start chatting with the chatbot and the chatbot give responses to our quarries

• And we can take appointments and the details will be saved in sqlite3 file

• From the following parts we can see more about the code and working of the project

PYTHON CODE



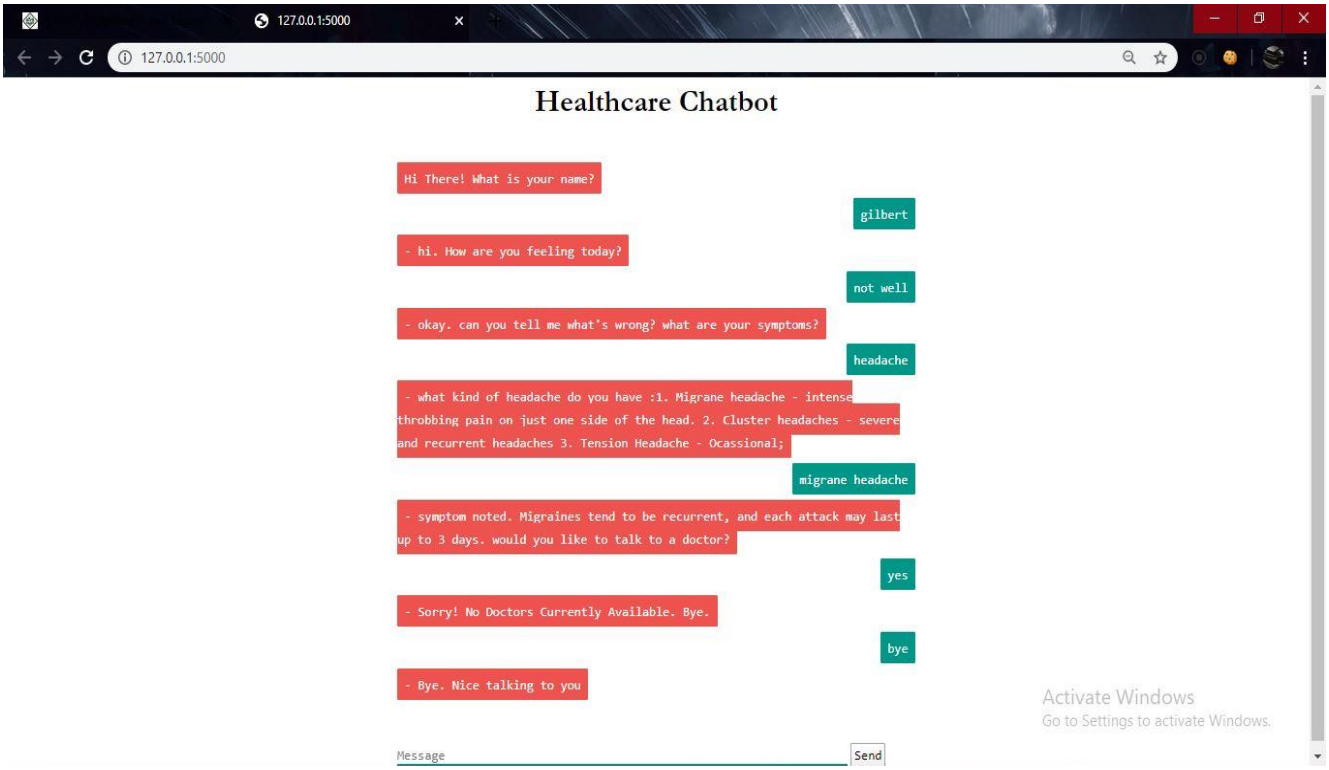
HTML CODE

```
<!DOCTYPE html>
<html>
  <head>
    <link rel="stylesheet" type="text/css" href="/static/style.css">
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.2.1/jquery.min.js"></script>
  </head>
  <body>
    <h1>Healthcare Chatbot</h1>
    <div>
      <div id="chatbox">
        <p class="botText"><span>Hi There! What is your name?</span></p>
      </div>
      <div id="userInput">
        <input id="textInput" type="text" name="msg" placeholder="Message">
        <input id="buttonInput" type="submit" value="Send">
      </div>
```

SCRIPT(JQuery)

```
    <script>
      function getBotResponse() {
        var rawText = $("#textInput").val();
        var userHtml = '<p class="userText"><span>' + rawText + '</span></p>';
        $("#textInput").val("");
        $("#chatbox").append(userHtml);
        document.getElementById('userInput').scrollIntoView({block: 'start', behavior: 'smooth'});
        $.get("/get", { msg: rawText }).done(function(data) {
          var botHtml = '<p class="botText"><span>' + data + '</span></p>';
          $("#chatbox").append(botHtml);
          document.getElementById('userInput').scrollIntoView({block: 'start', behavior: 'smooth'});
        });
      }
      $("#textInput").keypress(function(e) {
          if(e.which == 13) {
              getBotResponse();
          }
      });
      $("#buttonInput").click(function() {
        getBotResponse();
      })
    </script>
```

OUTPUT



CONCLUSION

From our perspective, chatbots or smart assistants with artificial intelligence are dramatically changing businesses. There is a wide range of chatbot building platforms that are available for various enterprises, such as e-commerce, retail, banking, leisure, travel, healthcare, and so on. Chatbots can reach out to a large audience on messaging apps and be more effective than humans. They may develop into a capable information-gathering tool in the near future.

REFERENCES

- Geeksforgeeks
- YouTube
- Sanfoundary
- Tutorialspoint
- stackoverflow

GitHub Link : https://github.com/gilbertraju/HealthCare-Chatbot