PSNA COLLEGE OF ENGINEERING AND TECHNOLOGY

(An Autonomous Institution,Affiliated to Anna University,Chennai)

Department of Information Technology

CHATBOT FOR COLLEGE ENQUIRY

Guided by

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ABSTRACT

The chatbot project for college admission aims to develop a conversational agent that can assist prospective students in their college admission process. The chatbot will be designed to interact with students in a natural language format, provide personalized guidance, and answer common questions related to the admission process. The chatbot will be trained on a large corpus of data related to college admissions, including application requirements, deadlines, program details, financial aid, and scholarship information. It will use natural language processing (NLP) techniques to understand the intent of the user's questions and provide relevant responses.

OBJECTIVE

The research aims and objectives of a chatbot may vary depending on the specific context and goals of the project. However, some common aims and objectives of chatbot research may include:

- **Understanding user needs and preferences**
- **Improving natural language processing (NLP) capabilities**
- **Developing personalized chatbot interactions**
- **Enhancing chatbot usability and user experience**
- **Ensuring chatbot safety and security**
- **Target audience**
- **Effectiveness**

Disadvantages of Existing System:

- There is no specific chatbot designed for our college with our college's data in it.
- Mostly paid services with high cost

Advantages of Proposed System

- Available for customers 24/7.
- Faster response time
- Reduces Operational Costs
- Since it is website , this can be accessed in anydevices

SYSTEM SPECIFICATION

The basic system requirements for running a chatbot on a laptop can vary depending on the specific chatbot platform or software you are using. However, here are some general guidelines:

- **Operating System:** Most chatbot platforms are compatible with popular operating systems such as Windows, macOS, and Linux.

- **Processor:** A modern processor with multiple cores, such as an Intel Core i5 or i7, or an AMD Ryzen 5 or 7, should be sufficient for most chatbot applications. Higher-end processors will provide better performance for more demanding chatbot tasks.

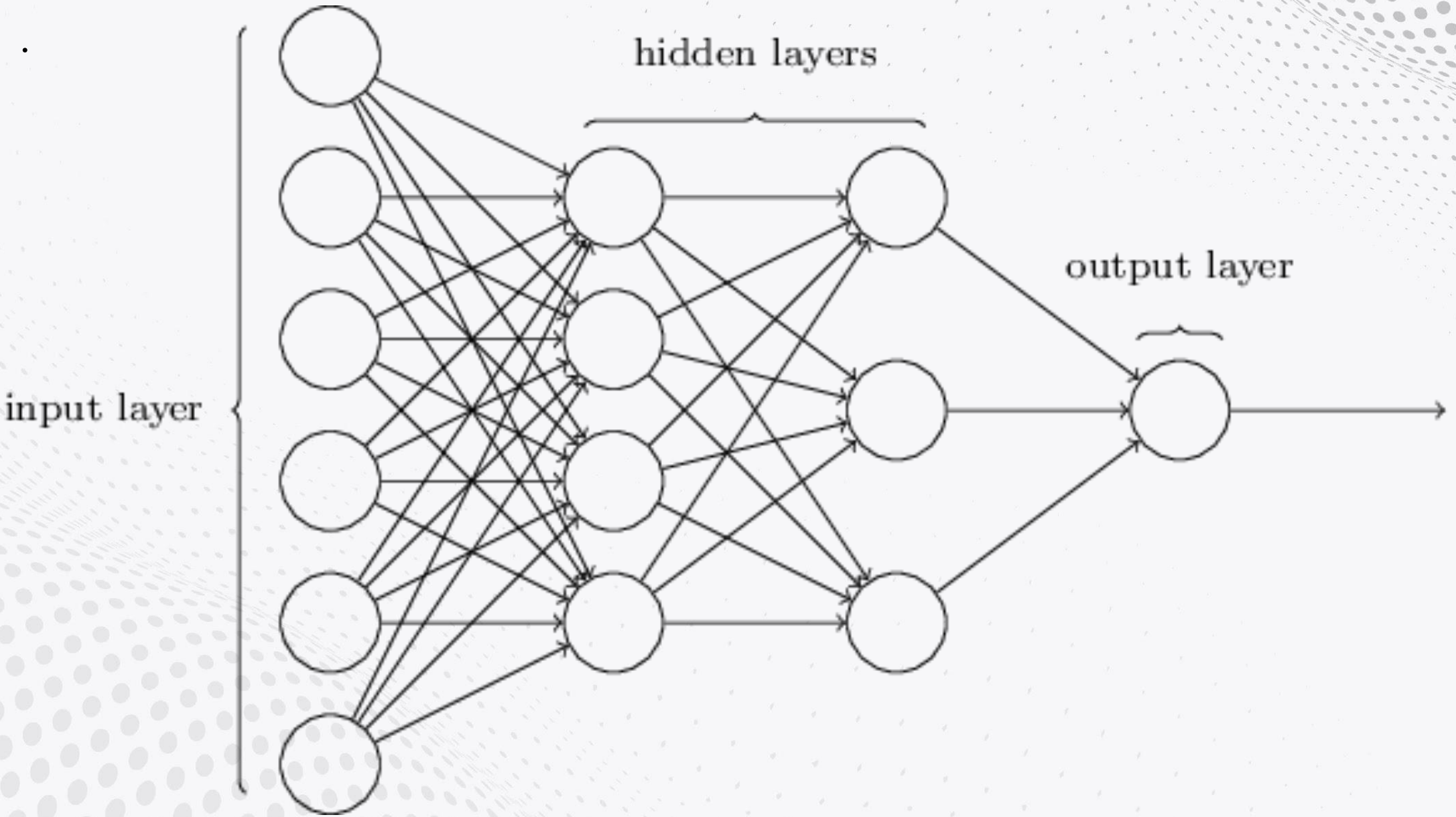
- **RAM:** The amount of RAM required will depend on the complexity of your chatbot and the expected number of concurrent users. In general, 8 GB of RAM is a minimum recommendation, but for larger-scale chatbots or those handling heavy workloads, 16 GB or more may be necessary.

- **Storage:** Sufficient storage space is required to store your chatbot application, databases, and any associated data. A solid-state drive (SSD) is recommended for faster read/write speeds, which can improve overall performance**.**

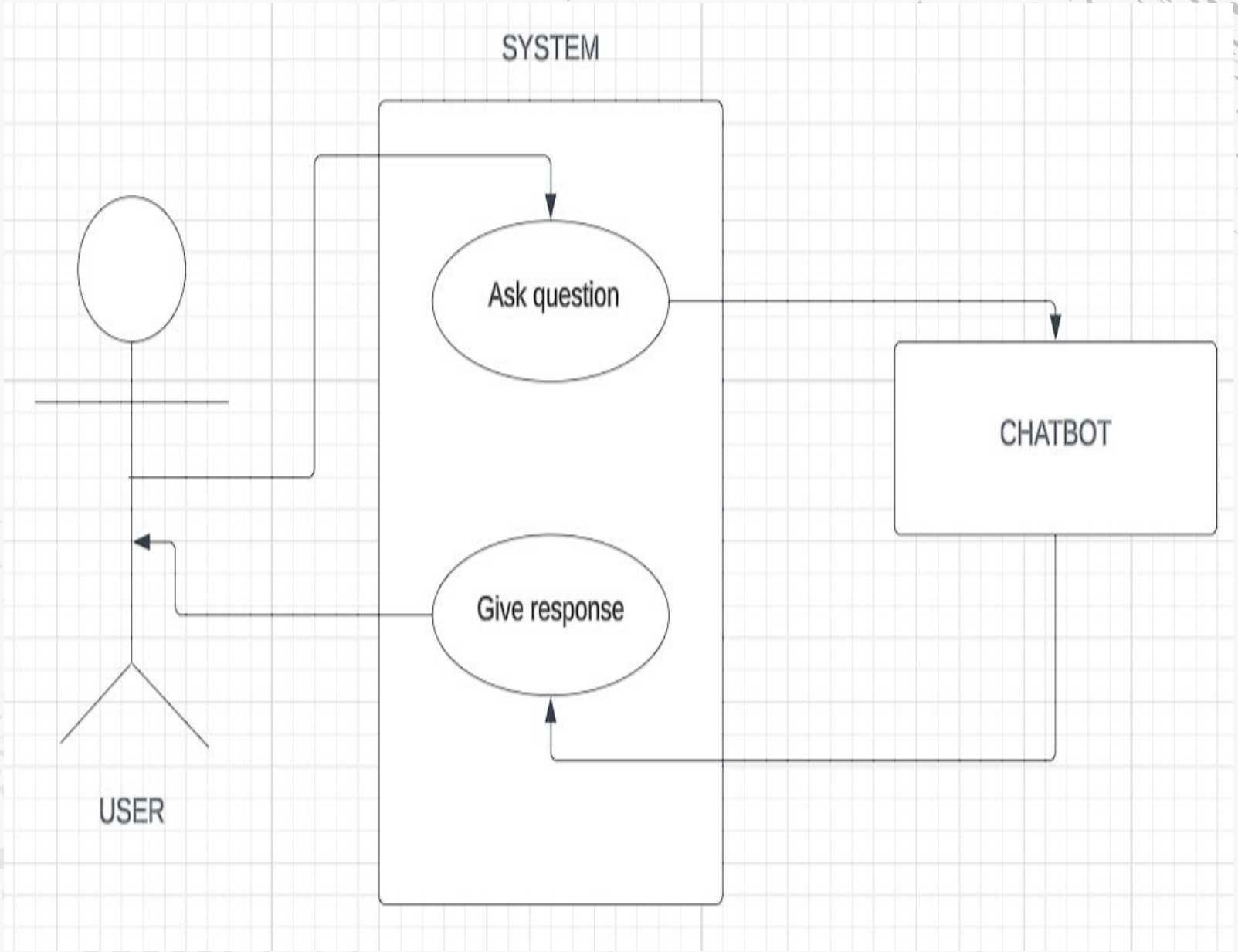
PROJECT MODULE

- Index.html (Webpage)
- app.py (main file)
- training.py (training file)
- data.json (knowledge base)
- styles.css (CSS file for Index.html)

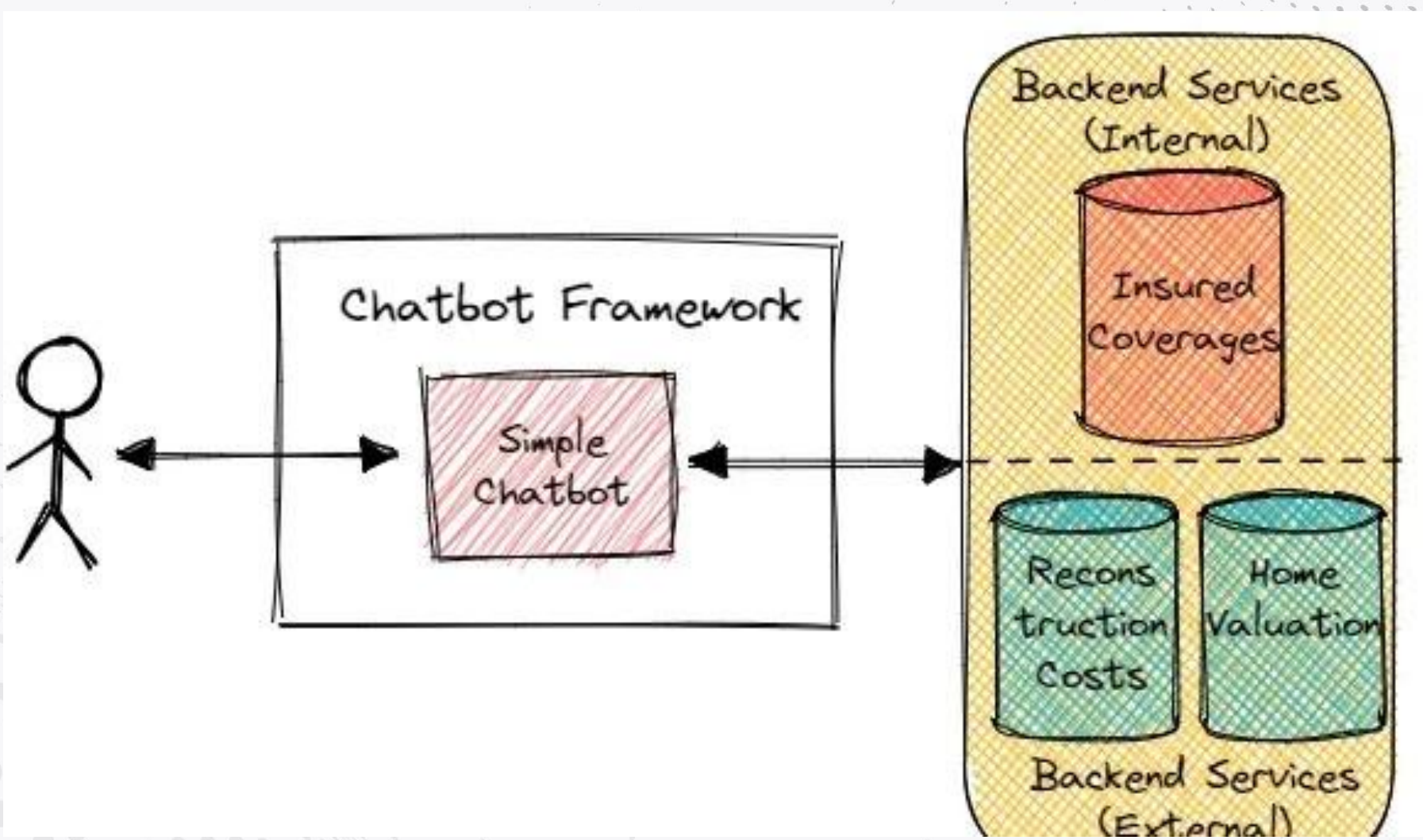
ARTIFICIAL NEURAL NETWORK



USE CASE DIAGRAM



SYSTEM ARCHITECTURE



OUTPUT DESIGN

- Designing the output for a chatbot involves considering various elements such as the visual presentation, message formatting, tone of voice, and response mechanisms. Here's a suggested approach for designing the output of a chatbot:

1. Visual Presentation:

- Use a simple and clean user interface that is easy to navigate.

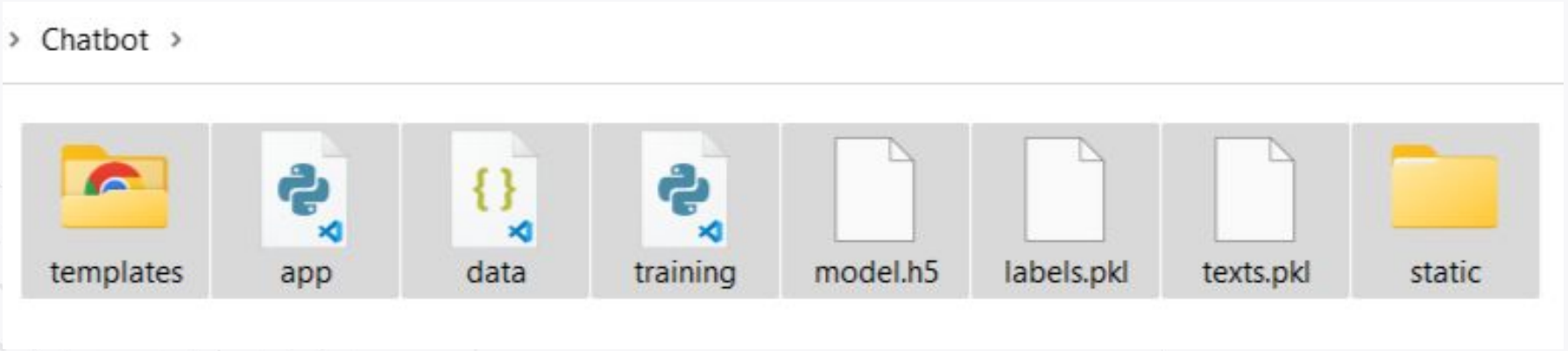
- Incorporate branding elements, such as colors and logos, to maintain consistency with your brand identity.

2. Message Formatting:

- Clearly distinguish between user messages and bot responses, such as using different colors or styles.

- Include a timestamp for each message to provide a sense of time and continuity.

CHATBOT FOLDER

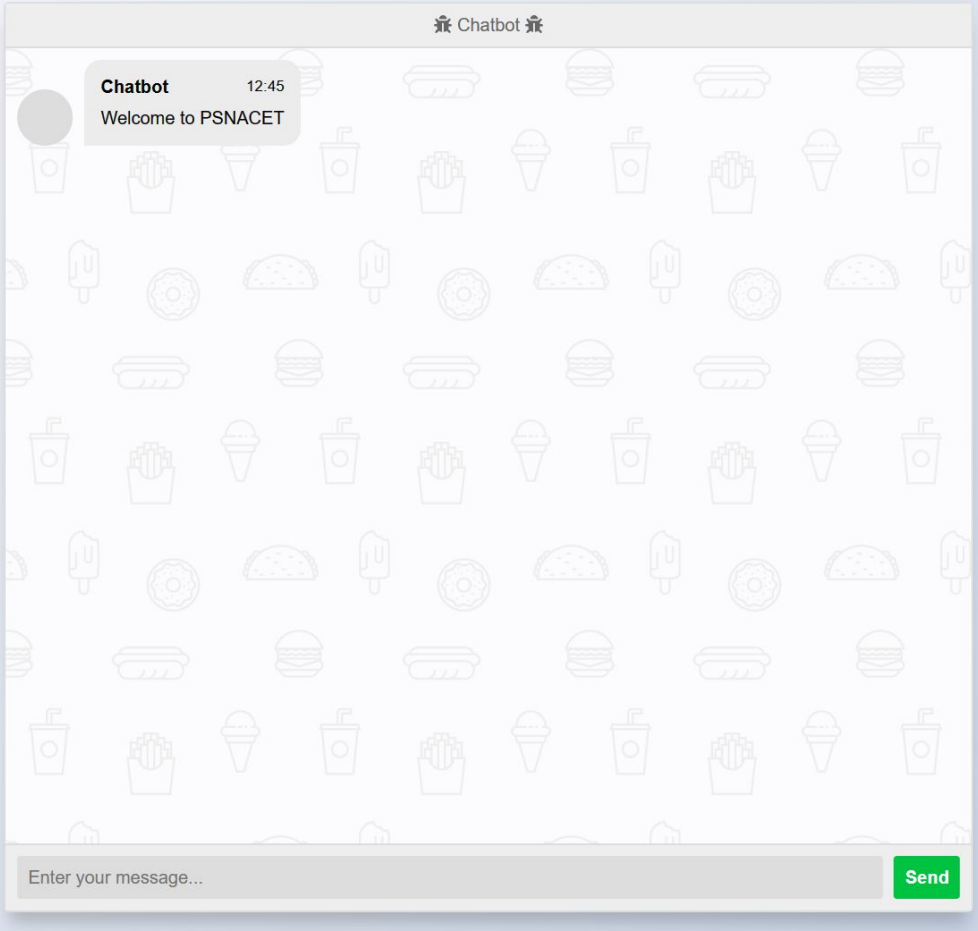


STEPS TO CREATE A CHATBOT IN FLASK

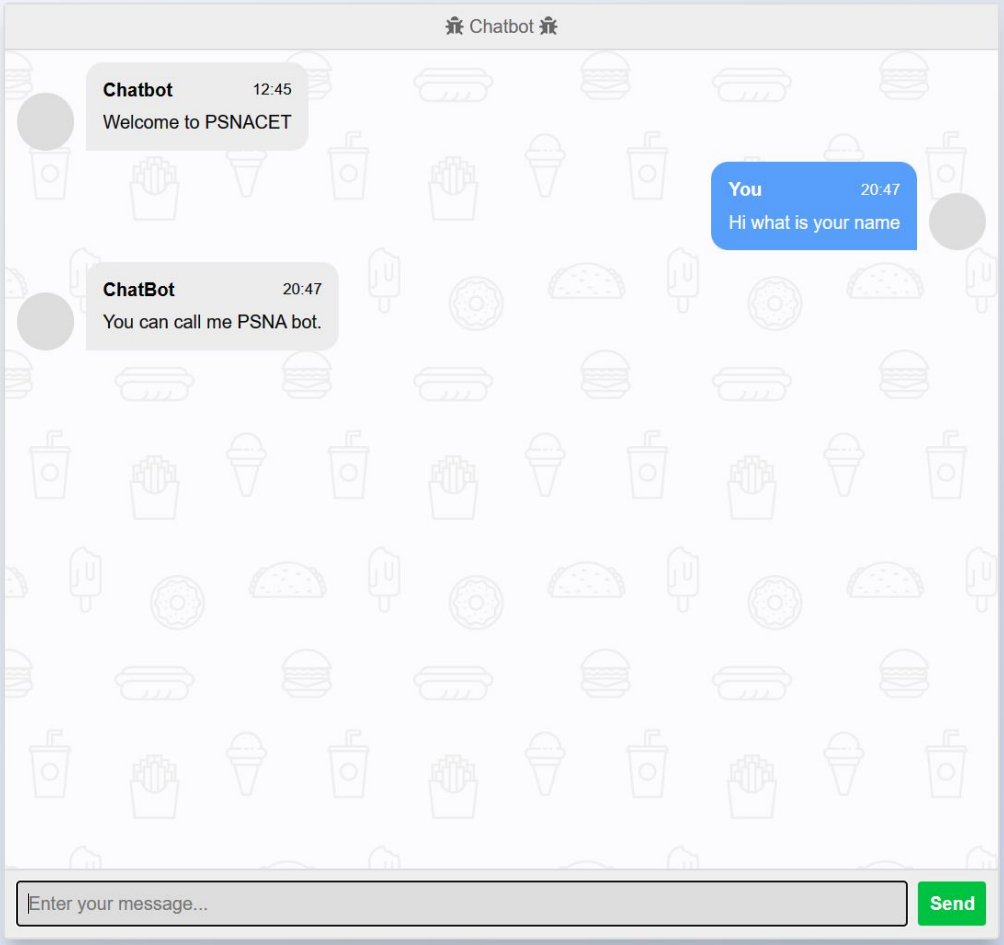
1. Import and load the data file
2. Preprocess data
3. split the data into training and test
4. Build the ANN model using keras
5. Predict the outcomes
6. Deploy the model in the Flask app

IMPLEMENTATION

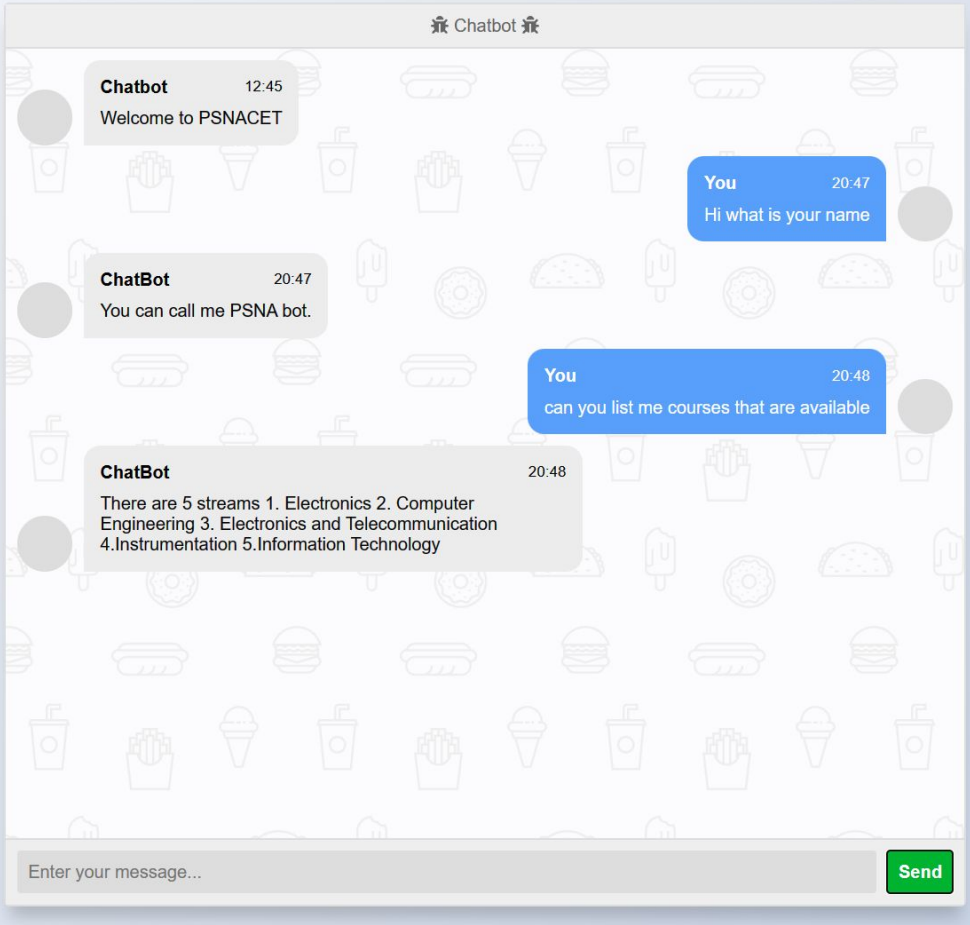
Sample output - 1



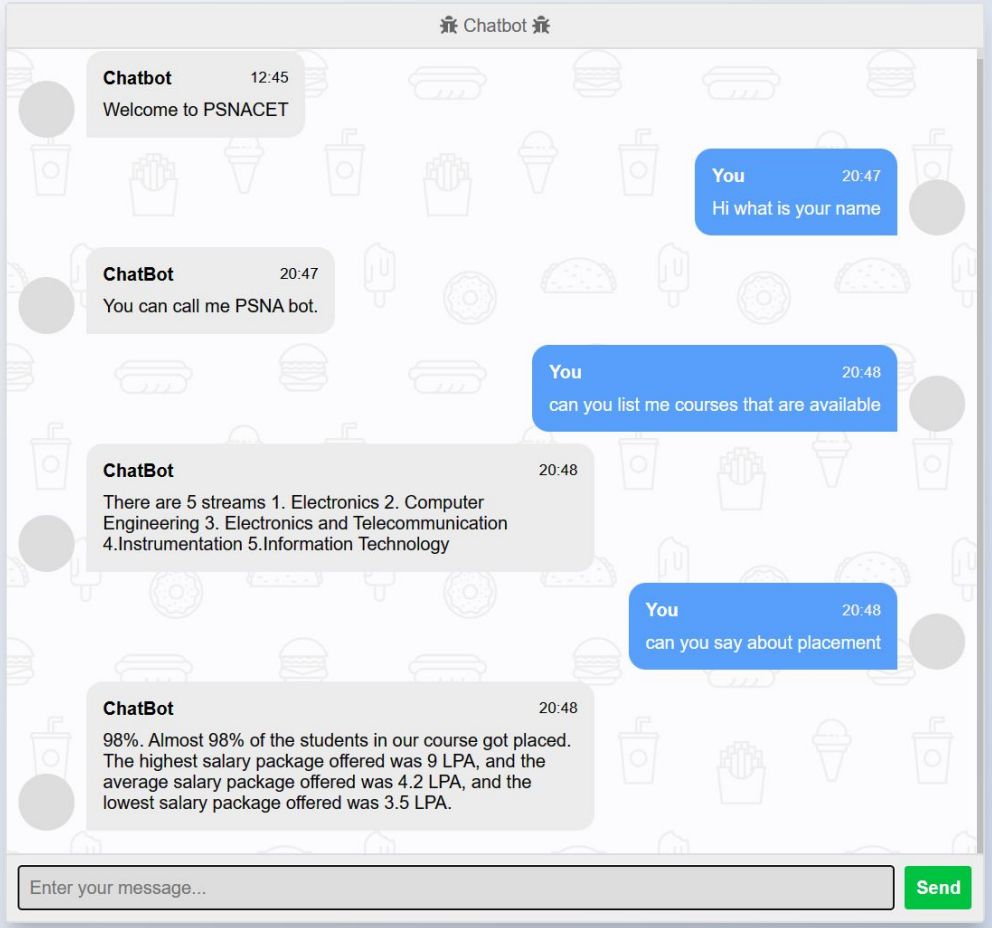
Sample output - 2



Sample output - 3



Sample output - 4



CONCLUSION

This bot was built to respond to the inquiries of students and parents regarding university's admission and their specializations, with extracted information for each specialization, familiarizing students and parents with the fees structure, and the required documents that students submit for their enrollment in the university. Implementing an admission chatbot can offer numerous benefits for the College. Chatbots can provide faster and more efficient responses to common admission-related queries, reduce the workload of staff during admission times, improve the user experience for prospective students and parents, reduce parents waiting in lines for inquiry during admissions and potentially increase the number of applications submitted and enrolled students.

FUTURE WORK

- Improve the chatbot's natural language processing (NLP) capabilities to enable it to better understand and respond to user queries and requests.
- Incorporate more advanced machine learning and deep learning algorithms to enhance the chatbot's ability to learn from user interactions and improve over time.
- Expand the chatbot's capabilities to include support for a wider range of languages and dialects, to cater to users from diverse backgrounds.
- Integrate the chatbot with other systems such as customer relationship management (CRM) software, to enhance its functionality and usability.Explore the use of chatbots in new and innovative contexts, such as healthcare, finance, and education, to leverage their potential in these areas.

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THANK YOU

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