



GLA
UNIVERSITY
MATHURA
Established vide U.P. Act 21 of 2010.

MINI PROJECT II

SYNOPSIS

Project Title- InsightBot (AIBot)

Submitted by:

Subodh Srivastava(201500710)

Raj Sinha (201500552)

Himanshu Kushwaha(201500296)

Submitted to:

Ms. Ruchi Talwar

Declaration

The authors of the statement confirm that they have completed a project called "InsightBot" and submitted it to GLA University. The project is an original work and has been completed by the authors in collaboration with their group mates under the guidance of Ruchi Talwar. The project is being submitted as a partial fulfillment of the requirements to obtain a Bachelor of Technology degree in Computer Science & Engineering.

The authors further assert that the findings and results presented in the project have not been submitted to any other university or institute for any degree or diploma award. This statement is essentially a declaration that the project work is the original and unique work of the authors and has not been plagiarized or copied from any other source. It is a common practice to include such declarations at the beginning of academic projects to ensure the authenticity and originality of the work.

Acknowledgment

It gives us a great sense of pleasure to present the synopsis of the B.Tech mini project undertaken during B.Tech III Year. This project is going to be an acknowledgement to the inspiration, drive and technical assistance will be contributed to it by many individuals.

We owe special debt of gratitude to Ms. Ruchi Talwar, Technical Trainer(GLAU) , for providing us with an encouraging platform to develop this project, which thus helped us in shaping our abilities towards a constructive goal and for his constant support and guidance to our work. His sincerity, thoroughness and perseverance has been a constant source of inspiration for us. We believe that he will shower us with all his extensively experienced ideas and insightful comments at different stages of the project & also taught us about the latest industry-oriented technologies.

We also do not like to miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and co-operation.

Contents

1. Introduction

- A. Objective
- B. Motivation
- C. Problem Statement

2. Software Requirement

- A. Hardware Requirements
- B. Software Requirements

3. Project Description

4. Working

5. Implementation

6. Reference

Introduction

Our project, InsightBot, is a cutting-edge AI chatbot designed to provide fast and accurate support to users seeking information or assistance. With the rapid pace of modern life, users need access to information quickly, and our chatbot is the perfect solution for this demand.

The InsightBot AI uses advanced artificial intelligence technology to understand user input and respond with relevant information in real-time. The chatbot also includes a suggestion feature that predicts the user's next question as they type, ensuring that users receive the most accurate and helpful information possible.

One of the unique features of InsightBot is its suggestion feature. The chatbot can predict what users will ask next as they type, making it faster and easier to get the information they need. This feature also reduces the likelihood of errors, ensuring that users receive the most accurate information possible.

Overall, InsightBot is an essential tool for any modern customer service or support system. Its ability to provide fast and accurate information, along with its advanced suggestion feature, makes it a valuable asset for anyone in need of quick assistance. With InsightBot, users can get the help they need quickly and efficiently, without the need to wait for a human representative to become available.

Primary Reason to Choose This Project

The primary reason to choose this AI project is its ability to provide efficient and accurate support to users. With its advanced artificial intelligence technology and suggestion feature, the chatbot can quickly and accurately respond to user queries, saving time and minimizing errors.

Another significant advantage of the chatbot is its scalability. It can handle a large volume of queries simultaneously, making it an ideal solution for businesses or organizations that need to provide assistance to a large number of users.

The project is also cost-effective as it can automate the process of answering user queries, reducing the costs associated with human resources. This makes it a highly attractive option for businesses or organizations looking to optimize their resources.

Finally, the chatbot's 24/7 availability is a critical advantage. Users can access support at any time of the day or night, making it an ideal solution for businesses or organizations that operate around the clock.

Overall, the combination of efficiency, scalability, cost-effectiveness, and 24/7 availability make this AI chatbot project an attractive solution for any business or organization looking to provide quick and reliable support to its users.

The Main Objective of This Project

Our InsightBot project aims to create an AI-powered chatbot that provides quick and accurate assistance to users seeking information. Leveraging advanced artificial intelligence technology, we strive to improve the chatbot's efficiency and effectiveness. One notable feature is the suggestion feature that predicts the user's intended question, reducing the need for users to type out their entire query. This feature saves time and reduces the likelihood of errors in the user's question, resulting in the most accurate response possible.

This project has the potential to lower operational costs for businesses and organizations by reducing the need for human resources. Moreover, it demonstrates the impressive capabilities of artificial intelligence technology in transforming the way users obtain information and seek assistance.

Our objectives for this project are to enhance user satisfaction, streamline information retrieval, and demonstrate the potential of AI technology. The inclusion of the suggestion feature is a significant step forward in achieving these goals, and we are excited to witness the impact of this project on the industry.

Scope of the Project

The scope of InsightBot AI chatbot project could include:

- **User interface design:** Designing an intuitive and user-friendly interface that allows users to easily input their queries.
- **Artificial intelligence technology:** Incorporating advanced AI technology, such as NLP and machine learning algorithms, to improve the chatbot's ability to understand and respond to user queries.
- **Integration with existing systems:** Integrating the chatbot with existing systems or platforms, such as websites or mobile applications.
- **Testing and evaluation:** Testing and evaluating the chatbot's performance to ensure it provides accurate and relevant responses.
- **Expansion of the chatbot's capabilities:** Expanding the chatbot's capabilities to include additional functionalities, such as voice recognition or integration with other AI technologies.

Overall, InsightBot AI chatbot project could have a broad or focused scope, depending on the specific goals and requirements of the project.

Working Methodology of the InsightBot

An AI bot powered by OpenAI API works by leveraging state-of-the-art natural language processing and machine learning algorithms to accomplish its tasks. Here are the general steps that an AI bot using OpenAI API may take to complete its tasks:

Query Processing: The AI bot processes user queries using natural language processing algorithms and sends the queries to the OpenAI API for further processing.

Response Generation: OpenAI API generates responses based on the processed query and sends them back to the AI bot.

Deployment: Once the AI bot receives a response from OpenAI API, it can be deployed to perform its specific tasks, such as answering questions, making recommendations, or providing customer service.

Continuous Improvement: As the AI bot interacts with users and receives feedback, it can continue to learn and improve its performance over time. This is achieved through ongoing training and updates to the OpenAI API algorithms.

Overall, the working methodology of an AI bot using OpenAI API is to leverage advanced natural language processing and machine learning algorithms to perform tasks that would typically require human intelligence, such as understanding natural language and generating responses based on complex information..

Details about the Features used in the Project

- **React Front-End** - The React library can be used to build a responsive and dynamic user interface that enhances the user experience. React allows for the creation of reusable UI components, making it easier to maintain and update the project's user interface.
- **MongoDB Database** - MongoDB is a popular NoSQL database that can be used to store and manage data in a flexible and scalable manner. Your project may use MongoDB to store user data, chat logs, or other relevant information.
- **Node.js Backend** - Node.js is a popular backend development platform that allows for the creation of scalable and high-performance web applications. Your project may use Node.js to handle user authentication, process API requests, or interact with the MongoDB database.
- **Third-Party API Integration** – OpenAI api is used to provide the ai chatbot experience and handle the query of the user.

Project Description

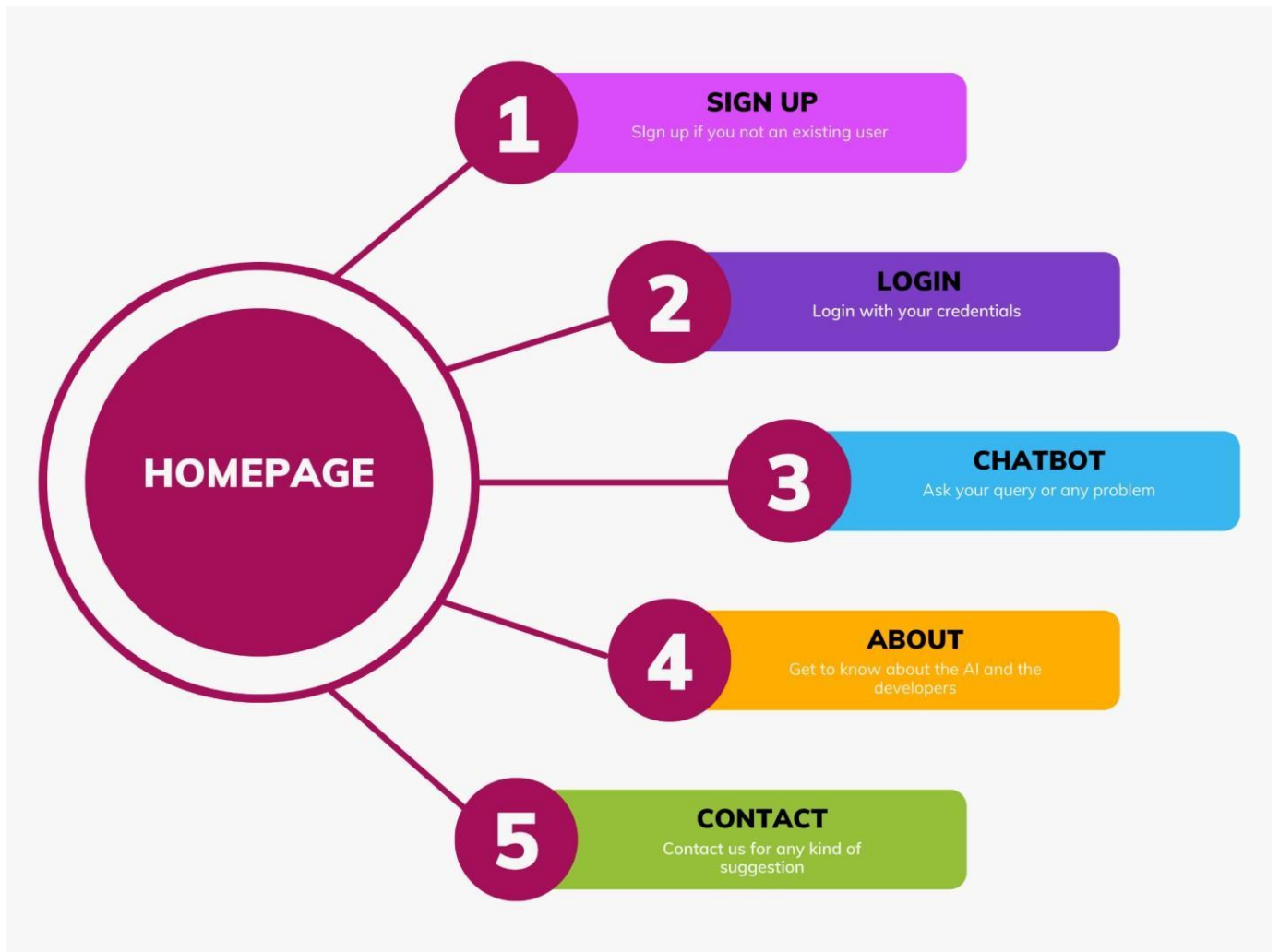
The InsightBot project is a cutting-edge AI chatbot that offers users quick and accurate assistance in retrieving information. The project utilizes the OpenAI API, a leading artificial intelligence technology, to enable the chatbot to understand user input and provide relevant responses. This technology is a significant step forward in improving the speed and accuracy of information retrieval, making the chatbot a highly effective and efficient solution.

One of the project's innovative features is the suggestion feature, which predicts the user's intended question as they type. This helps users save time and reduces errors in information retrieval, resulting in an improved user experience and a more efficient chatbot.

The InsightBot project offers numerous benefits for businesses and organizations looking to provide efficient and cost-effective customer support. The chatbot can handle a large volume of queries simultaneously, making it a scalable solution for businesses that need to provide assistance to a large number of users. Additionally, the chatbot is available 24/7, making it an ideal solution for businesses that operate around the clock.

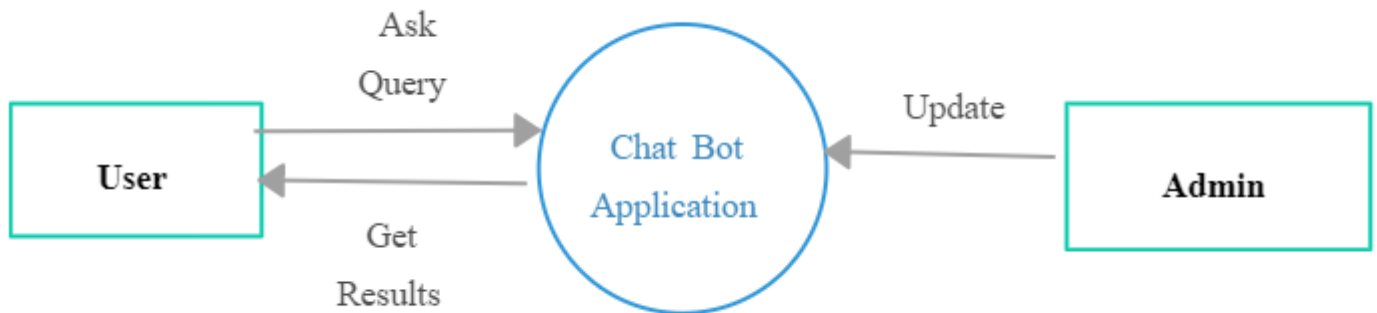
Overall, the InsightBot project is a powerful tool that showcases the capabilities of artificial intelligence technology and its potential to transform the way users obtain information. By leveraging the OpenAI API and including the suggestion feature, the project aims to improve user satisfaction, streamline the process of obtaining accurate information, reduce the need for human resources, and demonstrate the true potential of AI technology.

Usecase Diagram

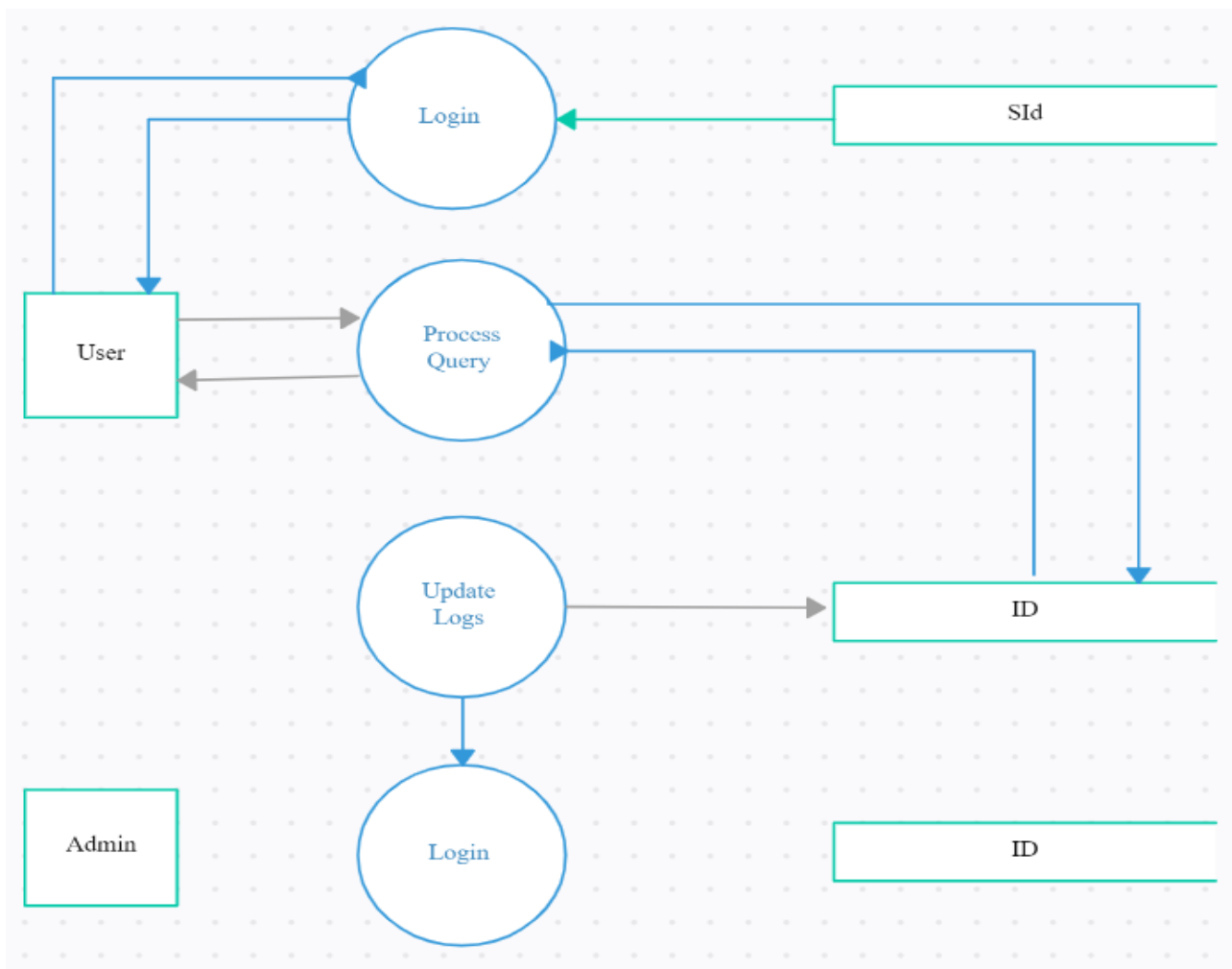


Data Flow Diagram

Level 0



Level 1



References

Websites: <https://www.w3schools.com/>
<https://www.geeksforgeeks.org/>

GitHub Repository Link

<https://github.com/r-a-j-s-i-n-h-a/InsightBot>