Internship Project Report: FAQ Chatbot

Abstract

This project focuses on the development of an FAQ Chatbot using Node.js, Express, and Vanilla JavaScript. The chatbot is designed to answer predefined frequently asked questions and provides a simple conversational interface. It demonstrates the integration of backend and frontend technologies to build an interactive application.

Introduction

In today's digital world, chatbots have become an essential part of websites and applications. They provide instant responses and improve user experience. This project, developed as part of my internship, aims to create a simple chatbot that can answer basic FAQ questions. The project highlights skills in JavaScript, Node.js, and Express while demonstrating full-stack development concepts.

Tools Used

- Node.js: JavaScript runtime environment for backend development.
- Express.js: Framework for building the server and APIs.
- HTML, CSS, JavaScript: For creating the frontend user interface.
- npm: For managing project dependencies.

Steps Involved in Building the Project

1. Created a Node.js server using Express and added a `/faq` API endpoint.
2. Defined a set of frequently asked questions and answers in a separate file (FAQ.js).
3. Built the client-side interface using HTML and CSS to design the chatbot UI.
4. Implemented JavaScript functions to capture user input and fetch responses from the backend.
5. Integrated the backend API with the frontend, enabling real-time responses.
6. Tested the chatbot by asking different questions and validating answers.

Conclusion

The FAQ Chatbot project successfully demonstrates the implementation of a basic question-answering system. It integrates backend and frontend components effectively, providing a simple yet functional chatbot. This project enhanced my understanding of full-stack development and strengthened my skills in Node.js and JavaScript.