BCA FINAL YEAR PROJECT

College Helpdesk Chatbot

• Project Title: College Helpdesk Chatbot

Presented by: [Your Name]

Roll No: [Your Roll Number]

College Name: [Your College]

Guide: [Guide's Name]

Introduction

- A chatbot is an Al-based software that can simulate a conversation with users.
- The **College Helpdesk Chatbot** helps students get quick answers to common questions about the college.
- Saves time for admin staff and enhances user experience.

Problem Statement

- Students often have similar questions about:
 - Admissions
 - Courses
 - Facilities
 - Events

Objective

- To build a chatbot that:
 - Understands natural language input
 - Provides instant and accurate responses
 - Is accessible via a simple web interface

Scope of the Project

- Students can:
 - Ask questions anytime
 - Get quick responses on college-related topics
- Admins can update the chatbot with new FAQs
- Can be expanded to mobile apps or voice interfaces

System Architecture

- User Interface (UI): Web page for input/output
- Backend (Flask App): Handles requests and integrates the chatbot
- Chatbot Logic (NLP & ML): Matches queries with appropriate answers
- Data (intents.json): Stores FAQs and responses

Technology Stack

- Frontend: HTML, CSS, JavaScript
- Backend: Python, Flask
- NLP: NLTK, SpaCy
- Data Storage: JSON file
- Tools: Visual Studio Code, Git, Browser

Modules Overview

- 1.User Interface Simple chat input/output
- 2.Preprocessing Tokenization, stopword removal
- 3.Intent Matching Using cosine similarity
- **4.Response Generation** Based on highest intent match
- 5.Flask App Connects UI to chatbot logic

emo Screenshots

- Show screenshots of:
 - Chat UI
 - Chatbot answering admission or course queries
 - Backend console/logs (optional)

Sample Interaction

User: What courses do you offer?

Bot: We offer undergraduate and postgraduate programs in IT,

Management, and more.

• **User**: How can I apply for admission?

Bot: You can apply online through our admission portal on the website.

Advantages

- 24/7 availability
- Reduces workload on helpdesk staff
- Easy to use and modify
- Can be integrated with college website or app

Limitations & Future Scope Limitations:

- Cannot answer complex or unknown queries
- Only answers predefined intents

Future Scope:

- Use AI/ML to learn from new queries
- Add voice recognition and multilingual support
- Store conversation logs for analytics

Conclusion

- The College Helpdesk Chatbot is an efficient tool to automate responses to common queries.
- Improves student engagement and reduces manual workload.
- Can be extended into a fully Al-powered virtual assistant.

Thank You

• Thank you for your attention! Contact: [Your email / LinkedIn if needed]