

# **Al-Powered FAQ Assistant for Instant Answers**

Project Guide: Prof. Ashish T. Bhole

Nikita S. Hemnani Kajal T. Patil Nikita S. Patil Sunidhi J. Chavan

0 - -- t - --- t - --- 1 0000

# INTRODUCTION



- A computer program that uses artificial intelligence (AI) techniques to simulate human-like conversations.
- Designed to interact with users, answer questions, provide information, and offer assistance in a conversational manner.
- Chatbots can be found websites, social media or instant messaging apps.

# **MOTIVATION**



- Human-like conversations
- 24/7 availability
- Task Automation
- Continuous Learning





## **PROBLEM STATEMENT**



- Integration of AI chatbots for customer support in an established environment
- Surge in user inquiries exceeding the Al's predefined capabilities
- Leading to confusion and inaccurate responses from the chatbots
- Increased instances of inconsistencies and extended waiting times for query resolution
- Adverse effects on the overall user experience and satisfaction.
- By deploying advanced training techniques, refining error -handling mechanisms, and expanding the chatbot's knowledge base, equilibrium is restored, and users enjoy improved engagement and efficient issue resolution

# **APPROACH**



- 1. Utilizes Natural Language Processing (NLP) techniques.
- 2. Incorporates Machine Learning (ML) algorithms for learning and adaptation.
- 3. Relies on vast datasets to train and fine-tune models.

- 1. Aims to create chatbots with human-like response generation .
- 2. Facilitates improved communication and interact ion with users.



# **TECHNOLOGY**





Natural Language Processing



Natural Language Tool Kit



Python



Tensorflow

#### **EXPECTED RESULT**



# Creating an Al-Based Chatbot yields the following results:

- 1. Improved customer engagement
- Reduced workload for human agents
- 3. Enhanced user experiences
- 4. Increased operational efficiency
- 5. Higher user satisfaction
- Personalized customer experiences



# CONCLUSION



- Al-based chatbots have revolutionized the way businesses interact with customers and manage their operations. With their versatile capabilities, they provide personalized and efficient customer experiences, available round the clock.
- As technology continues to evolve, Al chatbots represent a pivotal shift in human-technology interaction, shaping a more seamless and productive future for businesses and customers alike.

## **REFERENCES**



- Advantages and Constraints of a Hybrid Model K-12 E-Learning Assistant Chatbot- By: ERIC HSIAO-KUANG WU CHUN-HAN LIN YU-YEN OU CHEN-CHUNG LIU WEI-KAI WANG CHI-YUN CHAO
- JAICOB: A Data Science Chatbot By: DANIEL CARLANDER-REUTERFELT ÁLVARO CARRERA CARLOS A. IGLESIAS ÓSCAR ARAQUE JUAN FERNANDO SÁNCHEZ RADA SERGIO MUÑOZ
- The Use of Chatbots in Digital Business Transformation: A Systematic Literature Review By: NINA EVANS ANDREJ MIKLOSIK THAR MAHMOOD AHMED QURESHI



