PRAVAAH 2024

Basic Details of the Team and Problem Statement

Problem Statement Title: Design a chatbot system to assist individuals and communities during natural calamities such as hurricanes, earthquakes, floods, or wildfires.

Team Name: Calamity Solvers

Team Leader Name: Lisha Reddy Alluri

Institute Name: Stanley College Of Engineering & Technology for Women's.

Theme Name: LLM[Large Language Model]

Idea/Approach Details

Describe your idea here:

- ❏ The chatbot should provide timely and accurate information, emergency resources, and guidance to affected people.
- ❏ It should also offer support for preparedness measures before disasters strike and recovery assistance afterward.
- ❏ The chatbot must be accessible through various platforms, including web browsers, messaging apps, and voice assistants, to ensure widespread availability during critical situations.
- ❏ Additionally, the system should incorporate real-time data feeds, predictive analytics, and machine learning algorithms to enhance its responsiveness and effectiveness in crisis management.

Add process flow chart or any relevant image related to your idea :

- • **Start**
- • **User Interaction**
- • **User initiates interaction (via web, mobile app, messaging app, or voice assistant)**
- • **Greeting and Main Menu**
- • **Chatbot greets the user and presents the main menu options:**
- • **Get Current Alerts**
- • **Preparedness Tips**
- • **Emergency Assistance**
- • **Recovery Resources**
- • **Contact Emergency Services**
- • **Provide Feedback**
- • **User Selection**
- • **User selects an option from the main menu**

Describe your Technology stack here:

Frontend Development ,Backend Development ,Natural Language Processing (NLP) and Machine Learning (NLP Libraries and Frameworks) , Real-Time Data Integration(APIs and Data Sources) , Chatbot Frameworks , User Authentication and Security, Deployment and DevOps, Monitoring and Analytic Tools, Communication and Notification Services , Collaboration and Project Management.

Idea/Approach Details

Describe your idea solution here

Describe your Approach here

Creating a comprehensive chatbot system to assist individuals and communities during natural calamities requires careful planning and integration of various technologies. Here's a solution framework :
- Platform Accessibility
- Information Dissemination
- Resource Provision
- Machine Learning and Predictive Analytics
- Integration of Real-Time Data Feeds
- Multilingual Support and Accessibility Features
- Community Engagement and Collaboration
- Security and Privacy Measures
- Continuous Monitoring and Maintenance

- Planning and Requirement Analysis

- Design the Chatbot Architecture

- Select the Technology Stack

- Develop the Chatbot

- Testing and Validation

- Deployment

- User Education and Promotion

- Continuous Improvement

Team Member Details

Team Leader Name: Lisha Reddy Alluri Branch : Btech	Stream : Information Technology	Year (III): or 2025 passed out
Team Member 1 Name: N. Sreeja Reddy Branch : Btech	Stream : Information Technology	Year (III): or 2025 passed out
Team Member 2 Name: Ch. Srinidhi Branch : Btech	Stream : Information Technology	Year (III): or 2025 passed out
Team Member 3 Name: N. Vaishnavi Branch : Btech	Stream : Information Technology	Year (III): or 2025 passed out

THANK YOU