



SMART INDIA
HACKATHON
2022

Basic Details of the Team and Problem Statement

Ministry/Organization Name/Student Innovation:
Ministry of Power

PS Code: SIH1380

Problem Statement Title: Intelligent chatbot to answer queries pertaining to various Maintenance Processes within Substation.

Team Name: BINARY BRAINS

Team Leader Name: Megh Sharma

Institute Code (AISHE): U-0129

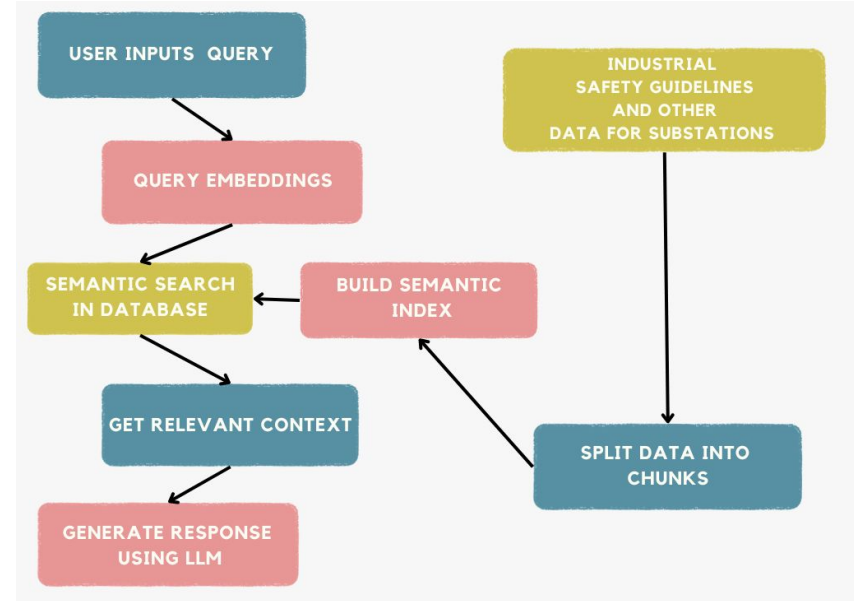
Institute Name: DHARMSINH DESAI UNIVERSITY

Theme Name: Smart Education

Idea/Approach Details

Describe your idea/Solution/Prototype here:

- Intelligent Substation Maintenance Chatbot
- Solves substation maintenance queries which follows industrial safety guidelines
- Semantic Processing and Contextual Understanding
- Troubleshoots Queries regarding all the equipments and tests and more within substations



Describe your Technology stack here:

- JS (Langchain)
- Milvus/FAISS (Vector Database) (Similarity Search)
- HTML, CSS, JS (front-end)
- SQL, PHP (back-end)

Idea/Approach Details

Describe your Use Cases here

- Aid in validating knowledge of maintenance engineer by generating test on general maintenance procedures by generating test based on most frequently asked questions
- Provide precise and contextually relevant responses to user queries
- Inclusion of industry standards and safety guidelines which will lead to best practices
- Increased productivity in maintenance activities within the substation

Describe your Dependencies / Show stopper here

- Model evaluation / Model selection
- Prompt engineering (Advanced)
- Understanding user intent
- Fine tuning model
- Model deployment

Team Member Details

Megh Sharma

Smit Shah

Pranjal Yadav

Devarshi Borisagar

Khushi Zalavadiya

Shaily Fadadu

B.Tech IT - 2nd year

B.Tech CE - 2nd year

B.Tech IT - 2nd year

B.Tech IT - 2nd year

B.Tech IT - 2nd year

B.Tech IT - 2nd year