

**A REPORT
ON**

**Chatbot to respond to text queries pertaining to various Acts,
Rules, and Regulations applicable to Mining industries"**

A PROJECT REPORT

Submitted by,

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**20211CSE0797
20211CSE0798
20211CSE0799
20211CSE0817**

Under the guidance of,

Ms. Nithya B.A

Assistant Professor

in partial fulfillment for the award of the degree of
BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING

At



PRESIDENCY UNIVERSITY

BENGALURU

MAY 2025

PRESIDENCY UNIVERSITY
PRESIDENCY SCHOOL OF COMPUTER SCIENCE AND
ENGINEERING
CERTIFICATE

This is to certify that the Project **Chatbot to respond to text queries pertaining to various Acts, Rules, and Regulations applicable to Mining industries"** being submitted by **"Guba Kushal Naidu, S. Varshith Santhosh , K.Mohan Reddy, G.Rithvik"** bearing roll number(s) **"20211CSE0797, 20211CSE0798, 20211CSE0799, 20211CSE0817"** in partial fulfillment of the requirement for the award of the degree of Bachelor of Technology in Computer Science and Engineering is a bonafide work carried out under my supervision.



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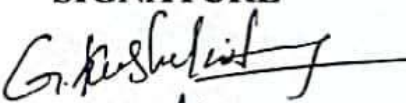
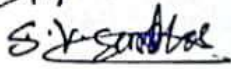
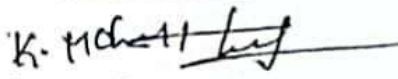



Dr. SAMEERUDDIN KHAN
Pro-Vice Chancellor - Engineering
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PRESIDENCY UNIVERSITY
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ENGINEERING
DECLARATION

We hereby declare that the work, which is being presented in the project report entitled " Chatbot to respond to text queries pertaining to various Acts, Rules, and Regulations applicable to Mining industries " in partial fulfillment for the award of Degree of Bachelor of Technology in Computer Science and Engineering, is a record of our own investigations carried under the guidance of Ms. Nithya B.A, Assistant Professor, School of Computer Science Engineering, Presidency University, Bengaluru.

We have not submitted the matter presented in this report anywhere for the award of any other Degree.

NAME	ROLL NUMBER	SIGNATURE
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ABSTRACT

India's Mining industries operate under a complex regulatory framework comprising various Acts, Rules, and DGMS Circulars, requiring stakeholders to navigate compliance requirements efficiently. This project aims to develop an **AI-powered chatbot** that automates responses related to **mining regulations, land laws, environmental policies, and compliance proceedings**. Leveraging **Artificial Intelligence (AI)** and **Natural Language Processing (NLP)**, the chatbot will provide **real-time assistance**, mimicking human conversations to resolve user queries intelligently.

The chatbot will integrate laws such as **The Coal Mines Act (1952), The Indian Explosives Act (1884), The Colliery Control Rules (2004), and Land Acquisition (LA) policies**, ensuring stakeholders receive **accurate legal interpretations without requiring manual consultation**. Hosted on a **Flask-based backend**, secured with **authentication mechanisms**, and powered by **OpenAI's GPT model**, the chatbot guarantees **traceability, audit logs, and multilingual support** for diverse users.

By **reducing bureaucracy, improving accessibility, and offering 24/7 automated interactions**, the chatbot serves as a **scalable, intelligent, and secure solution** tailored for the mining sector. Future expansion will allow adaptability across **health, agriculture, and public service domains**, promoting **efficient governance and digital transformation**.

ACKNOWLEDGEMENT

First of all, we indebted to the **GOD ALMIGHTY** for giving me an opportunity to excel in our efforts to complete this project on time.

We express our sincere thanks to our respected dean **Dr. Md. Sameeruddin Khan**, Pro-VC - Engineering and Dean, Presidency School of Computer Science and Engineering & Presidency School of Information Science, Presidency University for getting us permission to undergo the project.

We express our heartfelt gratitude to our beloved Associate Dean **Dr. Mydhili Nair**, Presidency School of Computer Science and Engineering, Presidency University, and **Dr. Asif Mohammed H.B**, Head of the Department, Presidency School of Computer Science and Engineering, Presidency University, for rendering timely help in completing this project successfully.

We are greatly indebted to our guide **Ms. Nithya B.A**, Assistant Professor, Presidency School of Computer Science and Engineering, Presidency University for her inspirational guidance, and valuable suggestions and for providing us a chance to express our technical capabilities in every respect for the completion of the internship work.

We would like to convey our gratitude and heartfelt thanks to the PIP4001 Internship/University Project Coordinator **Mr. Md Ziaur Rahman** and **Dr. Sampath A K**, department Project Coordinators and Git hub coordinator **Mr. Muthuraj**.

We thank our family and friends for the strong support and inspiration they have provided us in bringing out this project.

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