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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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.

16/5/2025

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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

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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.

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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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