

# **DSAI HACKATHON**

**Team Name:** Alpha architects

**Team Members:** Madhumithra Shree E S

Preethikabala K

Monisha J

P Sandiip Anish

**Level:** Beginner

## **BhilaiGPT**

### **INTRODUCTION**

In today's digital era, access to accurate and reliable information is crucial, especially for students seeking details about educational institutions like IIT Bhilai. However, finding specific information from books and documents can be time-consuming and challenging. To address this issue, we propose the development of BhilaiGPT, a cutting-edge solution designed to assist students in retrieving relevant information from books related to IIT Bhilai. BhilaiGPT aims to be the ultimate savior for hundreds of students who search for information about IIT Bhilai every year, providing them with quick and accurate answers to their queries.

### **APPROACH**

Our approach to building BhilaiGPT involves leveraging advanced language models and natural language processing techniques to extract information from books related to IIT Bhilai. We will utilize state-of-the-art algorithms and methodologies to analyze the content of these books and generate concise and informative responses to user queries. Additionally, we will implement a user-friendly interface that allows students to input their queries in either text or audio

format, ensuring accessibility and convenience. To ensure accuracy and reliability, BhilaiGPT will undergo rigorous testing and validation processes, incorporating feedback mechanisms to continuously improve its performance.

## OVERVIEW OF THE HACK

The primary objective of our hack is to develop BhilaiGPT, a sophisticated system capable of extracting information from books related to IIT Bhilai and providing accurate responses to user queries. By utilizing advanced language models and natural language processing techniques, BhilaiGPT aims to streamline the process of accessing information, saving students valuable time and effort. The hack will focus on implementing a user-friendly interface, optimizing the backend algorithms for efficient information extraction, and ensuring the reliability and accuracy of the responses generated by BhilaiGPT.

## TECH STACK

- **Python:** For programming language to build the backend logic and algorithms.
- **Hugging Face Transformers:** For leveraging pre-trained language models for natural language processing tasks.
- **Flask:** For building the web-based user interface and API endpoints.
- **MongoDB:** For storing and managing the data extracted from books and user interactions.
- **Docker:** For containerizing the application and ensuring easy deployment across different environments.
- **GitHub:** For version control and collaboration during the development process.

## **CONCLUSION**

With BhilaiGPT, we aim to revolutionize the way students access information about IIT Bhilai, providing them with a reliable and efficient solution for resolving their queries. By leveraging cutting-edge technologies and innovative approaches, BhilaiGPT will serve as a valuable resource for students, faculty, and enthusiasts interested in IIT Bhilai, ultimately enhancing the overall educational experience. Join us on this exciting journey as we build BhilaiGPT and empower students with the knowledge they need to succeed.