

Dept. of Computer Science and Engineering (Data Science)

Adichunchanagiri Institute of Technology, Chikkamagaluru

Mini Project Synopsis

TITLE:AI-Powered Study Assistant

Problem Statement: Students face challenges in managing study materials, summarizing lengthy notes, creating effective revision plans, and clarifying doubts instantly. Traditional methods consume more time and lack personalization. The proposed project aims to build an AI-powered study assistant that provides intelligent summarization, quiz generation, instant Q&A, and study planning.

Description: This project aims to develop an AI-powered study assistant that leverages Natural Language Processing (NLP) and Machine Learning to help students with effective learning. The system will:

- Summarize uploaded documents or notes into concise key points.
- Generate quizzes and practice tests for self-assessment.
- Provide instant answers to academic queries using AI-based Q&A; Create personalized study plans based on syllabus and available time.

Expected Outcomes:

- A functional AI-based system capable of summarizing notes and generating quizzes.
- Quick academic Q&A; support powered by NLP models.
- Personalized study planner to improve time management.
- Increased productivity and efficient exam preparation.

Technologies And Tools:

- Languages: Python, JavaScript, HTML, CSS
- Libraries/Frameworks: Django/Flask (Backend), React (Frontend optional), Hugging Face Transformers / OpenAI API, Pandas, NumPy
- Database: SQLite / PostgreSQL
- Tools: GitHub, VS Code, Postman

- Optional: Cloud storage or reminder integration

Team Members:

- Sandesh S (4AI23CD046)
- Hrushank A J (4AI23CD020)
- Shreyas G (4AI23CD050)
- Deepak B J (\$AI23CD014)

Signature of the Guide with date

Signature of the Coordinator with date