Dept. of Computer Science and Engineering (Data Science)

Adichunchanagiri Institute of Technology, Chikkamagaluru

Mini Project Synopsis

TITLE: GUARD TALK (secure platform for communication)

Problem Statement:

In today's digital age, effective communication is essential for both personal and professional interactions. Many existing chat applications offer basic functionalities but often lack features that enhance user experience, security, and integration with other tools. Users frequently encounter issues such as lack of privacy. So this project is to design and develop a chat application (GUARD TALK) which provides a platform to conversate through texts and it ensures some important information in the spreadsheet which helps to enhance information efficiently.

Description:

This chat application is designed for secure one-on-one conversations, prioritizing privacy and simplicity. Messages are exchanged in real time, with a focus on minimal distractions. Unique to our platform, all text is erased once users navigate away from the chat page, ensuring that no conversation history is stored. This feature provides an added layer of confidentiality, making it perfect for sensitive discussions. Experience streamlined communication with peace of mind, knowing your chats remain private and ephemeral which also evokes some important messages, that users can marked specific texts, which will be securely stored in a spreadsheet for easy reference by overviewing it in the graphical form.

Expected Outcomes:

One-to-One Chat functionality: Users can send and receive messages in real-time.

Message Erase: When users navigate away from the chat room, all text messages are automatically erased, focusing on privacy and confidentiality.

Marked messages: Users can mark important messages, this feature allow messages / numerical data exported to a spreadsheet (Excel), allowing users to keep track of important conversations, notes, or action items.

Technologies and Tools:

Backend Technologies: Python - A versatile language with libraries/frameworks like <u>Flask</u> for creating dynamic and interactive chat features, <u>Openpyxl</u> to read from and write to excel.

Java - A robust language used to store user information, messages, and other application data.

Frontend Technologies: HTML, CSS and JavaScript are the core technologies for web development.

Optional: MongoDB - A NoSQL database that is well-suited for handling unstructured data.

Team Members:

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