

Secure Chat Application – An Encrypted Messaging Web App Using AES/RSA Encryption

The **Secure Chat Application** is a **web-based messaging system** that ensures **end-to-end encryption (E2EE)** for secure communication. Unlike traditional messaging apps, this system uses **AES (Advanced Encryption Standard)** and **RSA (Rivest-Shamir-Adleman) encryption** to prevent unauthorized access.

Key features include **user authentication, encrypted file sharing, self-destructing messages, and multi-device synchronization**. The **RSA algorithm** is used for key exchange, while **AES encryption** secures message content.

The backend is built with **Node.js and WebSockets**, ensuring real-time chat functionality, while the frontend is developed using **React.js/Vue.js**.

By integrating **secure encryption protocols and decentralized storage**, this chat app provides **privacy-focused messaging for individuals and businesses**.