COLLEGE CODE : 9504

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ROLL NO : 01

DATE : 06.10.2025

Completed the Phase-05

PROJECT NAME : IBM-FE- CHAT APPLICATION UI

SUBMITTED BY,

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Final Demo Walkthrough

Conducted a complete walkthrough of the Chat Application MVP, showcasing all implemented modules:

1. Login / Authentication Flow using mock credentials.
2. Conversations List View displaying all active and group chats with recent messages.
3. 1-on-1 and Group Chat Interfaces with real-time message updates via Socket.IO.
4. Message Input & Optimistic Updates – users see messages appear instantly before confirmation.
5. Group Creation Modal – create, name, and manage group participants.
6. Responsive Layout tested on both desktop and mobile resolutions.

The demonstration highlighted the project's adherence to MVP goals, showcasing core usability, UI responsiveness, and real-time message handling.

Project Report

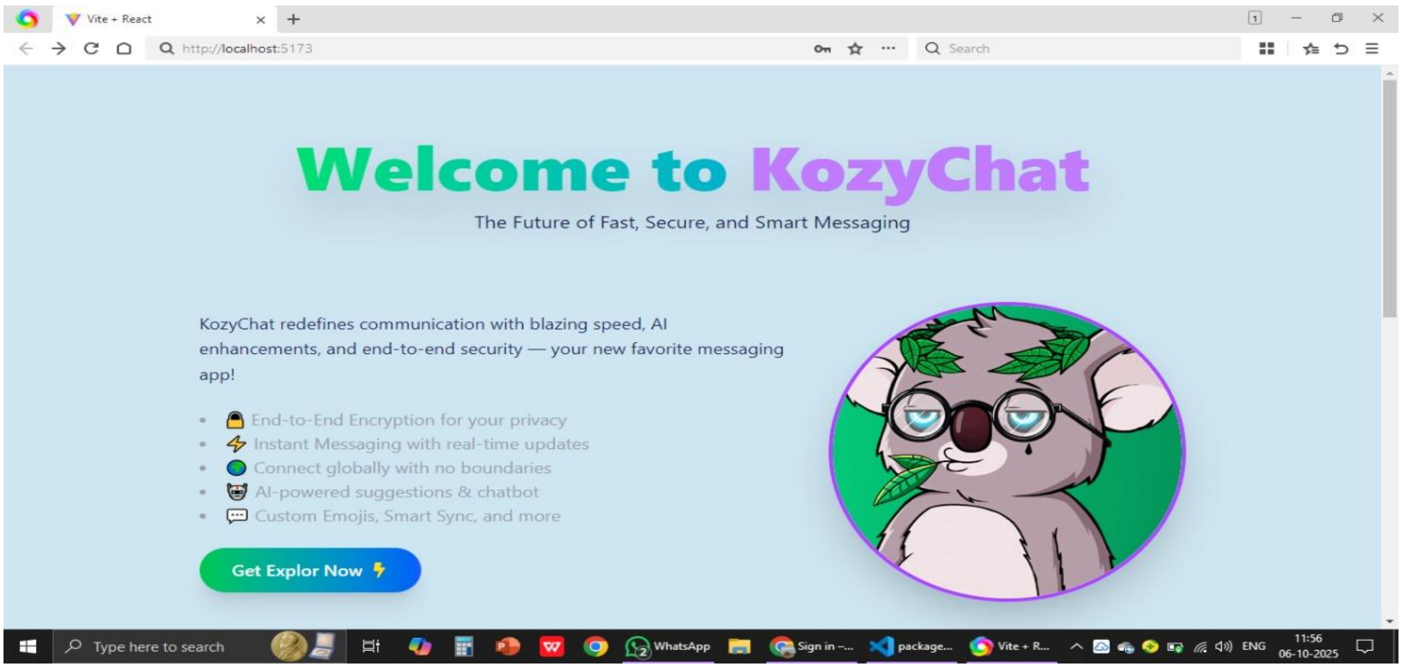
The final report consolidates all project phases (01 – 05), including:

- Problem Definition and User Stories.
- Solution Design & Architecture (UI Structure, Tech Stack).
- Implementation Details of core features and data flow.
- Testing Outcomes and Performance Observations.
- Deployment & Version Control Practices.

The report serves as a comprehensive documentation of both the development process and the project's lifecycle from design to deployment.

Screenshots / API Documentation

Screenshots Included:

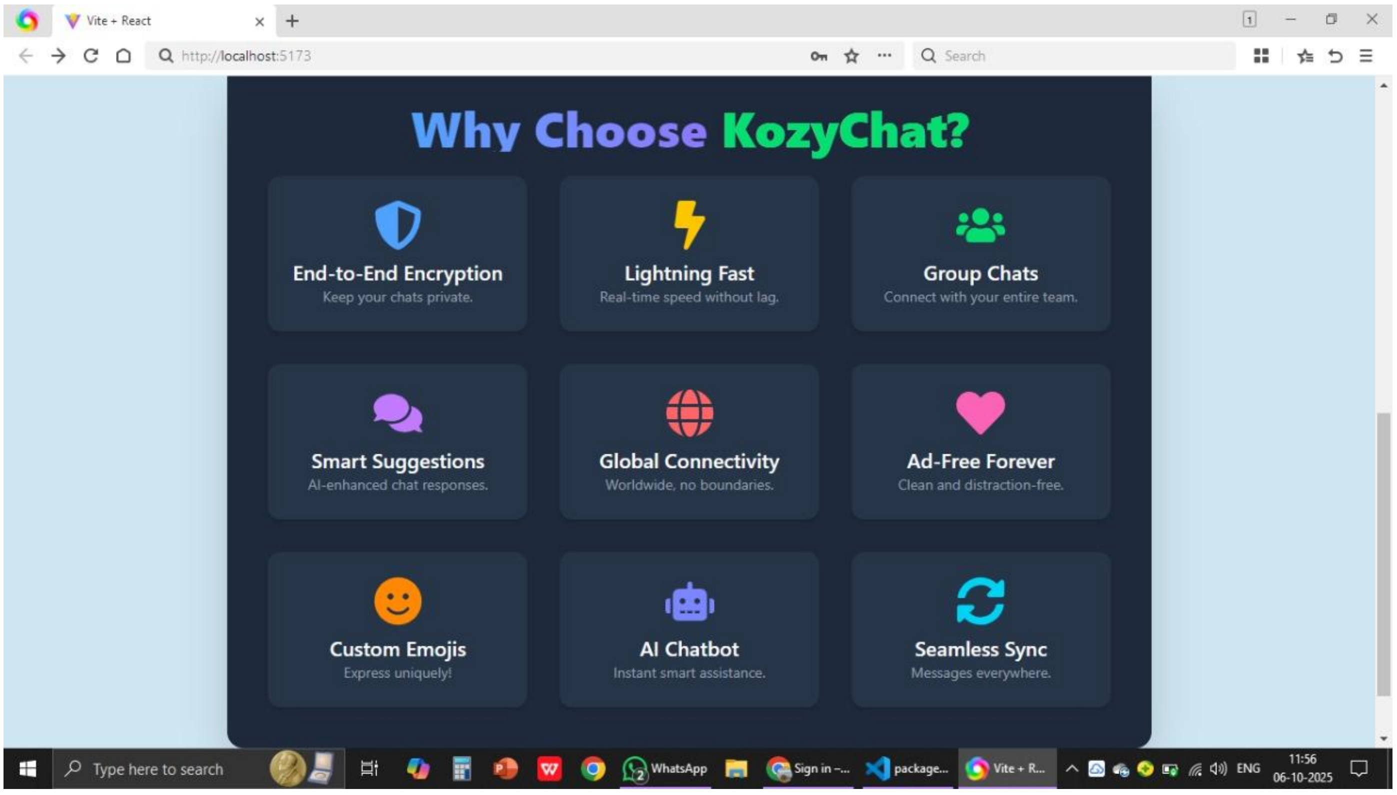


Welcome to KozyChat

The Future of Fast, Secure, and Smart Messaging

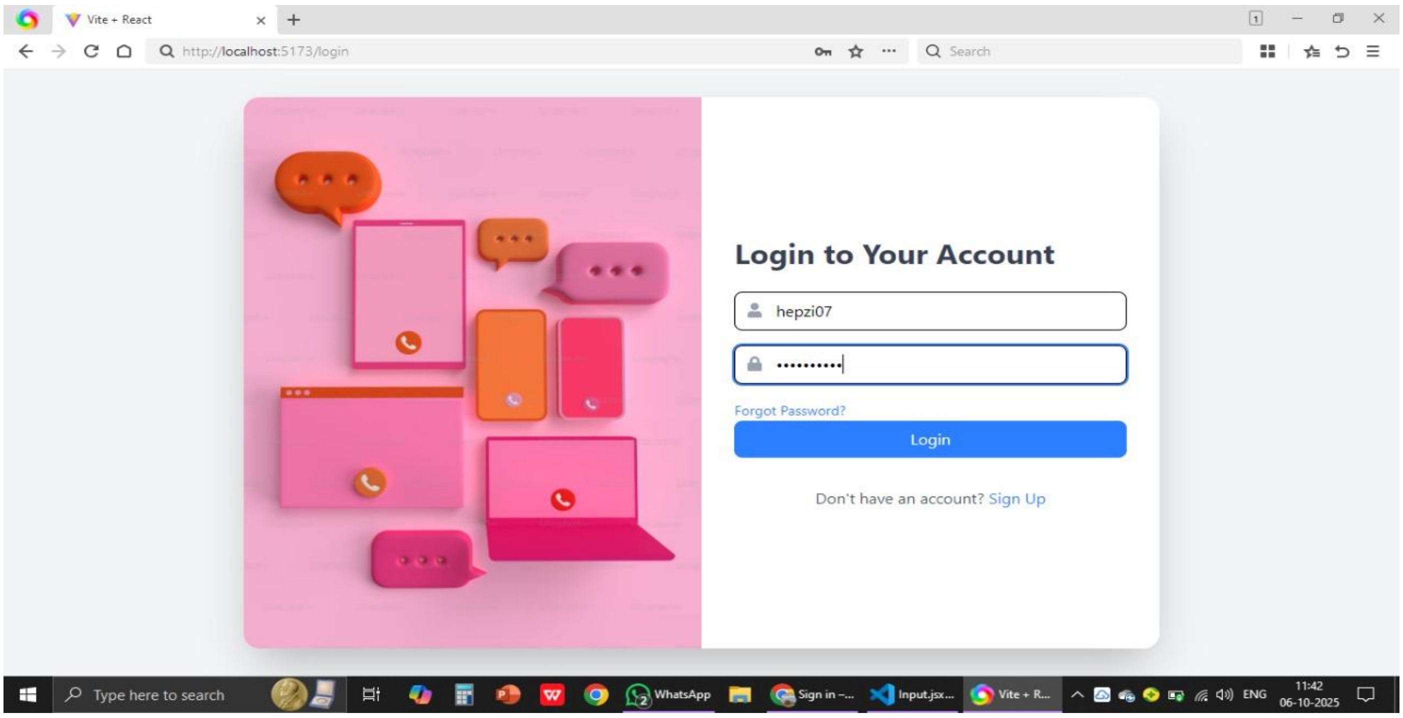
KozyChat redefines communication with blazing speed, AI enhancements, and end-to-end security — your new favorite messaging app!

- 🔒 End-to-End Encryption for your privacy
- ⚡ Instant Messaging with real-time updates
- 🌍 Connect globally with no boundaries
- 🤖 AI-powered suggestions & chatbot
- 💬 Custom Emojis, Smart Sync, and more



Why Choose KozyChat?

End-to-End Encryption Keep your chats private.	Lightning Fast Real-time speed without lag.	Group Chats Connect with your entire team.
Smart Suggestions AI-enhanced chat responses.	Global Connectivity Worldwide, no boundaries.	Ad-Free Forever Clean and distraction-free.
Custom Emojis Express uniquely!	AI Chatbot Instant smart assistance.	Seamless Sync Messages everywhere.


Vite + React

http://localhost:5173/login

Login to Your Account

hepzi07

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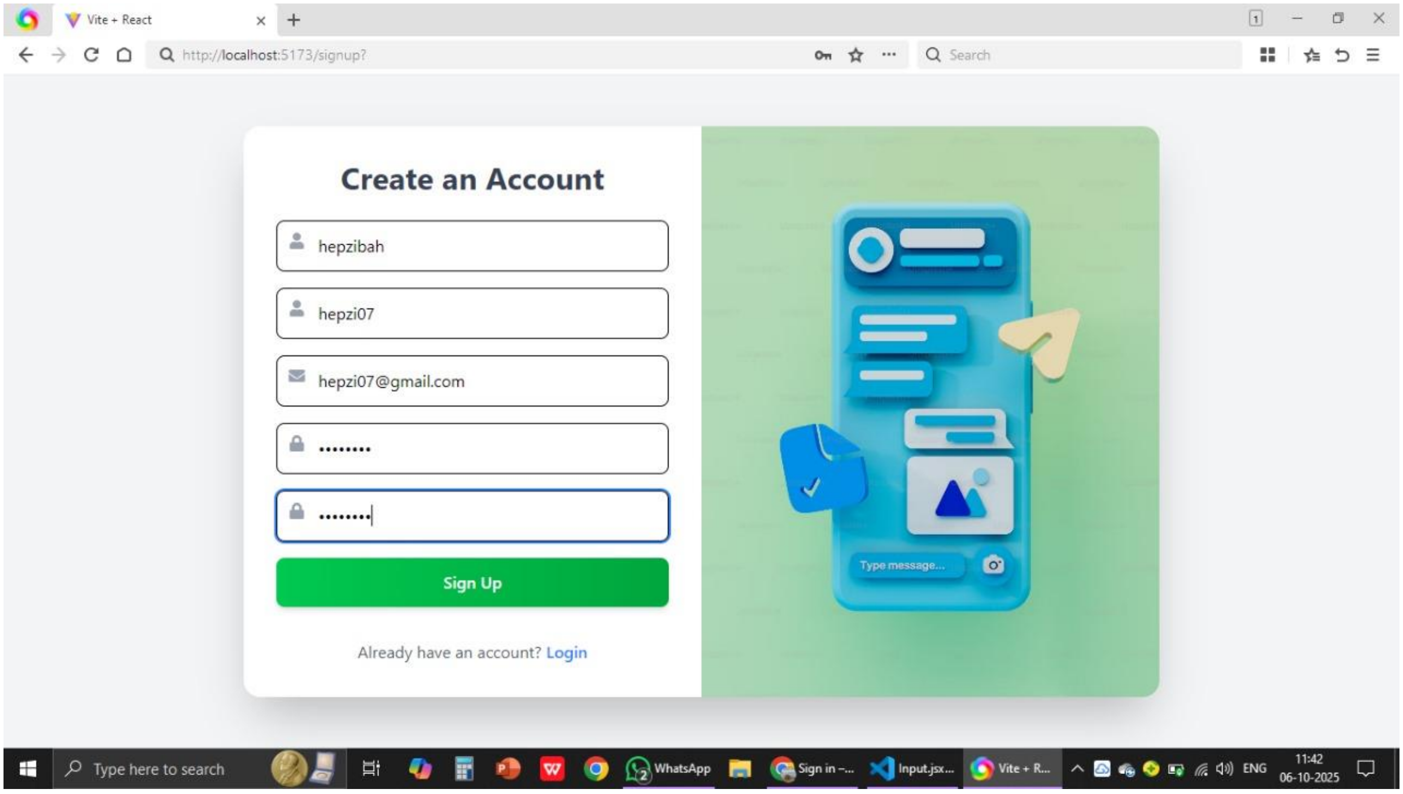
Forgot Password?

Login

Don't have an account? Sign Up


Vite + React

http://localhost:5173/signup?

Create an Account

hepzibah

hepzi07

hepzi07@gmail.com

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Sign Up

Already have an account? Login

API Documentation:

Documented all mock REST API endpoints with their purpose, request methods, and sample responses.

- **POST /auth/login –** Authenticate user (mock).
- **GET /conversations –** Fetch conversation list.
- **GET /conversations/:id/messages –** Retrieve message history.
- **POST /conversations/:id/messages –** Send new message.
- **POST /conversations/group –** Create group chat.

Challenges & Solutions:

challenge	**description**	**Soluton Implemented**
Real-time updates	Maintaining live message flow without a backend	Integrated Socket.IO Client with mock events to simulate live messaging.
State management	Synchronizing multiple conversation states	Used React Context API + Zustand for efficient global state control.
UI Responsiveness	Consistency across screen sizes	Implemented Tailwind CSS breakpoints and tested on multiple devices.
Data mocking	Developing without a backend API	Used Mock Service Worker (MSW) for simulated API responses.
Code consistency	Collaboration & version tracking	Maintained GitHub repository with Conventional Commits and branching workflow.

GitHub README & Setup Guide

The GitHub repository includes a detailed README.md containing:

- Project Overview and Features
- Tech Stack Used
- Folder Structure (Atoms, Molecules, Organisms pattern)

Setup Instructions:

```
git clone <repo-url>
cd chat-application-ui
npm install
npm run dev
```

Environment Variables:

VITE_API_URL = Mock API Endpoint

VITE_SOCKET_URL = Socket Server URL

Deployment Instructions for Netlify / Vercel, including build commands and preview links.

Final Submission (Repo + Deployed Link)

GitHub Repository Link: [https://github.com/ Hepzi-07/chat-application-UI.git **]**

Deployed Link (Netlify / Vercel): [http://localhost:5173/ **]**