# 📡 Real-Time Chat App – Internship Project Report

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## 🌐 GitHub Repository

🔗 [View Project on GitHub – Real-Time Chat App Folder](#)

## 🎯 Objective

To design and develop a **modern, secure, and scalable real-time chat application** that supports interactive messaging, authentication, and a clean user interface. This app is built using a full-stack JavaScript architecture and is ideal for showcasing practical skills in real-time development, authentication, and responsive design.

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## 🚀 Key Features

- ☑ User Registration & JWT Authentication
- ☑ Real-Time Messaging using Socket.IO
- ☑ Live Online Users List
- ☑ MongoDB-Powered Chat History
- ☑ Secure REST API with Express.js
- ☑ Fully Responsive UI (Tailwind CSS & Animate.css)
- ☑ Designed for Scalability and Production Readiness

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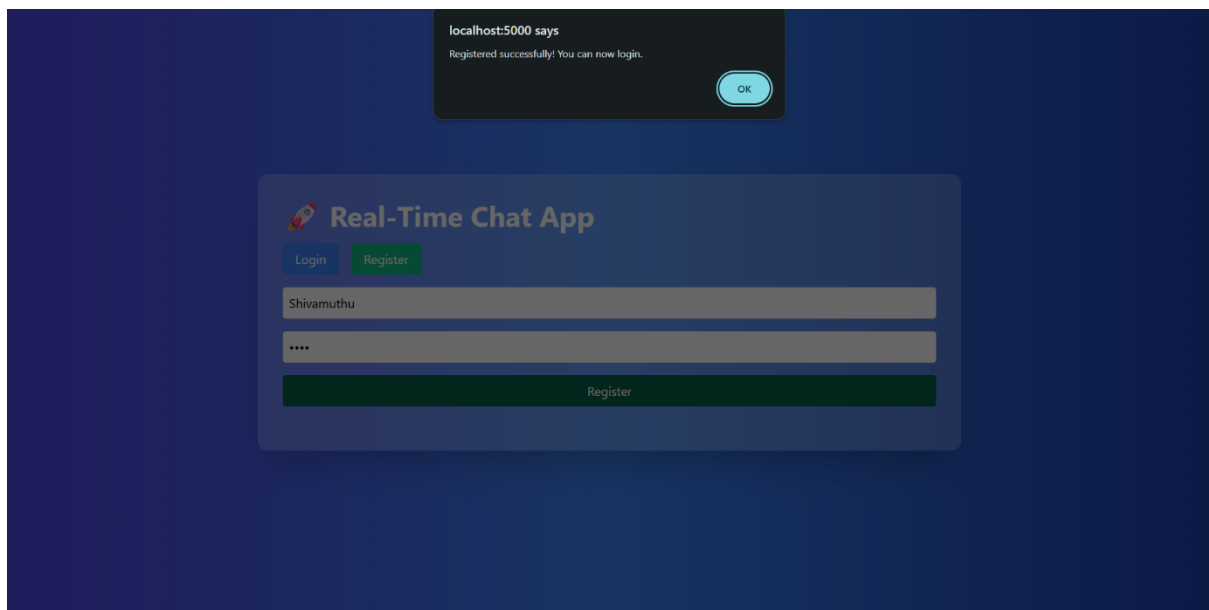## 🛠 Tech Stack

| Layer | Technologies Used |
| --- | --- |
| Frontend | HTML, Tailwind CSS, Animate.css |
| Backend | Node.js, Express.js |
| Real-Time | Socket.IO |
| Database | MongoDB (with Mongoose) |
| Authentication | JSON Web Tokens (JWT) |

| Layer | Technologies Used |
|---|---|
| Version Control | Git & GitHub |

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## 🖼️ Screenshots

### 📌 User Registration Screen:



### 📌 Chat Interface:

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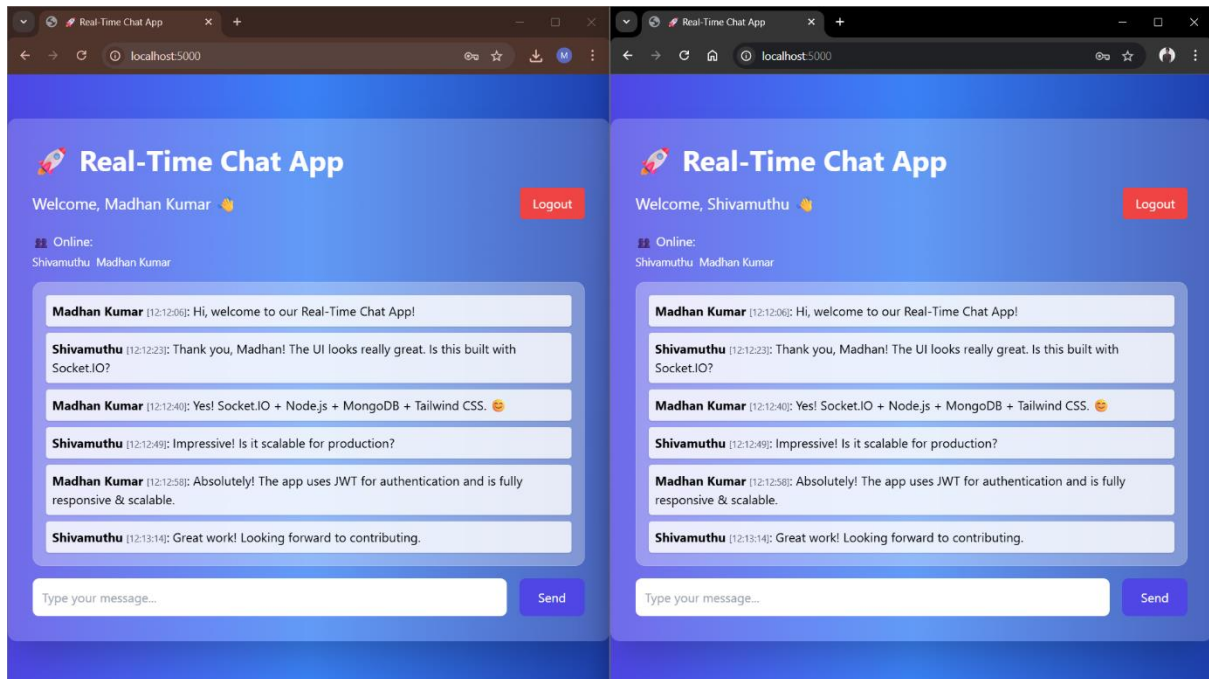
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📓 **Learning Outcomes**

- Built real-time communication using **Socket.IO**

- Implemented secure **JWT authentication**

- Designed clean and responsive UI using **Tailwind CSS**

- Gained experience with **MongoDB CRUD operations and API design**

- Learned practical full-stack deployment and debugging

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