

 Interactive Messaging Playground hero image

# Interactive Messaging Playground

A real-time messaging application with interactive features and modern UI

Full-Stack Developer

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## Project Overview

### Technologies Used

React

Node.js

Socket.io

MongoDB

TypeScript

messaging

real-time

react

nodejs

## The Challenge

Building a scalable real-time messaging system that handles thousands of concurrent users while maintaining low latency and providing rich interactive features.

## The Solution

Implemented WebSocket connections with Socket.io, optimized database queries, and used React for efficient UI updates. Added features like typing indicators, message reactions, and file sharing.

## Key Metrics

**10,000+**

**Concurrent Users**

Peak concurrent users supported

**< 100ms**

**Message Latency**

Average message delivery time

**99.9%**

**Uptime**

Service availability

## Screenshots



Main chat interface showing message threads

The main chat interface with message threads and user list



Mobile responsive design

Responsive design working on mobile devices

## Links

Generated case study for Interactive Messaging Playground