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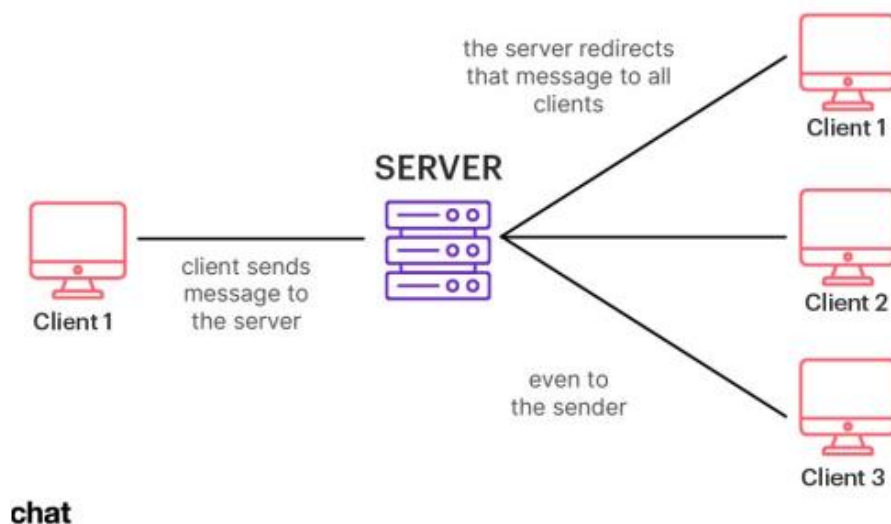
Roll Number : 21112034

System Design Document: Chat Application-

Introduction

The Chat Web App is a real-time communication platform designed to facilitate seamless and interactive conversations online. Whether you need to connect with friends, family, or colleagues, our chat app provides a user-friendly and feature-rich solution for all your messaging needs.

System Architecture



Front End: Powered by the React framework, our application offers a sleek and responsive user interface that works seamlessly across devices.

Real-Time Communication: We leverage the power of Stream-chat Api to provide instant, real-time messaging capabilities.

Robust Backend: Built with Node.js, our backend infrastructure ensures smooth data processing, user management, and connectivity.

Robust Data Storage: Your chat history and user data are securely stored and managed by Stream-chat Api

Components and Modules

BackEnd:

Controllers folder- This folder contains auth.js file that has all the middleware functions related to authentication

Routes folder- This folder contains auth.js file that has all the middleware functions related to sign in or sign up

.env file- it contains all the environment variables

Index.js file- this file contains code for the server

FrontEnd:

Public folder: The contents of the "public" folder are typically served as-is to the client without any modification, making them ideal for assets like HTML files, images, fonts, and other resources that don't need to be bundled

Src folder:

1. **Assets folder:** The "assets" folder inside the "src" folder of a React application is typically used to store various types of static assets, such as images, fonts, and other resource files, that your application may need. The primary purpose of this folder is to keep these assets organized and accessible within your application's source code.
2. **Components folder:** this folder contains react components related to authentication and components related to chat application and stream-chat along with stream chats pre-defined components
3. **Circle.jsx file:** this file contains code for chat bot

SetUp Device-

NodeJs:

1. **Clone the Repository:** Clone the repository that contains your Node.js app. Git clone https://github.com/aryanmandya/chat_project.git

2. **Navigate to the Project Directory:** Change your current working directory to the project's root folder:

```
cd<server name given>
```

3. **Install Dependencies:** Run the following command to install the required Node.js dependencies listed in your package.json file:

```
npm install
```

4. **Start the Node.js Server:**
Nodemon index.js

