Building the chat component

To build a basic chat component in a Node.js application using Socket.io for real-time communication, follow these summarized steps:

- **Setup the Project:**
- Create a project directory and initialize a Node.js project with `npm init`.
- **Install Dependencies:**
- Install Express.js and Socket.io as dependencies with `npm install express socket.io`.
- **Create the Server:**
- Set up a Node.js server with Express and Socket.io to handle real-time chat.
- Use `io.on('connection')` to handle new client connections, messages, and disconnections.
- **Create the Client HTML:**
- Create an HTML file (`public/index.html`) with an input field, send button, and message display area.
- Include the necessary JavaScript files.
- **Create the Client JavaScript:**
- Create a client-side JavaScript file (`public/client.js`) to manage chat functionality.
- Use Socket.io to emit and listen for messages between the server and clients.
- **Run the Application:**
- Start the Node.js server with `node server.js`.
- Access the chat component in a web browser at `http://localhost:3000` (or your specified port).