ChatServer.java

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import java.io.*;
import java.net.*;
import java.util.*;

public class ChatServer {
    private static Set<ClientHandler> clientHandlers = new HashSet<>();

    public static void main(String[] args) {
        int port = 12345;
        try (ServerSocket serverSocket = new ServerSocket(port)) {
            System.out.println("Chat server started on port " + port);

            while (true) {
                Socket clientSocket = serverSocket.accept();
                                    System.out.println("New  client  connected:  "  +
clientSocket.getInetAddress());
                ClientHandler clientHandler = new ClientHandler(clientSocket);
                clientHandlers.add(clientHandler);
                new Thread(clientHandler).start();
            }

        } catch (IOException e) {
            e.printStackTrace();
        }
    }

    static void broadcast(String message, ClientHandler excludeClient) {
        for (ClientHandler client : clientHandlers) {
            if (client != excludeClient) {
                client.sendMessage(message);
            }
        }
    }

    static class ClientHandler implements Runnable {
        private Socket socket;
        private PrintWriter out;
        private BufferedReader in;

        public ClientHandler(Socket socket) {
            this.socket = socket;
        }

        public void run() {
            try {
                out = new PrintWriter(socket.getOutputStream(), true);
                in = new BufferedReader(new InputStreamReader(socket.getInputStream()));

                String message;
                while ((message = in.readLine()) != null) {
                    System.out.println("Received: " + message);
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                    ChatServer.broadcast(message, this);
                }

            } catch (IOException e) {
                e.printStackTrace();
            } finally {
                try {
                    socket.close();
                    clientHandlers.remove(this);
                } catch (IOException e) {
                    e.printStackTrace();
                }
            }
        }

        void sendMessage(String message) {
            out.println(message);
        }
    }
}
```

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ChatClient.java
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import java.io.*;
import java.net.*;

public class ChatClient {
    public static void main(String[] args) {
        String hostname = "localhost";
        int port = 12345;

        try (Socket socket = new Socket(hostname, port)) {
            System.out.println("Connected to chat server");

            new Thread(new ReadThread(socket)).start();
            new Thread(new WriteThread(socket)).start();

        } catch (IOException ex) {
            ex.printStackTrace();
        }
    }

    static class ReadThread implements Runnable {
        private BufferedReader in;

        public ReadThread(Socket socket) {
            try {
                in = new BufferedReader(new InputStreamReader(socket.getInputStream()));
            } catch (IOException e) {
                e.printStackTrace();
            }
        }

        public void run() {
            String response;
            try {
                while ((response = in.readLine()) != null) {
                    System.out.println("\n" + response);
                }
            } catch (IOException ex) {
                ex.printStackTrace();
            }
        }
    }

    static class WriteThread implements Runnable {
        private PrintWriter out;
        private BufferedReader consoleInput;

        public WriteThread(Socket socket) {
            try {
                out = new PrintWriter(socket.getOutputStream(), true);
                consoleInput = new BufferedReader(new InputStreamReader(System.in));
            } catch (IOException e) {
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                e.printStackTrace();
            }
        }

        public void run() {
            String text;
            try {
                while ((text = consoleInput.readLine()) != null) {
                    out.println(text);
                }
            } catch (IOException ex) {
                ex.printStackTrace();
            }
        }
    }
}
```