**Assignment: Build a Real-Time Chat Application with Web Sockets**

Goal: Build a real-time chat application using Node.js and web sockets that allow multiple users to communicate with each other in real-time.

You have 3 hours to complete this assignment.

Requirements:

- Use Node.js to build the server side of the chat application.
- Use web sockets to enable real-time communication between the server and the client.
- Use a popular Node.js web socket library like Socket.io or ws.
- Implement basic chat functionality, allowing users to join a chat room and send and receive real-time messages.
- Use a simple, user-friendly design for the chat interface.

Bonus Points:

- Implement basic user authentication, allowing users to sign in and choose a username.
- Implement additional features like file sharing, emojis, and user status updates.

Deliverables:

- A GIT repository containing the source code for the chat application.
- A README file with instructions for running the chat application locally.

Note: You may use any additional libraries or tools as long as they are free and open-source. You may also use any front-end libraries or frameworks you are comfortable with.

Good luck and happy coding!