

# **Today's Task – Implement a Real-Time Chat Application using WebSockets**

Dear Team,

Today's task is to build a real-time chat application using WebSockets. The goal is to understand how persistent bi-directional connections work between the client and server for instant message delivery.

## **Task Details:**

- Implement a simple backend server (in Python) using WebSockets.
- The server should handle multiple users (using unique usernames).
- Messages from one user should broadcast to all connected users.
- Display connection and disconnection messages in the chat log.
- Add simple client-side UI (HTML + JS) or test using WebSocket tools like wscat.

## **Bonus:**

- Add private (one-to-one) chat support.
- Store chat history in a file or simple database.

**Note:** Kindly learn the theoretical concepts and communication flow of WebSockets before implementation.

Best regards,

**Prakash Raj S**

Full Stack Developer