Web Group Chat Application using Spring Boot

**Abstract:**

To Create a Web Group Chat application using WebSocket, STOMP and Spring Boot. It’s a Group chat application where we can chat with other users in real-time. For this, we will be using WebSocket Protocol and STOMP Protocol in a Spring Boot CLI Framework. A web application is typically built on the request and response parameter paradigm, which means that whenever a request is sent to the server, the data is returned as a response parameter, but the server never transmits the data to the client on its own. The server always awaits the client's or browser's request before sending the data in JSON format. Between the server and the client, there is only one method of communication, and the server must constantly rely on the client to transmit data. But we can achieve two-way communication between the server and the client using the WebSocket Protocol. A WebSocket is a two-way communication protocol between the server and the client. It's a low-level protocol that specifies how to send messages without providing any extra information about the incoming messages. Our UI Client (which is a browser) connects to the message broker via the STOMP Protocol, which is a simple text-oriented messaging protocol. It specifies a protocol for communicating with clients and servers using message semantics.

**Project Completion Phases:**

**Phase – 1:** (Before First Progress Meeting)

Configuration of WebSocket Endpoint and Message Broker in Spring Boot framework.

**Phase – 2:** (Before Second Progress Meeting)

Creation of Chat Message Model, Controller for sending and Receiving messages and WebSocket Event Listeners.

**Phase – 3:** (Projection Completion Phase)

The front-end development part of the project which includes creating HTML file to display the User Interfaces for displaying the chat messages and styling the file using CSS and adding the functionality using JavaScript.