**Team Echo: Real-Time Chat Application Test Plan**:

1. **User Registration:**

**Test Case 1: Successful Registration**

**Input**: User provides valid registration data (username, email, password).

**Expected Output:** User account is created successfully, and a confirmation message is displayed.

**Test Case 2: Invalid Registration Data**

**Input**: User provides invalid or incomplete registration data.

**Expected Output**: Server rejects the registration attempt and prompts the user to correct the input.

1. **User Login:**

**Test Case 1**: Successful Login

**Input:** User enters valid login credentials (email, password).

**Expected Output**: User is logged in successfully and redirected to the home page.

**Test Case 2: Invalid Login Credentials**

**Input:** User enters incorrect login credentials.

**Expected Output:** Server rejects the login attempt and displays an error message.

1. **User Logout:**

**Test Case 1: Successful Logout**

**Input:** User clicks on the logout button.

**Expected Output**: User session is terminated, and the user is redirected to the login page.

1. **Chat Functionality:**

**Test Case 1: Sending Message**

**Input:** User sends a message to another user.

**Expected Output:** Message is successfully sent and displayed in the recipient's chat window.

**Test Case 2: Receiving Message**

**Input:** User receives a message from another user.

**Expected Output:** Message is received and displayed in the user's chat window.

**Team Echo: Real-Time Chat Application User's Guide:**

**Registration:**

Navigate to the registration page.

Enter your desired username, email, and password.

Click on the "Register" button to create your account.

Upon successful registration, you will receive a confirmation message.

**Login:**

Navigate to the login page.

Enter your registered email and password.

Click on the "Login" button to access your account.

Upon successful login, you will be redirected to the home page.

**Logout:**

To logout, click on the "Logout" button.

You will be logged out of your account, and the session will be terminated.

You will be redirected to the login page.

**Chat Functionality:**

After logging in, navigate to the chat page.

Select a contact from your contact list to start a chat.

Enter your message in the chat input field.

Press "Enter" or click on the send button to send the message.

Your message will be displayed in the chat window, and the recipient will receive it instantly.