**Test Cases**

A table is constructed to display results of test cases involved in this chit chat distributed system. The purpose of conducting test cases is to test the handling of communication and process omission of the distributed system.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| No | Test Cases | Test Data/ Input | Expected Result | Actual Result | Status Pass/Fail |
| 1 | Server Setup | 1. Run SBT 2. Select [4] com.hep88.Server | The Server should start without errors return | The server has started without errors | P |
| 2 | Join Server – User 1 | 1. Run SBT 2. Select [3] com.hep88.Client | The User will be directed into chat room | The User successfully joined the chat room | P |
| 3 | Join Server – User 2 | 1. Run SBT 2. Select [3] com.hep88.Client | The User will be directed into chat room | The User successfully joined the chat room | P |
| 4 | Enter Name – User 1 | Enter Username | Username should be visible in the input box | Username is visible in the input box | P |
| 5 | Enter Name – User 2 | Enter Username | Username should be visible in the input box | Username is visible in the input box | P |
| 6 | Join Chat – User 1 | 1. Join Button 2. Status 3. User List | After the join button has been initialized, the status will change from inactive to joined. Joined user will be added to user list and shown. | The Status changed from inactive to joined. The user has been added to the User List. | P |
| 7 | Join Chat – User 2 | 1. Join Button 2. Status 3. User List | After the join button has been initialized, the status will change from inactive to joined. Joined user will be added to user list and shown. | The Status changed from inactive to joined. The user has been added to the User List. | P |
| 8 | Select Chatting User – User 1 | Select User 2 from User List | The user list should allow user to choose which user they want to send text to | User 2 has been selected and highlighted blue. | P |
| 9 | Type and Send Message – User 1 | 1. Logs 2. User 2’s Receiving Message | User 1 Sent Log List should appear the message written and sent.  User 2 should receive the message under Received message List. | User 1’s message shown on sent logs list.  User 2 received the message under the received message list. | P |
| 10 | Select Chatting User – User 2 | Select Use 1 from User List | The user list should allow user to choose which user they want to send text to | User 1 has been selected and highlighted blue. | P |
| 11 | Type and Reply Message – User 2 | 1. Logs 2. User 1’s Receiving Message | User 2 Sent Log List should appear the message written and sent.  User 1 should receive the message under Received message List. | User 2’s message shown on sent logs list.  User 1 received the message under the received message list. | P |
| 12 | Clear Input Text | Clear Button | The text should be removed when the clear button is initialized | The text has been removed | P |
| 13 | Clear List – Received Message | 1. Clear User 1 Received Message List 2. Clear User 2 Received Message List | The Received List should be empty after clear button has been initialized | The list has successfully been cleared | P |
| 14 | Clear List – Logs | 1. Clear User 1 Logs list 2. Clear User 2 Received Message List | The Logs List should be empty after clear button has been initialized | The list has successfully been cleared | P |

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# Test Results

The Results are shown by Client’s perspective via Screenshots.

## 4.1.1 Test Case 1 - Server Setup



The server started successfully without error.

## 4.1.2 Test Case 2 - Join Server – User 1

Graphical user interface, text

Description automatically generated

The client has been successfully connected to the server by User 1.

## 4.1.3 Test Case 3 - Join Server – User 2

Graphical user interface, text

Description automatically generated

The client has been successfully connected to the server by User 2.

## 4.1.4 Test Case 4 - Enter Name – User 1

Graphical user interface, text

Description automatically generated

User 1 entered Username in the text box as Mary.

## 4.1.5 Test Case 5 - Enter Name – User 2

Graphical user interface, text

Description automatically generated

User 2 entered Username in the text box as John.

## 4.1.6 Test Case 6 - Join Chat – User 1

Graphical user interface, text

Description automatically generated

User 1 has joined the chat room under the name of Mary.

## 4.1.7 Test Case 7 - Join Chat – User 2

Graphical user interface, text

Description automatically generated

User 2 has joined the chat room under the name of John. The user list displayed users who joined the chat room.

Graphical user interface, text, application

Description automatically generated

User list on user 1 perspective has been updated.

## 4.1.8 Test Case 8 - Select Chatting User – User 1

Graphical user interface, text, application

Description automatically generated

User 2 has been selected.

## 4.1.9 Test Case 9 - Type and Send Message – User 1

Graphical user interface, application

Description automatically generated

The message “Hi” has been sent to User 2, John. The text sent is displayed under the sent text list.

Graphical user interface

Description automatically generated

The message sent from User 1, Mary has been received and shown under the received text list.

## 4.2.1 Test Case 10 - Select Chatting User – User 2

Graphical user interface

Description automatically generated

User 1 has been selected.

## 4.2.2 Test Case 11 - Type and Reply Message – User 2

Graphical user interface

Description automatically generated

The message “Hi Mary, how are you” has been sent to User 1, Mary. The text sent is displayed under the sent text list.

Graphical user interface

Description automatically generated

The message sent from User 2, John has been received and shown under the received text list.

## 4.2.3 Test Case 12 - Clear Input Text

Graphical user interface

Description automatically generated

User 1 entered typo.

Graphical user interface

Description automatically generated

User 1 removed the text by clear button.

## 4.2.4 Test Case 13 - Clear List – Received Message

Mary

Graphical user interface, application

Description automatically generated

Graphical user interface

Description automatically generated

User 1, Mary has cleared the receiving list.

John

Graphical user interface, application

Description automatically generated

Graphical user interface, application

Description automatically generated

User 2, John has cleared the receiving list.

## 4.2.5 Test Case 14 - Clear List – Logs

Mary

Graphical user interface, application

Description automatically generated

Graphical user interface, text, application

Description automatically generated

User 1, Mary has cleared the log list.

John

Graphical user interface, text, application

Description automatically generated

Graphical user interface, text

Description automatically generated

User 2, John has cleared the log list.