

Omni

User Interface Design Document

Team 6

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Introduction

Purpose of this Document

This document contains a mockup of the user interface of Omnichat. As a reminder, Omnichat is the combination of the frontend and web server components Team 6 is designing for Omni. This interface is built with HTML/CSS/JS. This document will provide diagrams and visuals that describe the flow of user interaction with Omnichat. The intended audience for this document is the CMSC 447 section 2 teaching team.

References

Omni System Design Document

Havens, Micah, et al. "System Design Document." 29 Oct. 2022,
<https://github.com/Skid-Team-6/Omnidocs/blob/main/Omni%20System%20Design%20Document.pdf>

Omni System Requirements Specification Document

Havens, Micah, et al. "System Requirements Specification." 20 Oct. 2022,
<https://github.com/Skid-Team-6/Omnidocs/blob/main/Omni%20System%20Requirements%20Specification.pdf>

Omni Project Proposal

Havens, Micah, et al. "Project Proposal." 12 Oct. 2022,
<https://github.com/Skid-Team-6/Omnidocs/blob/main/Omni%20Proposal.pdf>

UIDD Template

Umrawal, Abhishek K., et al "User Interface Design Document (UIDD) Instructions & Template"

Software Engineering 9

Sommerville, Ian, et al "Software Engineering 9th Edition", March 2010,
<https://ifs.host.cs.st-andrews.ac.uk/Books/SE9/index.html>

User Interface Standards

Common Components

Component	Description
Channel	A virtual space in which messaging takes place.
Channel List	A UI element which contains the channels that the user may access.
Chat Interface	A webpage with a channel list, message pane, message box, and an online users list.
Login Screen	Screen displaying text boxes for the user to enter their username and password.
Register Screen	A screen where the user registers a new account with a new username and password.
Message Box	A UI element which is a text box into which a user may type a message to send.
Message Pane	A UI element which displays past and newly-sent or newly-received messages within a specified channel.

General Error Handling

Error Presented	Description
Authentication Error	The user enters in the wrong login credentials on the first page.
Connection Error	The user has been disconnected from the Omni server. Displayed at the top of the screen
Message too Long	Displayed when a user tries to enter in a message to the chat box that is over 255 characters.
Username in Use	The username presented is already in use by

	another user.
Invalid Passphrase	Passphrase given during account creation does not meet the given requirements.

User Navigation

Page and Ordered Number	Description
1. Chat Interface Page	The user will have the option to select which channel they would like to chat in and send messages in it. The user will also be able to view the current members online.
2. Login Page	The user will be prompted with a page to enter their username and password to login to the server. If an account does not already exist there is a registration button available.
3. Registration Page	The user can create a new account with Omni. The user will create a new username and password according to the criteria presented to them.

User Interface Walkthrough

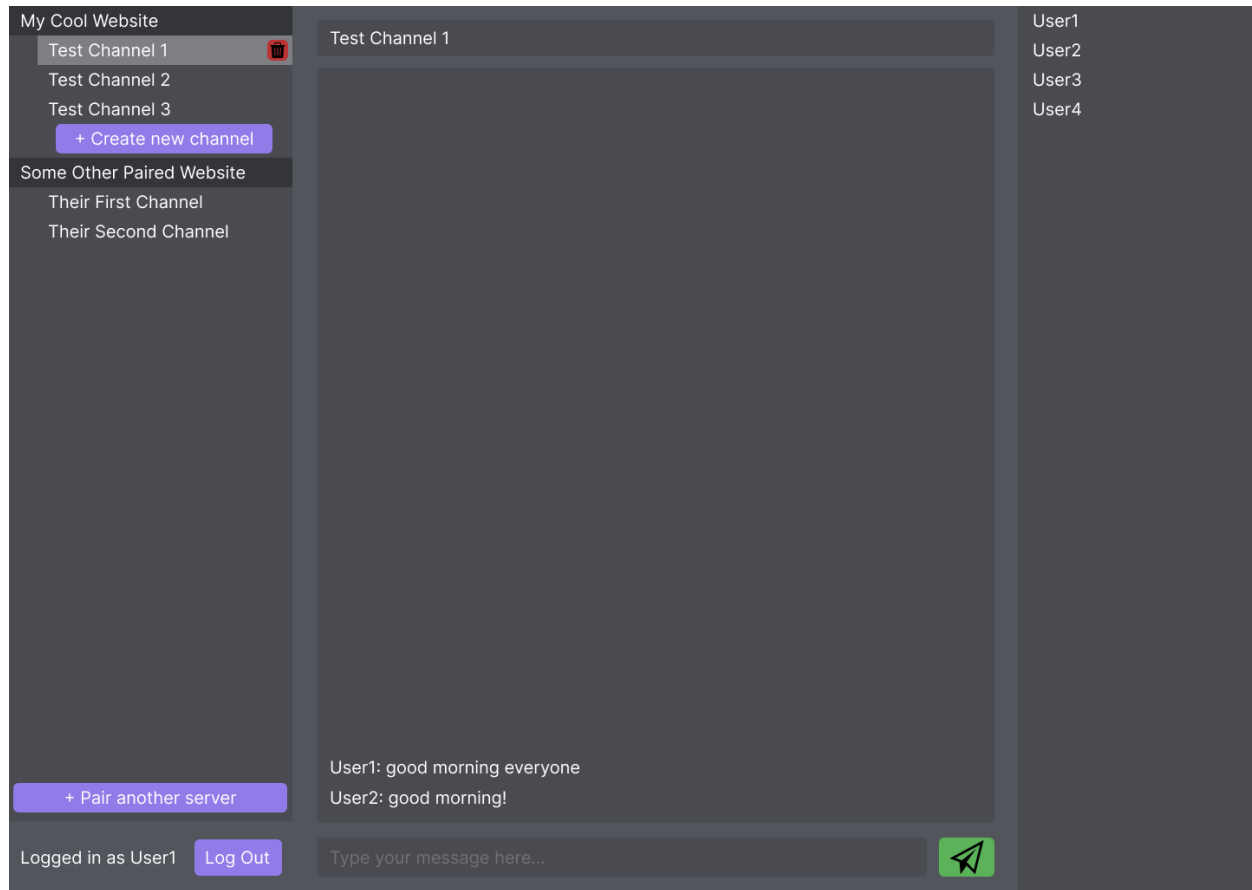


Figure 1: The chat interface page.

The chat interface is the most complex part of the UI. On the left is the channel list, which is composed of all of the channels visible to the logged in user. The channels are split into sections, each section representing one server. The first server is always the one associated with the website the user is currently logged in to. The rest are the servers that the current server is paired with. The currently selected channel is highlighted. Administrators will see more options in this pane than normal users. Server administrators will be able to create new channels in the current server (see the “Create new channel” button), pair new servers (with the “Pair another server” button), and delete channels (see the trash can button on the selected channel). These extra buttons will not be available to normal users.

Beneath the channel list is the user information section. This informs the user what their own username is, and provides a button for them to log out, which will inform the web server, clear the session token, and then redirect the user to the login page. In the future, there may also be a settings button in this section.

In the center is the messages pane. This section contains the messages that have been sent in the current channel, as well as a text box that allows the user to type a new message. Next to the text box there is a green button with a paper airplane icon (this is temporary), which

is the send button. When this button is clicked, if the content typed in the message box passes all validation, the content will be sent to the server. On top of the message pane is a box informing the user of what channel they are currently viewing.

On the right is the user list. The user list will inform the user of all other users who are online and that have access to the currently selected channel. That is, online users appear in this list if they may also view the channel that is currently being viewed. This list is updated live as users go online or offline and is the simplest part of the chat interface.

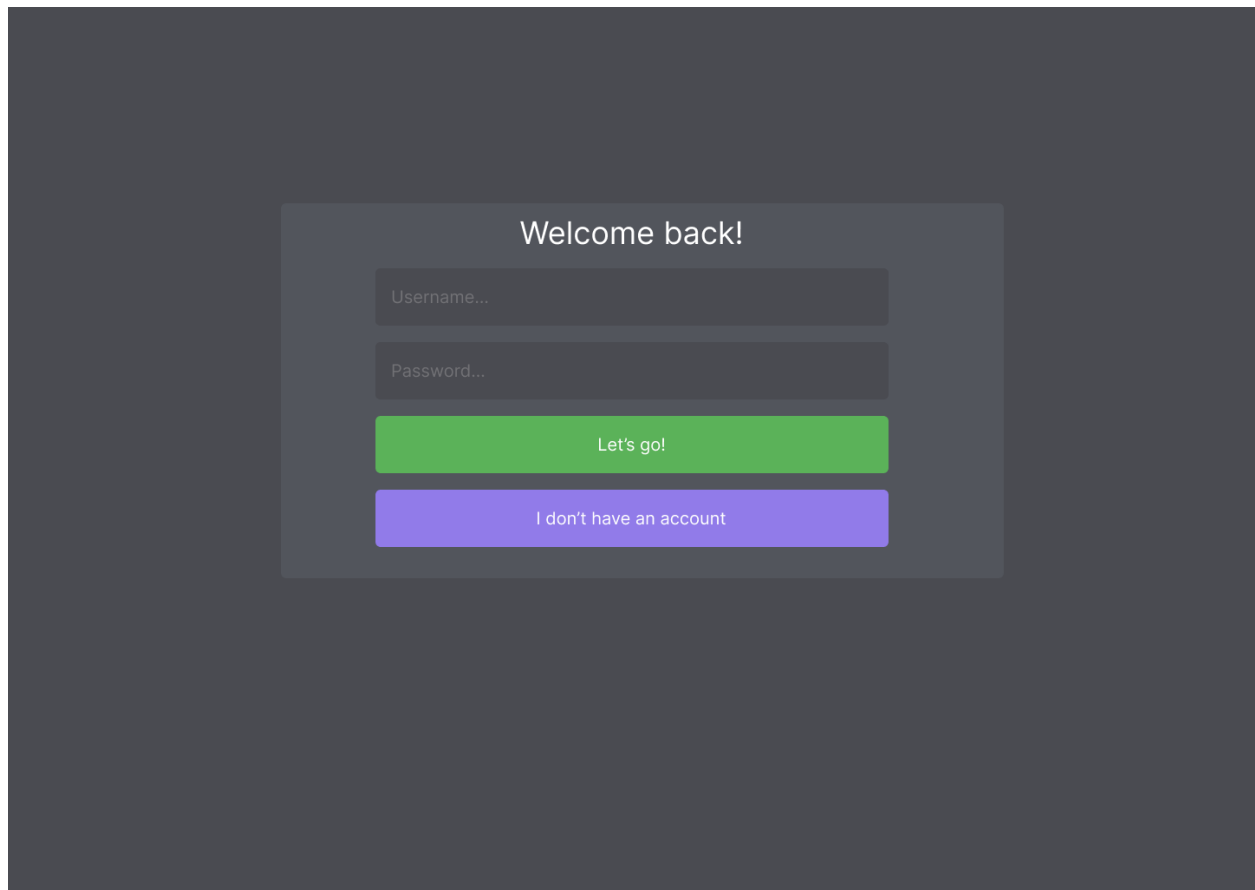


Figure 2. The login page.

The login page contains only four interactable UI elements: a username field, a password field, a submit button (labeled “Let’s go!”), and an account creation button (labeled “I don’t have an account”). When the submit button is clicked, the information in the username and password field is sent to the server for validation, following any security protocols necessary. When the account creation button is clicked, the user is directed to the registration page.

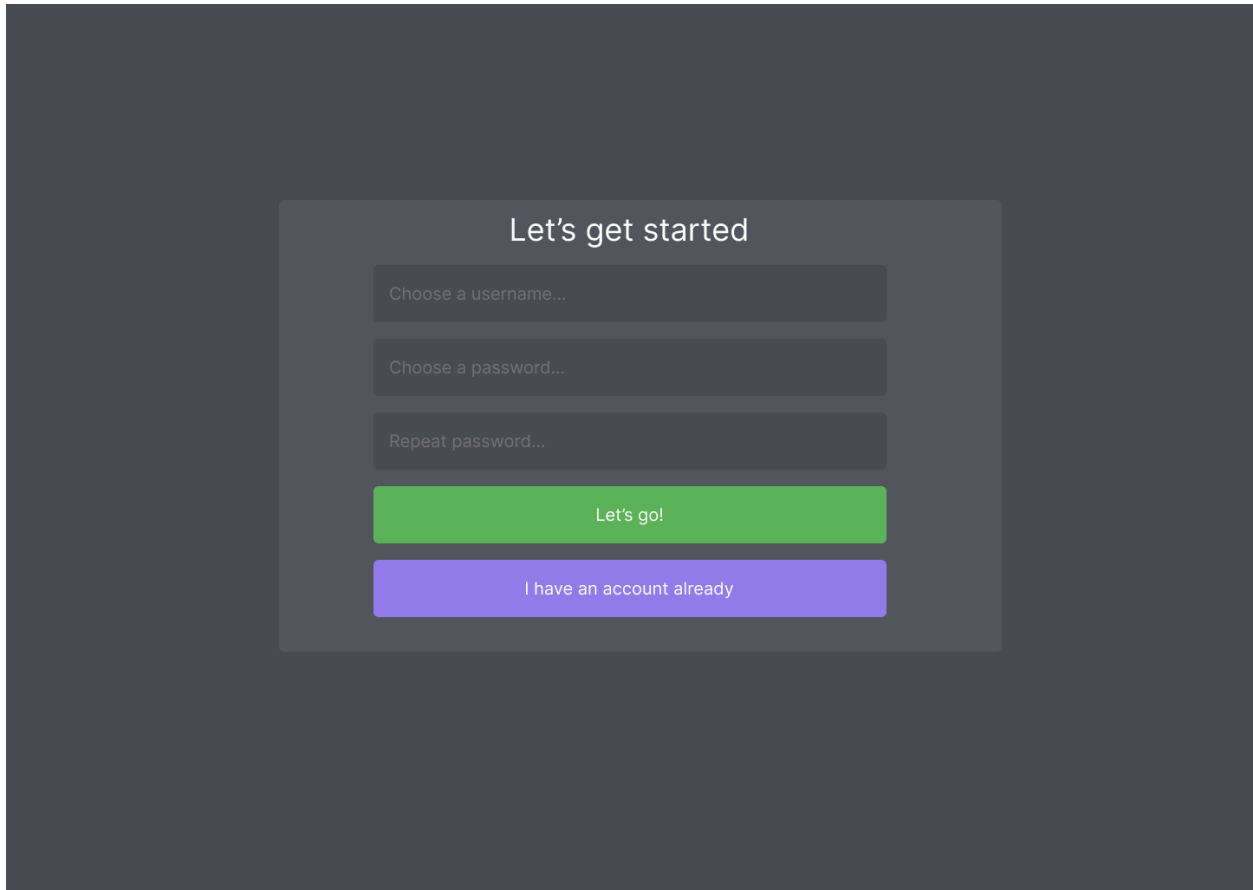
A registration page UI mockup with a dark gray background. A central light gray box contains the title "Let's get started" in white. Below the title are three text input fields with placeholder text: "Choose a username...", "Choose a password...", and "Repeat password...". Below these fields are two buttons: a green button labeled "Let's go!" and a purple button labeled "I have an account already".

Figure 3: The registration page.

The registration page has five interactable elements: a username field, a password field, a password confirmation field, a submit button (labeled “Let’s go!”, just like the login page), and a login button (labeled “I have an account already”). The two password fields must match in order for the submit button to send an account creation request to the server. The username and password must also pass validation as described in the [Data Validation](#) section below. These will be double-checked on the web server as well. If the user presses the second button (login button), they will be redirected to the login page.

Data Validation

Login Page

Data Item	Description
Account name	This data item will be a string with a max length of 12 characters and it allows letters,

	numbers, and special characters.
Account password	This data item will be a string with a max length of 20 characters and it allows letters, numbers, and special characters.

Register Page


Data Item	Description
New account name	This data item will be a string with a max length of 12 characters and it allows letters, numbers, and special characters. The name must not exist already in the account name database.
New account password	This data item will be a string with a max length of 20 characters and it allows letters, numbers, and special characters.


Chat Page

Data Item	Description
User chat input	This data item will be a string with a max length of 255 characters and it allows letters, numbers, and special characters.


Open Issues

User account management #1

 Open
 ApexDevelopment opened this issue 11 days ago · 0 comments



ApexDevelopment commented 11 days ago

Collaborator
 

We need a policy and procedure for managing users, as well as to decide what database solution we will use.

Appendix A - Customer and Contractor Agreement

The customer and Team including: Micah Havens, Scott Devere, C.J. Commodore, Adnaan Dasoo, and Josh Martin are agreeing to the implementation of Omni in accordance with the information listed above. The team and the customer are agreeing that everything listed above is acceptable and sufficient for the task that the customer needs. If future changes need to be made to this document all members of the team will meet with the customer to explain what needs to be changed and why, and upon agreement the changes will follow.

Dated Signatures:

- Micah Havens, 11/09/22, X MH
- Scott Devere, 11/09/22, X SD
- C.J. Commodore, 11/09/22, X CC
- Adnaan Dasoo, 11/09/22, X AD
- Josh Martin, 11/09/22, X JM

Customer Area:

Customer Comments:	
Date: _____	Signature: X _____

Appendix B - Team Review Sign-off

All members, including Micah Havens, Scott Devere, C.J. Commodore, Adnaan Dasoo, and Josh Martin, have reviewed the system requirements specification document for our software, named “Omni”. Each team member has reviewed this document for accuracy and completeness in all parts, including text, diagrams, bullets, charts, and tables.

Dated Signatures:

- Micah Havens, 11/09/22, X_____MH_____
- Scott Devere, 11/09/22, X_____SD_____
- C.J. Commodore, 11/09/22, X_____CC_____
- Adnaan Dasoo, 11/09/22, X_____AD_____
- Josh Martin, 11/09/22, X_____JM_____

Appendix C - Document Contributions

- Micah Havens
 - Worked on: Purpose of this Document, References, User Interface Walkthrough
 - Percentage estimate: 30%
- Scott Devere
 - Worked on: Appendices, Data Validation, Purpose of this Document, References
 - Percentage estimate: 20%
- C.J. Commodore
 - Worked on: Appendices, User Interface Standards
 - Percentage estimate: 15%
- Adnaan Dasoo
 - Worked on: Data Validation, User Interface Walkthrough
 - Percentage estimate: 15%
- Josh Martin
 - Worked on: Appendices, User Interface Standards
 - Percentage estimate: 20%