

The Purple Sponge's Milestone 1 (CSC 667)

Github Repository:

<https://github.com/sfsu-csc-667-fall-2024-roberts/term-project-the-purple-sponge.git>

Github Project Board: <https://github.com/orgs/sfsu-csc-667-fall-2024-roberts/projects/10>

What we have accomplished for the Milestone this week:

- > Outlined the features our term project will include, as well as potential optional features to expands on the to-be-finished game
- > Listed down the kinds of technology we will use to implement various aspects of the term project
- > Drew out wireframes to serve as a blueprint of what each main web page should look like

Game of choice: **Bingo**

Required Features:

Important Bingo Features:

Home page (not logged in)

- ☐ Allow anyone to create account
- ☐ Allow anyone to log in to account

Log In Screen

- ☐ Formfield with username and password input boxes
- ☐ Submit button to send entered credentials to the server to be verified
 - ☐ If successful, redirect to homepage (logged in version)
 - ☐ If fail, give alert to user that their credentials don't match
- ☐ Button to create a new account
 - ☐ Redirects to the create an account page

Create Account Page

- ☐ Form Field with username and password input boxes
 - ☐ Password must abide by all the conditions (upper and lowercase letters, numbers, special characters) to be valid
- ☐ Confirm password input box
- ☐ Create account button to send data to server that verifies that account doesn't already exist and creates a new one
 - ☐ If successful, redirect to log in screen
 - ☐ If fail, alert user for why the account cannot be made

- ☐ If because of the username already existing, tell the user the username already exists
- ☐ Submit button should be greyed out until all fields are valid

Lobby Screen (logged in)

- ☐ Allow user to log out
- ☐ Have an overview of ongoing games to join
 - ☐ Statuses of the match can be displayed
 - ☐ Each match has a join button
 - ☐ Redirects players to Game Waiting Room
 - ☐ Might be grayed out if game status does not permit
 - ☐ Players should be able to rejoin an in-game session if they previously were playing (server needs to skip their turns and save their data)
- ☐ Able to chat in the global chat
- ☐ Button to start new game

Game Creation Screen

- ☐ Basic settings for the game are chosen here:
 - ☐ Max num of players
 - ☐ Timer length (speed of the game)
- ☐ Button to create the game
 - ☐ Redirect the user to the Game Waiting Room
- ☐ Button to return to the lobby screen

Game Waiting Room

- ☐ Button for starting the game (only works for the host and when 2 or more people have joined)
 - ☐ Redirect all connected users to game screen
- ☐ Displays X number of slots depending on settings chosen
- ☐ Displays chosen game speed settings
- ☐ Slot turns green and fills up with player info to represent each connected user

Game Screen

- ☐ Randomly generate a bingo card for everyone
- ☐ Interactable Bingo card displayed for each player
- ☐ Clicking on a tile will mark that tile
- ☐ A representation of the number that is being rolled out
- ☐ Chat box available to all players that is private to the game room
- ☐ Bingo! Button to call out bingo and momentarily pause the game.
- ☐ Server verifies the card for any completed row, column, or diagonals.
 - ☐ Have a cooldown so players don't spam this

- ☐ If it is a verified win, then a banner displays the victor's name for all users to see and the game room closes in 10 seconds
 - ☐ Redirect user to Home page (logged in)
- ☐ If it is a false win, the banner alerts everyone that the game is not over and the game resumes.

Optional Features:

- ☐ Ability to have multiple bingo cards open at once
- ☐ Some in-game currency that is awarded to players for participating and winning
- ☐ Store page for cosmetic banners, and stuff in exchange for in-game currency

Technologies:

- Render, Node.js, Express.js, PostgreSQL, TypeScript, Husky, lint-staged, ESLint, Prettier, dotenv, morgan, ejs, cookie-parser.

Wireframes

Home page (not logged in)

Home page (for all users)

Bingo!

Introductory information and announcements can be put here

Frame 2

Log in

Clicking on the login button will redirect user to the login page to create an account

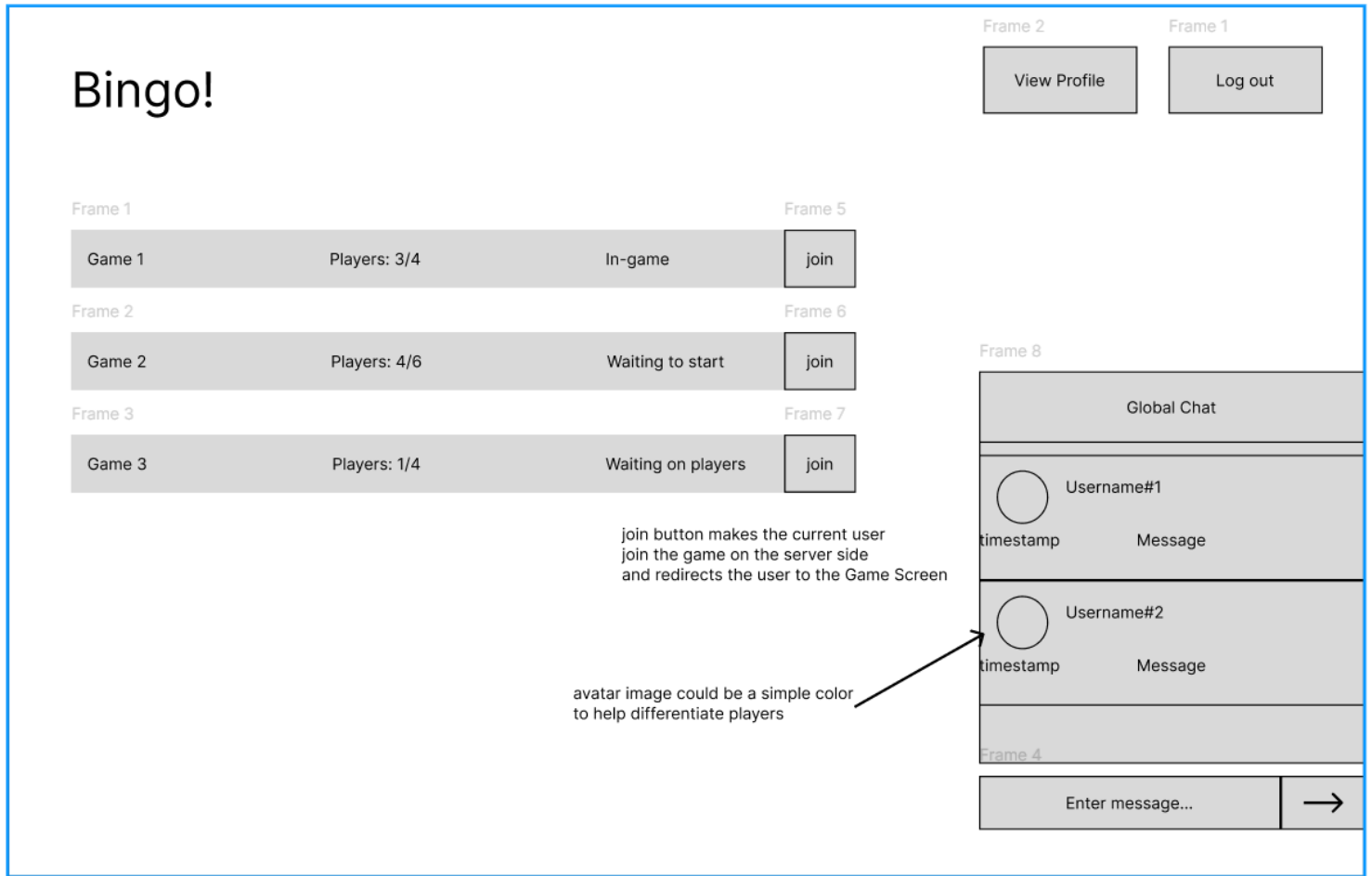
Frame 1

Create Account

The create account button will redirect user to the Create Account page

Lobby Screen (logged in)

Lobby page (user must be authenticated to view this page)



Bingo!

Login to your account

Username

Password

The user is able to input any text in "Username" and "Password" fields.

If the user needs to, they can go to the create account page via the "Sign up" button

When clicking the "Login" button, two things can occur:

1. If the username inputted is not in the database, or the password does not match with the username, a popup warning will appear to inform the user if an incorrect username/password
2. If the username exists in the database, and the password matches, the user will be redirected to the

Create Account Screen

Create an Account

Username:

Enter a username you'd like here

The username which someone inputs will be stored as text in a database. There will be a check present to ensure no two users can have the same username.

Password:

Enter a password you'd like here

Your password must contain upper and lowercase letters, numbers, and at least one special character!

The password will have a check for uppercase, lowercase, number, and special characters so that the user creates a more secure password. Additionally, this will be encrypted when it gets stored in the database.

Retype Password:

Please retype your password here

The password must then be retyped by the user, and will be checked against the value in the first password field.

Create Account

The create account button must be pressed to submit the information and for an account to be made. If all the fields are filled correctly, the enter key could also potentially be used.

Game Waiting Room

Waiting Room	Game #
Player 1	Max num of players: 4
Player 2	Timer length: #
Waiting...	
Waiting...	
<p>For the host, this will abort the game For the players, they will leave the game</p> <p>Start only appears for the host and when 2 or more players join Join appears for players that join an ongoing game</p>	
Back	Start/Join

Game settings

Game Settings

Max num of players (Limit: #-#):

Timer length (Limit: #-#):

Able to set a number to each setting,
but also a number will be assigned by default

Name:

Game's name by default set to the game's id

Back

Create

Game Screen

Game screen (User must be authenticated)

Frame 9

Bingo!

12, 15, 79 ...

Display For the called numbers

Frame 1

2	5	7	8	9
2	5	7	8	9
2	5	7	8	9
2	5	7	8	9
2	5	7	8	9

Game Room Chat

Username#1

timestamp

Message

Username#2

timestamp

Message

Enter message...

→

Example bingo card that will be randomized and given to each player
and is interactable by clicking each tile to mark a number