

Assignment1 Writeup

What was the most challenging piece of this assignment?

The hardest part of this assignment was definitely making the game board responsive. Getting it to look good and work well on both desktop and mobile screens was tricky. I had to go through a bunch of versions to figure out a layout that could adjust to different screen sizes without breaking the look or functionality. I ended up using both CSS Grid and Flexbox together, which was kind of confusing at first—especially trying to keep the tiles square and everything properly aligned no matter the screen size. HTML was pretty easy to work with, but CSS definitely took more time to get used to, especially when I started adding things like transitions and transforms for interactive stuff.

What decisions did you make when you made your site mobile friendly?

To make the site work better on phones, I changed up the navbar so it takes up less space—mainly by shrinking the padding and font size on smaller screens. That way, more of the game is visible without needing to scroll. I also made the game board layout flexible by using percentages instead of fixed pixel sizes, so it scales nicely no matter how wide the screen is. I used CSS Grid and the aspect-ratio property to keep the tiles looking like squares. For the buttons and text, I tweaked font sizes and padding at certain screen widths to keep things readable while saving space.

What did you take into account when you developed the design of your website?

When I was designing the site, I really wanted it to feel like a battleship game, so I went with a nautical theme—lots of blues and whites to give it that ocean vibe. I tried to keep everything visually organized by using consistent fonts and spacing, so players could easily tell apart the game board, the instructions, and the navigation. Accessibility was important too, so I made sure there was good contrast for text and clear hover/focus effects for anything clickable. One part I'm really proud of is the subtle animations I added to the game tiles and navbar—they make the experience feel smoother without being too flashy. I also put some extra effort into styling the rules list so it looks more polished and easier to follow, using CSS tricks like counters and pseudo-elements.

Given more time or resources, what additional features would you add to your site in the future?

I want to build a proper drag-and-drop feature for ship placement—letting users move their ships around before starting would make the setup feel way more interactive. I would also love to add

sound effects for hits, misses, and when a ship sinks, along with explosion animations to make the gameplay more exciting. Adding multiplayer with WebSockets would be a big but really cool upgrade, so people could play against friends in real time instead of just versus the computer.

How many hours did you spend on this assignment?

I spent approximately 13 hours on this assignment. About 3 hours went into planning and designing the layout, 7 hours on implementation and coding, and 3 hours on testing and debugging across different devices and browsers.