Battleship: Part 1, Mock

HTML, CSS, and Design

Overview

In this first assignment, you will be constructing a mock website of the popular game, Battleship. This will NOT be an interactive page at all, but instead will show a game of Battleship in progress that you can build on top of in the future. The only tools you can use here are pure HTML and CSS, and future projects will build on top of this effort.

For this project, you will work solo.

Battleship is a popular American board game. It is played between 2 players, where you have to guess the location of your enemy's ship. Here is an online implementation: https://www.battleshiponline.org/. You are NOT expected to implement this way, this link is simply to demonstrate the rules.

Restriction

Please note that for this assignment I am forbidding the use of any JavaScript, Ruby or other programming language, including the use of imported JS libraries. You MAY import files or icons, but cannot use any style beyond this. You are also forbidden from using any styling library, such as Bootstrap, Material, etc.. Do NOT use anything like React, Angular, Vue to help you on this assignment as the goal is to get comfortable with the basics, and you will lose points accordingly.

Additionally, we will be building and hosting these pages using Github Pages.

Rubric

- Working Github, high code quality and actively working URL - 15%
- 4 unique pages - 20%
- Navbar - 20%
- Mobile friendly design - 5%
- Use of the certain HTML Components - 10%
- Use of certain CSS properties and features - 10%
- Good and professional design - 5%
- Writeup - 5%
- Extra Credit

Working Github and actively working URL

The basic piece of this assignment is to make sure that all of your code is pushed, and that the website works for users. If there are any additional login or verification steps, please make sure that that is provided in the instructions. All written code must be well written, clear and follow patterns set out in this or other courses. One important practice is that you must organize your code into correct folders and files: each page should have all appropriate files in the correct folder (except for the home page); the core HTML should be in an index.html (i.e., I shouldn't be able to see a .html in your URL paths ever); common CSS should be stored in a common folder, and specific CSS in each correct folder. There must be no JavaScript used on the site.

4 unique pages

Your personal site should have at least 4 pages.
1. There should be a home page that includes the title of the game (you can change it from Battleship if you wish) and any other art of your choosing.
2. There should be a sample game page that includes game boards in 2 different states but you must show some hits and misses. For the "hits"/checks and "misses"/x's, you may import art or use text. This page should also include a timer with a mock timestamp and a button with the word "restart". Finally, when your mouse hovers over the tiles of the board, the mouse pointer should change to the "pointer" cursor and the
3. One page should have the rules of the game listed out. It should also include a "made by" or "credits" section that has a link to your email, Github, Linkedin, etc (you can use fake data if you prefer.)
4. The final page should be a mock "high scores" which will list made up usernames and the number of games they've won and lost.

We are not too worried about the content of your website, so aspects like typos or bad grammar will not be evaluated too strongly. You may also add other details to the page to make sure all of the requirements are being assessed.
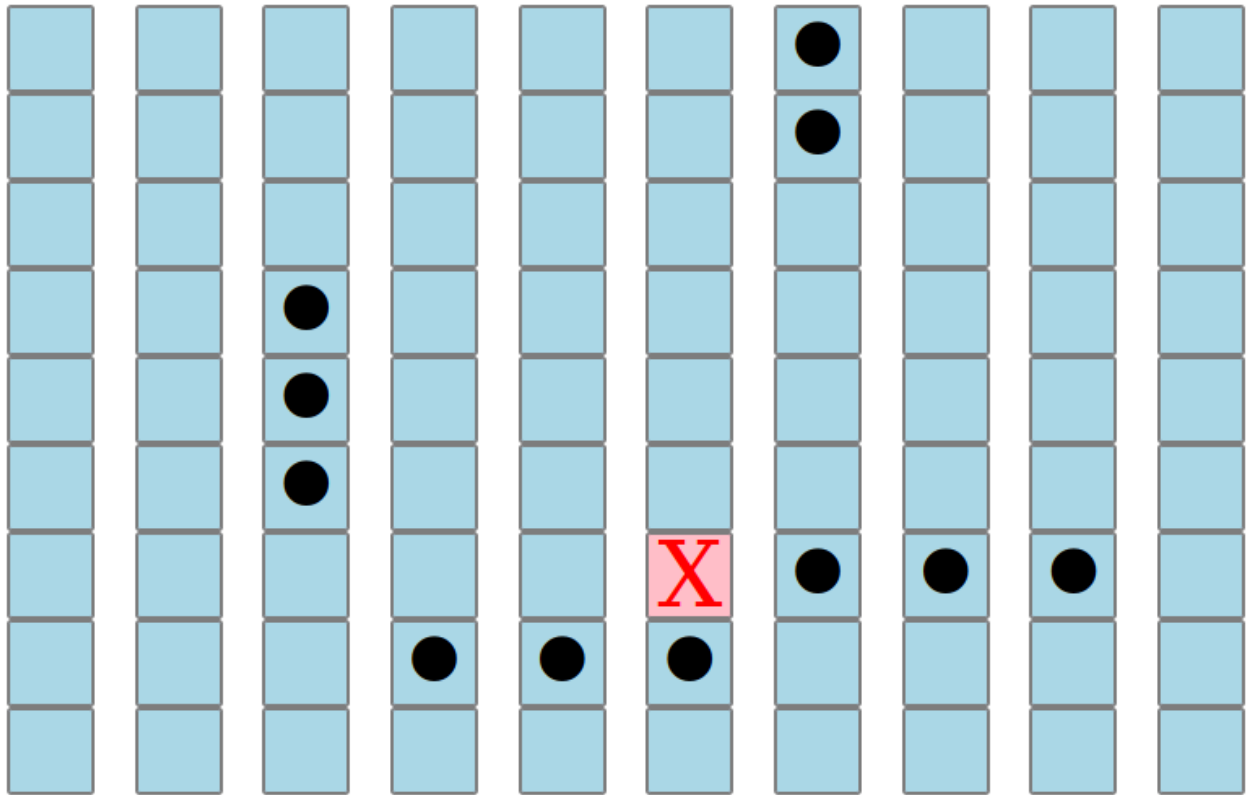
Component Examples

For the enemy boards, the checks are "hits", the X's are "misses" and the black dots are where your ships are.

Sample enemy board:
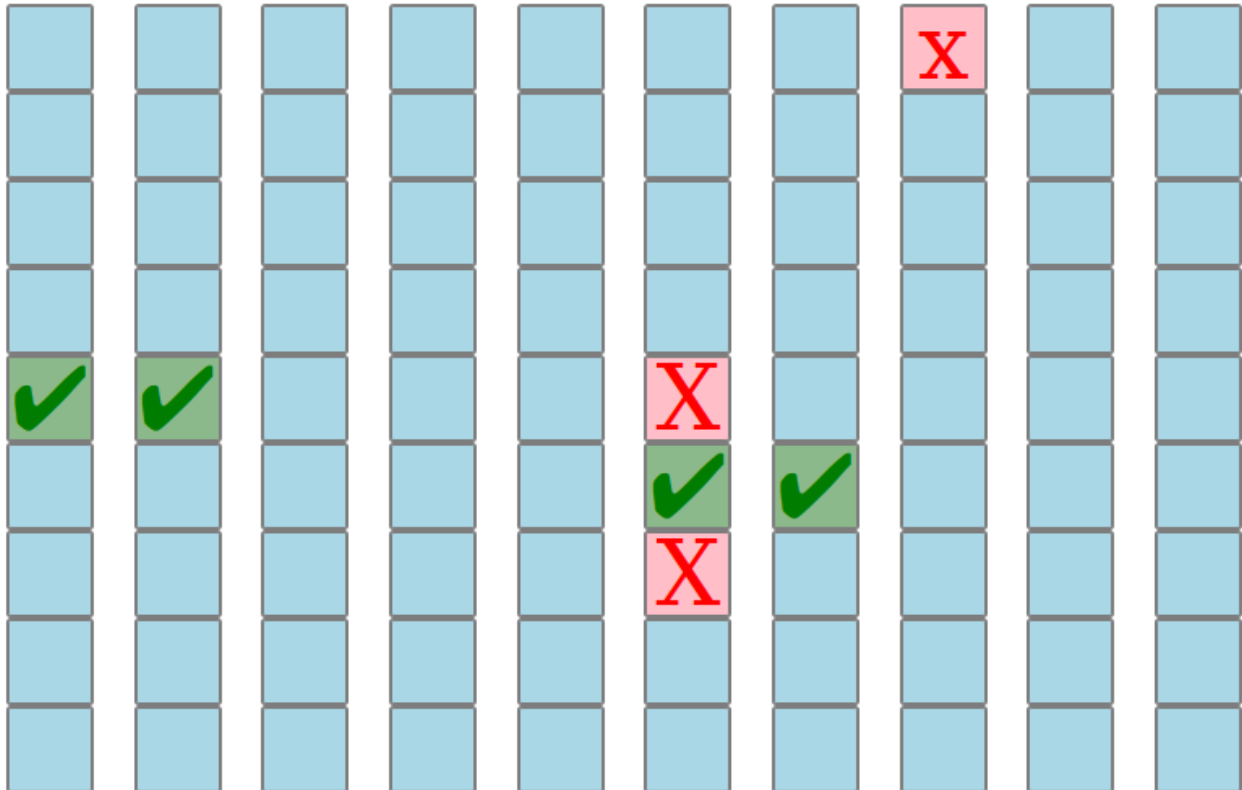
Sample player board:

Navbar

A core feature of your site should be a navbar, so that users can easily access all information:
- It should stay in the same position, no matter where the user has scrolled
- It should contain links to each of the pages above. Additionally, when a user is on that page, you should use styling to indicate that that is where the user is currently looking.
- It should have a title that references the name of the game
- It should not cover any content, unless the user has scrolled down the page
- Hint: consider using CSS aspects like transitions and pseudo-elements (e.g., :hover) to artfully dynamically modify the size of your navbar

Mobile friendly design

Your website should look equally as good when on a mobile phone or desktop computer. Some considerations:
- You may need to modify your navbar so that it shows as much space as possible.
- All content should be equally accessible whether a user is on desktop or mobile
- Text, images and other content should shrink and grow so that it is easier to see

- Idea: it might be a good idea to move the navbar (say from the side to the bottom of the screen) when the user is in mobile or browser view.

Use of the certain HTML Components

Your website should should use, at least once, each of the following HTML elements:
- div
- span
- a
- img
- p
- head
- body
- h1, h2, h3, h4, h5 or h6
- ul or ol or table

Additionally, make sure that your id's and classes are well named, as any poorly or carelessly named content may result in a lower score.

Finally, you should ensure that there is little to no raw HTML on your page: everything should be styled in some capacity.

Use of certain CSS properties and features

You website should use, at least once, each of the following CSS properties or features:
- font-family
- background-color or background
- margin
- padding
- position
- align-items or text-align
- flex
- grid
- @media queries
- You must use at least two different pseudo-elements (e.g., :hover, :first-child, etc.)
- transition/transform

Good and professional design

Finally, it is important that you have a web design that is both easy for users to navigate but also interesting to keep people engaged. Some considerations:
- Think about how your colors and fonts relate to each other. It is good if these do not class, but rather make it easy for users to use your site.
- Consider importing a font for an easy way to make your website standout. What font do you find more readable on a computer screen?

- How are you branding your page? Consider including pieces like SVG icons to make your site look more professional
- Imagine how a user would navigate your page
- Experiment with spacing and grid so that your site is well organized
- You can even consider working out of the box a bit: adding icons that update when users interact; modify the scroll bar so it fits with your theme

Please know that I understand that this is NOT a design course, but the intention is that you can create something to document your professional experience and share with recruiters, colleagues or others.

Extra Credit

If submitted 48 hours before the deadline, you will reserve 3 extra credit points so you will be eligible to receive a maximum score of 103%.

Deliverables

Upon successful completion, you should submit include the following with your code:

- A link to your website
- A link to your Github repo (if this is private, make sure that TA's are added as collaborators)
- A video walking through your website. Please take this opportunity to describe each page and point out anything worth noting such as parts of the page you are proud of, areas where you were uncertain or any unique features you added. You may post a private video on YouTube or whatever platform of you choosing, but be sure to share the link with your submission. This should be less than 5 minutes
- A writeup responding to the following questions and ideas(at least 3 sentences per bullet point):
    - What was the most challenging piece of this assignment? Did you find it easy or challenging to work with HTML and CSS? How long did this overall assignment take you?
    - What decisions did you make when you made your site mobile friendly?
    - What did you take into account when you developed the *design* of your website? Is there anything that you're particularly proud of?
    - Given more time or resources, what additional features would you add to your site in the future?
    - How many hours did you spend on this assignment? (Obviously doesn't need to be 3 sentences)
    - (Optional) If you made any assumptions about this assignment, what are they
- If you used code or design from somewhere online, please mention it here. Furthermore, if you imported a file to use a Fonts or Icons library, please indicate that here as well.