Website link: https://cssadventure.netlify.app/

Github: https://github.com/Chenyijun/PUI/tree/main/homework-8

Part 1

CSS Adventure is a game to practice CSS for users who are learning CSS or wants to challenge their CSS skills. The CSS topics I focused on were flexbox and grid. Users can clearly see how each CSS property affects the flexbox or grid as they practice solving the puzzles. It's engaging because I made it RPG-themed and I drew almost all the graphics myself.

Part 2

1. See available and completed levels and skip to ones you have not finished
   a. Click on "Level ___ of 5" button
      i. Click on a level or reset
2. Read CSS properties explanations
   a. Hover over bolded CSS properties
3. Solve puzzle
   a. Type into the input box
   b. Answers
      i. Level 1: space-around, end
      ii. Level 2: 3
      iii. Level 3: span 3
      iv. Level 4: column-reverse
      v. Level 5: 3, 3
4. View help modal
   a. Click on "Help" button on the bottom left
   b. Click outside the modal to escape
5. Move on to next puzzle
   a. Click on bottom right button "Next" once you complete the puzzle
   b. Click on top right arrow button if you want to see the next puzzle without completing the current puzzle

Part 3

1. React
   a. **Why?** I like React more than vanilla JS because I can use states and hooks
   b. **How?** I used it for the entire site. I used it to manage states and update different components.
   c. **What?** It allowed me to reuse components easily.
2. Typescript

a. **Why?** I chose it because I've never used it before and I know it's commonly used in the industry. I want to learn it now so I would be more prepared for after graduation.
b. **How?** I used it to write the entire webapp since it added typing
c. **What?** It made all my variables typed which made it easier to debug.
3. Styled-Components
    a. **Why?** I'm used to using it for all my CSS styling
    b. **How?** I used it to style all my components
    c. **What?** It allowed me to reuse styles easily in a cleaner way than class and id
4. React-tooltip
    a. **Why?** I've used it before and it has a lot of nice properties.
    b. **How?** I used it for more explanations on CSS properties
    c. **What?** It gives users information without taking them away from the page

Part 4

I did not make any changes to my original design other than actually drawing out my characters and assets. I decided to use animal characters rather than human characters.

Part 5

The biggest challenge was using Typescript since I don't have much experience with typed languages like Java. It was really frustrating to learn the syntax and constantly have to look up how to set prop types. It was a lot more time-consuming than I expected while not really adding anything visual difference to the final product since it's more useful if there are multiple people working on the same project. It was a good experience though since now I can say I've used Typescript before for interviews.