

PUI Assignment 8 Write-Up

Link to Website: <https://caropang.github.io/portfolio/src>

Link to Repository: <https://github.com/caropang/portfolio>

Part 1

The purpose of this website is to serve as a personal portfolio to showcase my skills and interests. In particular, this website hosts information about previous technical and design projects that I've worked on, a small page introducing myself, as well as my resume which displays my qualifications in detail.

I decided to use a few different strategies to make my website interesting and engaging. First, I used the three.js and gsap libraries to create interesting and interactive visuals on the homepage of my website and display artwork. I used camera movement and mouse tracking to allow the users to interact with the graphics. I also added basic CSS animations throughout my website to make it more appealing. Additionally, I added a mini "shell" program in the header of my website which allows users to navigate through the website with basic Linux commands. All of the parsing and handling is coded in Javascript.

The target audience for my website is friends and family. Due to time constraints, I decided to focus most of my efforts on the programming aspect of this website, and spent less time fully flushing out the content. In the future, I would like to further refine the content on the website and fine tune the responsiveness so that I can add it to my resume as a personal website for recruiters to see.

Part 2

Header (Included on all pages)

- Click on "Home" to navigate to Home page
- Click on "About" to navigate to About page
- Click on "Projects" to navigate to Projects page
- Click on "Resume" to navigate to Resume page
- Hover/ click over ">> Type help to see commands"
- Type "--help" and press enter (should output list of commands)
- Commands should work as specified
 - --help View help list.
 - clear Clear shell output.
 - pwd View current location.
 - ls View linked pages.
 - cd [arg] Navigate to page.
 - hello Prints messages.
 - Up and down arrow keys can be used to navigate through command history. (History resets on window reload)

Back buttons

- Clicking on "Back to Home" on About, Project, and Resume pages to return to the Home page
- Clicking on "Project Gallery" breadcrumb on project pages to return back to Projects

Home Page 3D Interactions

- Moving mouse should rotate sphere
- Scrolling up and down should zoom camera in and out

Part 3

- a) I used the three.js graphics library.
- b) I decided to use this library because I saw a lot of interesting examples of how people have used this library online, and I wanted to try experimenting with it myself. I thought that it would be a perfect addition to my personal website so that I could make it more visually interesting.
- c) I used it to create and render the graphics on the homepage of my website. In particular, I created a randomly generated star field as well as a planet which can be interacted with by the user to showcase different parts of the website. I used many different features of the library such as texture mapping, lighting, using different meshes, and integrated an additional external animation library (gsap) to help with the animations.
- d) The main functionality of these animations are visual appeal. Being able to interact with the 3D objects on the front page adds a sense of playfulness to the website and contributes to the overall aesthetic/ brand that I aimed to portray with this website. Additionally, the texture mapped to the sphere can be used to showcase personal artwork.

Part 4

The main change from the mock-ups to the final design was the addition of 3D graphics instead of 2D graphics. Additionally, I was originally planning for the 3D model on the homepage to be clickable and have links to the other pages of the website. However, due to technical complications, I removed this from the design. I also cut down on the number of projects included in this version. Finally, I decided to include the “shell navigation” feature on every page of the website.


Part 5

In this project, I encountered a lot more challenges than I had initially expected. In particular, I faced a lot of problems trying to set up an initial scene with three.js. There were a lot of quirks that I had to learn to get adjusted to the modelling environment and learn how to manipulate the objects in the way that I wanted. Because I ran into these technical challenges, I feel that my final design was a bit limited in scope, but I hope that in future projects I will be able to experiment further with this library.

(ACCESSIBILITY ON NEXT PAGE)

Accessibility

Summary, Details, Structure



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Address: <https://caropang.github.io/portfolio/src/>

Styles: OFF ☐ ON ☒

Summary


Summary


Details


Reference


Structure


Contrast


 0
Errors

 0
Contrast Errors

 4
Alerts


 2
Features

 0
Structural Elements

 0
ARIA

[View details](#)

Congratulations! No errors were detected!
Manual testing is still necessary to ensure compliance and optimal accessibility.



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Address: <https://caropang.github.io/portfolio/src/>

Styles: OFF ☐ ON ☒

Details


Summary

Details



Reference

Structure



Contrast

 4 Alerts




☒ 1 X No heading structure

☒ 1 X No page regions



 

☒ 2 X Possible heading



  


☒ 2 Features

☒ 1 X Form label

☒ 1 X Language



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Address: <https://caropang.github.io/portfolio/src/>

Styles: OFF ☐ ON ☒

Structure

Summary

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Structure

Contrast

This page has no heading structure!