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PUI Assignment 8: Implement a web portfolio
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Livesite:

https://meozhang.github.io/arch_portfolio/index.html

Github:

https://github.com/meozhang/meozhang.github.io/tree/master/arch_portfolio

Part 1: In 300 words (only!) describe your website (We will stop reading at 300 words, so please be concise). Include the following:

- What is the purpose of your website?

  I'm designing and building an interactive portfolio website for my architecture projects from college and my professional experience at Lake Flato Architects. Through the website, I want to showcase my aesthetics and technical skills through site mapping/analysis, conceptual drawings, physical models, and renderings.

- What information do you convey with your website?

  The portfolio website includes a home page, 3 detail pages for the projects, and a page "about me". Project 1 and 2 are research-based design projects that feature sculptural and experimental designs. Project 3 is from my industrial experience, it's a single-family residence located in Mexico, currently under construction.

- How is it interesting and engaging?

  The overall website design follows the minimalistic style, in order to keep the focus on the images and description texts. Therefore most of the interactive elements serve decorative purposes and aim to make the browsing experience more fun and engaging. For example, on the home page, when the mouse hovers over the image for each project, the "read more" circle appears and spins to attract readers and invite them to open the link. In project pages, images and text would appear and slide in from the bottom as the reader scrolls down the page.

- Who is the target audience?

  The website is intended for people who are interested to learn more about architecture and my professional experience as an architectural designer.

- Landing page:

  - **Animation of the word "architecture"**: the outline of the letters will appear as a line drawing when the page loads. It can be reproduced when the landing page is reloaded/refreshed.

  - **Hover effect of the green circle**: when the mouse hovers over the green circle in the middle, it scales up and the edge has a feathering effect. When the mouse leaves, it scales down and reverts back to a solid circle. The effect can be reproduced by the mouse entering and hovering over the circle.

- Home page:

  - **Project image hover effect**: when the mouse hovers over a project image, it scales up slightly and creates a green drop shadow. The mouse turns into a bigger circle with the text "read more" on it. The green circle with text would spin as the mouse enters, and would disappear when the mouse moves or leaves the image. The effect can be reproduced by the mouse entering the image.

  - **Graphic animation triggered when scrolls:** As the page scrolls down, the project number and the graphics(a green line and a green dot) would appear and moves away horizontally, and the big opaque green circle in the background would appear and scale up as well. The animation can be reproduced when the page scrolls down, or reverted when the page scrolls up.

- Project pages

  - **Graphic animation triggered when scrolls:** As the page scrolls down, the project title subtitles, and the graphics(a green line and a green dot) would move away horizontally, and the big opaque green circle in the background would appear and scale up as well. The animation can be reproduced when the page scrolls down or reverted when the page scrolls up.

  - **Images and text slide in when scrolls down:** when the page loads, the images and text will not load until the page scrolls down and the content enters the visible window area. The content appears with a slide-in and fade-in effect. This effect can be reproduced by refreshing and scrolling down the page.

- **Title image carousel:** At the top of the project page, there's a carousel(slide show) of images. It plays automatically but can also be controlled by clicking on the indicator dots below the carousel. The animation will continue to play as the page is active.

- **Image hover effect:** when the mouse hovers over a project image, it scales up slightly and creates a green drop shadow. The effect can be reproduced by the mouse hovering the image.

- **Image lightbox:** when clicking on an image, and lightbox will pop up showing an enlarged image. The lightbox can be closed if clicks outside the image or clicks on the "x".

Part 3: Describe what external tool you used (JavaScript library, Web API, animations, or other). Following the bulleted list format below, reply to each of the prompts. (I will stop reading at the 4th sentence, so please be concise)

"why you chose to use it,": what alternative solutions you considered, or talk about how it makes X, Y, and Z easier to accomplish than writing it in vanilla CSS/JS, etc.

"how you used it,": focus on which specific features you used (e.g. "I used the Bootstrap grid system to define different column breakpoints, and used the modal, button, and navbar components").

"what it adds," talk about the resulting responsiveness / interactivity / ultimate effect that it yielded for your site.

- **Bootstrap**

  Why did you choose to use it?

  Bootstrap offers detailed documentation and examples that helped me implement difficult features such as carousel and navigation bar. It uses predefined classes to give the website a structure and enables responsiveness based on screen width. With Bootstrap, I could start with a basic but functional structure and pull preset elements as I needed, therefore I was able to put in more effort into customization.

  How did you use it?

  I used the Bootstrap grid system to enable website responsiveness. I designed the navigation bar, carousel, lightbox based on Bootstrap examples. I also used the preset Bootstrap class to change margins and paddings.

  What does it add to your website?

With bootstrap, the website has a basic layout that is responsive to various screen sizes. The navigation is an essential part of the structure, it's responsive and professional looking. With the carousel and lightbox, the website is more interactive and communicates better to the audience.

Other references:

Lightbox https://codepen.io/JacobLett/pen/MOJPRW

- **Lazy Line Painter**

Why did you choose to use it?

Lazy Line Painter achieves very complicated line drawing effects with minimal preparation required. The interface is friendly and approachable, and it gives clear instructions on installation and implementation.

How did you use it?

I created an illustrator line drawing and saved it as SVG. With some customization for color and animation styles, Lazy Line Painter took the SVG file and converted it into an SVG tag to paste into an HTML file.

What does it add to your website?

I used it to animate the landing page text because it gives an artistic transition for users before they enter the home page. It's visually appealing and inviting people to interact with it.

- **Greensock**

Why did you choose to use it?

Greensock is an animation tool that's easy to implement by defining the start and end state, with a variety of animation types available. It offers a special "scroll trigger" effect that starts an animation when the content enters the visible portion of the windows. I looked at many other examples that archived the same effect, and Greensock allows me to do it with minimum lines of code.

How did you use it?

I created an illustrator line drawing and saved it as SVG. With some customization for color and animation styles, Lazy Line Painter took the SVG file and converted it into an SVG tag to paste into an HTML file.

What does it add to your website?

I used it to animate the landing page text because it gives an artistic transition for users before they enter the home page. It's visually appealing and inviting people to interact with it.

- **Cursor Customization**

References:

(https://codepen.io/designcourse/pen/GzJKOE)

Why did you choose to use it?

I referenced this example because it's very dynamic and the style of it fits well with the website. It's easily customizable: i was able to change the style to be consistent with the website aesthetics.

How did you use it?

I copied the HTML/CSS/JavaScript into my own files and made custom changes to the styling and animation. It hides the original arrow cursor and creates a circular one with an expanding effect on click.

What does it add to your website?

I changed the cursor styles to have a holistic visual appearance as the website. It made the browsing experience more special for the audience.

Part 4: Describe how you iterated on your HW7 mockups, if at all, including any changes you made to your original design while you were implementing your website.

- Added more interactive elements, such as the spinning "read more" circle when the mouse hovers over the image on the home page, in order to make the experience more fun and dynamic. Added lightbox help increase the legibility of images, and encourage the audience to learn more about the content.

Part 5: What challenges did you experience in implementing your website?

- Learning jQuery was a big challenge for me. even with some practice with javascript in the previous assignment. I did some research and looked at many examples to learn the new syntax and understand the capacity of Query.
- Learning how to install a library and implement the tools was difficult because the process varies on the type of library or tool. Implementing the animation also required a lot of customization in all HTML, CSS, and JavaScript files, which took time to learn and understand.