

# Assignment 8

Implementing Web Portfolio

[Link to GitHub repository](#)

[Link to published website](#)

Programming Usable Interfaces

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## Part 1      General Description

I developed a **portfolio website** for myself, with my **general information, past experiences and projects, and my life experiences**. The **target audience** was potential employers and research collaborators, friends, and families.

I have applied for PhD programs in HCI and decided to conduct academic research on social media. Instead of providing very condensed experiences (common in academic portfolio websites), I decided to present myself in a “light” way by firstly giving a self-introduction on the home page. For those interested in my previous experiences, I added quick links to my projects and resume on the first page too. In this way, I balanced being casual, personal and providing rich information for the audience.

The website was **interesting and engaging** in two ways. Firstly, I presented my skills and interests using particle animations on the home page, which was fun and rare. The particle animations helped to emphasize my diverse skills across programming, UX design, and behavioral research. This was the valuable asset I could bring to my future research team. The audience can interact with the word particle animation too. Using social media icon animations also showed my research in a lively way. Also, most pages have animation on scroll and link hover transitions, making the website more interactive and engaging.

## Part 2      Interactions

### 1. Interaction with the skill text particles animation

- In the text particle animation next to the “Previously, I worked...” paragraph on home page:
  - Hover over texts to push them away
  - Click on anywhere in the animation window to randomly generate new text nodes

### 2. Scroll animations

- Scroll up and down on all but the resume pages

### 3. Link hover effects

- Hover over links in paragraphs (indicated by dotted underline and pinkish color), navigation links, and project card links on the projects page to see the effects

## Part 3 External Tools Used

### 1. react.js

- Reason for using
  - It's a common framework used in frontend development. It's versatile and easy-to-use by allowing developers to develop reusable components in projects.
- How I used it
  - I constructed the whole site using react.
- What it adds
  - It gave me the option to define reusable components and maintain a clear file structure.

### 2. react-router-dom

- Reason for using
  - It's a neat tool for links and routing in react.
- How I used it
  - I used the Router, Route, and Link components to realize the navigation between different components on the website.
- What it adds
  - It enabled easy-to-manage navigation between react components, which is hard if using `<a>` tags.

### 3. react-bootstrap

- Reason for using
  - It's a great tool for responsive layout in react.
- How I used it
  - I used the Container, Row, and Col components to maintain responsive layout on the website.
- What it adds
  - It enabled easy-to-manage column layout changes for different screen size break points.

#### 4. react-responsive

- Reason for using
  - It's a great tool to write media queries in react.
- How I used it
  - I used its function *useMediaQuery* to detect the current screen size and selected the style sheet for that size accordingly.
- What it adds
  - It enabled using media queries in react.

#### 5. Animation on scroll (AOS) library

- Reason for using
  - It makes animation on scroll a million times easier compared to hand writing everything by code.
- How I used it
  - I used it by adding the provided attributes to define the scroll animation for most parts of my website.
- What it adds
  - It enabled easy animation on scroll that can be done within minutes for my website.

#### 6. react-particles-js and tsparticles libraries

- Reason for using
  - The two libraries together enable particle animations with different customizable particle contents, including images and text, in react.
- How I used them
  - I used them on my home page to create the particle animation effects to display my skills and interests. The two `<Particle />` components with the long attributes were how I configured them.
- What it adds
  - It enabled a simpler way to create customized particle animations on my website with user interactions.

#### 7. gh-pages npm package

- Reason for using
  - It boosts up deploying your react app on GitHub pages.
- How I used them
  - I used them to configure my repository deployment on GitHub pages.
- What it adds
  - It made my app deployment and assignment submission possible.

## Part 4 Iteration on Assignment 7 Prototype

I deleted the “see my projects” button at the bottom of home page since it’s redundant.

## Part 5 Challenges

Learning to use the Particles component with all the configuration attributes was one of the biggest challenges. Some libraries didn’t support text particles and the one I’m using was not really well-documented. Programming the responsiveness was another challenges since I’ve never really done that. It’s hard to do in react without a library too.