Personal Project

Portfolio Development

Juliën Verheijen
Fontys Hogeschool ICT
Advanced Media Design

Table of Contents

Context

In this document, I describe how I built the portfolio using software. Specific pieces of code are explained, and it describes why I made certain choices.

Research Methods

Literature Study

Find contextual information, guidance and best practices.

Proof of Concept

Create a prototype or demonstration of a single critical aspect of your idea to test if it really offers a good solution to the problem you are solving.

(CMD Methods et al., 2015)

Results

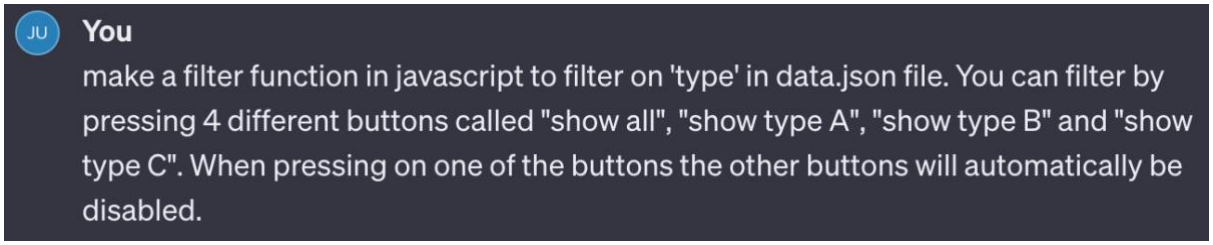
The entire portfolio was created in HTML, CSS, Vanilla JavaScript and JSON. The decision to choose these is explained research document "How to make the portfolio scalable?".

The deliverable page is partitioned with a card element that repeats as many times as the number of arrays in the JSON file. This JSON file contains all the data visible on the card. Including the title, image, description, project type and the texts that appear on each project page. This allows for clear editing of the text in the JSON file and changes in all locations of the website.

Because the JSON file takes longer to load, I used a Javascript EventListener that shows a loading icon until all data has been loaded.

Later during the project, more and more deliverables were added. This created a long list of tiles on the deliverables page. To make it easier for the user, I added a filter that filters by project type.

Because I was using JSON, this was not as easy as I expected. I couldn't find a solution on the internet that helped me. I therefore asked chatGPT for help in writing the code.



The generated code did need to be partially modified to make it work. Below is the working code.

```
//filter on project type
document.addEventListener('DOMContentLoaded', async () => {
  const showAll = document.getElementById('showAll');
  const showPersonal = document.getElementById('showPersonal');
  const showInternational = document.getElementById('showInternational');
  const showGroup = document.getElementById('showGroup');
  const filteredDataContainer = document.getElementById('filteredData');
  const container = document.getElementById('card_container');

  //make 'All Projects' enabled by default
  const filteredData = await filterDataByType(null);
  displayFilteredData(filteredData);
  enableAllButtons();
  showAll.disabled = true;

  //make all projects active
  showAll.addEventListener('click', async () => {
    const filteredData = await filterDataByType(null);
    displayFilteredData(filteredData);
    enableAllButtons();
    showAll.disabled = true;
  });

  //make personal projects active
  showPersonal.addEventListener('click', async () => {
```

```
  const filteredData = await filterDataByType('P'); //P stands for Personal
  displayFilteredData(filteredData);
  enableAllButtons();
  showPersonal.disabled = true;
});

//make international projects active
showInternational.addEventListener('click', async () => {
  const filteredData = await filterDataByType('I'); //I stands for International
  displayFilteredData(filteredData);
  enableAllButtons();
  showInternational.disabled = true;
});

//make group projects active
showGroup.addEventListener('click', async () => {
  const filteredData = await filterDataByType('G'); //G stands for Group
  displayFilteredData(filteredData);
  enableAllButtons();
  showGroup.disabled = true;
});

//filter on type
async function filterDataByType(type) {
  try {
    const response = await fetch('data.json');
    const jsonData = await response.json();
    return type ? jsonData.filter(item => item.type === type) : jsonData;
  } catch (error) {
    console.error('Error fetching or parsing data:', error);
    return [];
  }
}

//display or clear filterd data
function displayFilteredData(data) {
  container.innerHTML = ''; // Clear existing content

  //post data
  data.forEach(post => {
```

```
    const div = cardTemplate.content.cloneNode(true);
    div.getElementById("card-link").href = post.link;
    div.getElementById("card-projectType-icon").src = post.coverProjectTypeIcon;
    div.getElementById("card-title").textContent = post.title;
    div.getElementById("card-details").textContent = post.context;
    div.getElementById("card-cover-img").src = post.coverImage;
    container.append(div);
  });
}

//enables active buttons
function enableAllButtons() {
  showAll.disabled = false;
  showPersonal.disabled = false;
  showInternational.disabled = false;
  showGroup.disabled = false;
}
});
```

To avoid problems, I worked with a version control system. With each component completed and fully working, I pushed it to GitHub. Here the code is safely stored, and I can always go back to an older version.

Check out all the source code on GitHub.

Conclusion

Writing code yourself takes quite a bit of time and effort. Since I have very little experience with Vanilla Javascript, this was a good project to learn more about it. I also learned that ChatGPT can help you with writing code. Using JSON came in handy in this project. But I also found out that it has its disadvantages such as longer loading speed, more complex linking and limited text formatting. However, using a CMS system would make this even easier to add content.

Learning Outcomes

Learning outcome 3: Software design and realisation

By creating and reusing software components and libraries to build a working product with code. And using Github as version control.

Literature

CMD Methods, Van Turnhout, K., Jacobs, M., Kamp, I., Mulholland, C., Neuman,
A., Rouwhorst, S., & Van Vlies, L. (2015). *CMD methods*. Accessed November 9, 2023, from https://cmdmethods.nl/