Web Development Reflective Essay

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Roles and contributions

The team consisted of 6 team members. The group size was perceived in the team as the upper limit in size, given the assignment's scope. As we worked on our first peer-graded assignment together, it became clear that some members would focus more on content and styling, while others would focus on layout and semantic structure. We divided work into the following roles: Each of the three pages were assigned a creator (3 creators), and the remaining three members worked on styling, imagery, and copy. While these were the main designations for each member, everyone contributed to the core HTML and CSS code in the project. The group perceived me as a de facto group lead given my experience in managing software projects and my advancement in the degree. I was in my third semester, while most other members were in their first or second semester.

Some team members also went above and beyond to create additional pages. However, in the group, we decided to stick to the criteria and not overload the site with extra work at a potentially lower quality that was not requested.

Your use of HTML and CSS

For the overall HTML structure, we used as much semantic structure as possible and as few bespoke div blocks with respective classes as necessary. All pages each consist of a header, main and footer section, which made it easier to re-use HTML across pages as long as we cannot generate them dynamically. We used basic links (with appropriate styling) for interactivity and embedded imagery using standard HTML <img> tags.

The CSS for this site uses Flexbox to achieve the layout, allowing us to learn this modern approach to design and make the site somewhat responsive. We further defined our colors and used these throughout the page. Our CSS structure supports the semantic structure by using appropriate class names. For example, we used ".attractions" for a section containing attractions, and ".attraction" for each attraction in the container).

One of the learnings when using Flexbox was that it is worth separating properties relating to Flexbox from other styling properties. Flexbox's nested nature further makes it harder to maintain an overview of parent and child containers, so keeping an external record of the site structure (in a more detailed wireframe or some other visual representation) would have helped.

We also added appropriate meta tags to each page with keywords, descriptions, and other information to make the site friendly to search engines and accessibility.

The site's overall structure consists of three individual HTML files, linked with one shared CSS file in a "styles" folder, and all images in an "img" folder. We can extend this structure to include a "scripts" folder or similar to hold any JavaScript code that adds functionality to the site.

Some more detailed learnings include that, for example, the image gallery on the home page is hard to implement with interactivity lacking the presence of JavaScript. A basic version was achievable with HTML and CSS, but the ability to "lightbox" or enlarge individual images was hard to achieve with pure CSS in a way that works consistently across browsers and viewports.

We also learned that Flexbox is not always the best approach; in many cases, a grid would have likely been more comfortable to implement.

Positive aspects of your teamwork experience

The team was easy to work in because team members appeared to group appointments regularly and on time. The team had a positive attitude even though many were building a website for the first time (including myself) and were also facing pressure from other mid-term assignments. Almost nobody in the team had worked with version control, so using a common Git repository was additional learning for everyone. Additionally, I appreciated that the team was very global, spread across many time zones and cultures, which made the learning experience even better. Given the varied backgrounds and skillsets, everyone was able to contribute through their strengths.
Another positive aspect of our teamwork was the team's willingness to "disagree and commit" to move ahead with speed. Team discussions were often held efficiently as when team members were not in agreement on a topic, and we could disagree but still commit to supporting each other in the outcome. Proactively placed ideas were welcomed and rarely shot down, and the limited time available and desire to meet the criteria for marking helped move faster.

Negative aspects of your teamwork experience

Given the team's globally distributed nature and everyone's work schedules, it was tough to find suitable times for group meetings. Our Asian colleagues often had to stay up late at night, while American counterparts woke up early in the morning. As a European, most meetings fell in the middle of workdays, making it hard to have frequent, longer sessions.

I would have also hoped for more asynchronous work culture using tools such as Google Docs, where team meetings were not so important. Unfortunately, apart from the sessions, it was hard to get team members to provide feedback or comment on work. As a result, we had fewer valuable back-and-forth interactions, which undoubtedly impacted the outcome.

As each team member had different ambitions with this course – some were aiming very high, while others just wanted to pass – these diverging expectations led to varying levels of commitment across the team. Furthermore, it was clear that some team members had never engaged in team-based software development, and this was a further burden on the collaboration.

Some team members were less proficient in English, making communication harder. This meant that very often, team members would not participate or remain passive in order to not disrupt the proactive and forceful approach of team members who were stronger communicators.

Effects of teamwork on the quality of the work

The peer-review nature of a team positively impacted the work because errors were detected quickly, and the team identified issues in our site's HTML on-the-fly, ensuring an improved outcome. The shared enthusiasm for the subject matter further helped create a website that projects fun and makes the work interesting. We also had great learning moments as we reviewed each other's code, which improved not only the quality of the work on this assignment but also the quality of work we all will take forward from this module.

The distributed nature took its toll on the project, as the asynchronous timings of team members often delayed interactions. We also probably suffered from the lack of skills or talent in visual design, relying heavily on looking up designs elsewhere and agreeing to a workable, if not aesthetically perfect, solution. The value of a UX designer became very apparent to me during this assignment. Nevertheless, I was able to apply some principles myself as taught in the course.
The team's skill set was on a novice level, including me, and this added some challenges to the work. Beyond organizing effectively as a team, each of us had to acquire some of the hard skills

needed to implement the work, which each of us did at varying levels. Hence some of the team had to catch some of the quality issues produced by others. The learning here is that an evenly skilled team can contribute to speedy delivery as it reduces the need for peer-review and assumes working, high-quality output to be the default. In my case, it was also clear that team members relied somewhat on other, more proactive team members to pull the work over the finish line. For example, if I announced a team meeting and forgot to set up a Zoom call, no one else would set it up instead, leaving the meeting not to take place.

Tools you and your team used

The team worked collaboratively using Slack as a communication mechanism. We used a Slack bot to announce and manage team meetings, and Zoom calls were directly integrated into the Slack environment to conduct team sessions. Further, we did our research in a shared Google document that allowed us to collect information asynchronously, and we tracked the marking criteria in a Google spreadsheet. We created wireframes with Google Spreadsheets, which served the purpose of this midterm well.

For code, we used a private repository on GitHub to store and version our code. This was the first time most team members used a code versioning tool. This was an added challenge but ensured the team could work independently without stepping on each other's toes. As an editor, each member used their text editor of choice, mostly either Brackets or VSCode. HTML and CSS were formatted using built-in formatting tools. For the fast creation of HTML, we used Emmet to allow for the rapid production of div blocks with classes and repeated elements.

Word Count: 1.469