Project Documentation Template

Project Overview

- **Title**: Web-shop (final project) 12.12.24
- **Introduction**: The Final Project is an online store inspired by Lululemon, a brand known for its high-quality activewear. The purpose of this project was to apply the knowledge gained throughout the semester in HTML, CSS, and JavaScript to create a functional and responsive website. The goal was to build a web-shop that allows users to browse products, sort them by category, select colors, and manage a shopping cart.

  This project was developed to meet the requirements of the Frontend Development course, focusing on proper code structure, responsive design, and interactivity. The result is a simple yet functional web-shop that highlights key web development skills.

Project Requirements

- **Features List:**
  1. Homepage Navigation
     Simple and clean homepage layout with a focus on usability.
     Header includes links to the "Become a Member" section and the cart.

  2. Membership Signup
     Users can register with their email and password to join the Lululemon community. Membership data is temporarily stored in localStorage for session functionality.

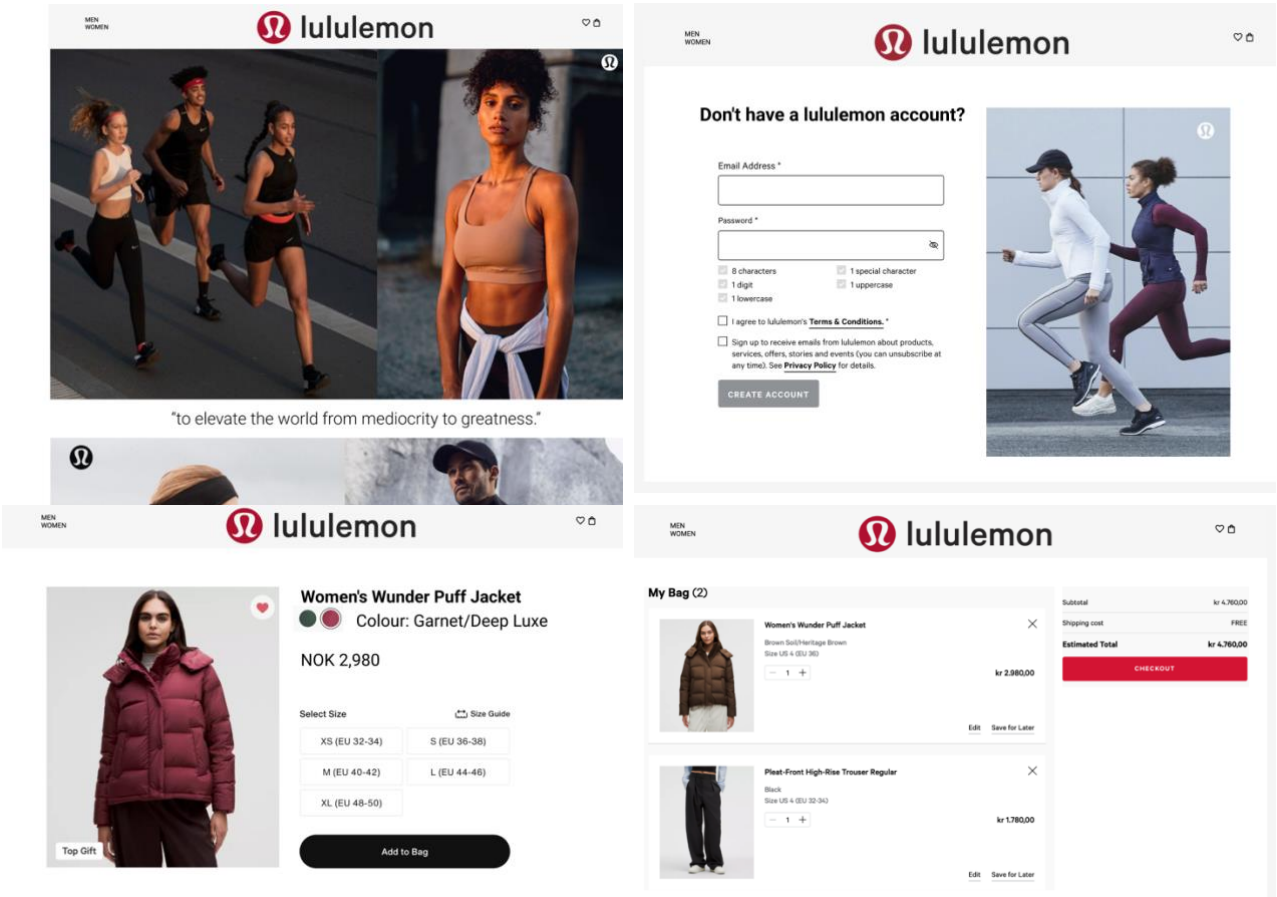
  3. Product Browsing and Sorting
     Overview of activewear products, categorized for easy browsing (e.g., Accessories, Outerwear, Sweaters, Dresses). Ability to sort products by price and select between two color options for each item.

  4. Dynamic Cart System
     Add selected products to the cart with quantity management and item removal options. View a clear summary of the cart, including the total price, before proceeding to checkout.

5. Checkout Process
   Simple checkout flow that clears cart data upon completion.

- **Technology Stack**
  HTML, CSS, JavaScrip, Github and Figma

- **Design and Planning**
  - https://www.figma.com/proto/0iG34hzDnZ8NOik6nydS1b/Final-Project?node-id=0-1&t=yGEj11dSS09CAUCZ-1



Development Process

- **Challenges:** Throughout this project, I faced several challenge. One of the key difficulties was understanding how to properly structure the project from the beginning. Initially, I thought building the "basic" structure would be easy, but I quickly realized I needed to think ahead and plan more iteratively. Another key difficulty I encountered was managing the structure of multiple HTML and JavaScript files. At first, I thought splitting the code across different files would keep things organized, but I quickly realized that coordinating between multiple files created its own set of challenges.

Another time-consuming challenge was dealing with case sensitivity in JavaScript, which often led to frustrating errors. This required a lot of trial and error, and I used tools like ChatGPT to help “find” the issues.

Testing

• How You Tested:

To ensure the functionality of the website, I carried out manual testing throughout the development process. This involved interacting with the website as a user would, filling out the form, signing up as a member, and adding products to the cart. I checked that the data entered in the form was correctly stored in localStorage and that the cart updates accordingly when items are added or removed.

Additionally, I used the browser console to log any errors or issues. This was especially useful for debugging JavaScript functions and verifying if the right data was being stored in localStorage or displayed correctly on the page. For more complex issues, I relied on ChatGPT to troubleshoot specific problems and get advice on how to approach certain challenges.

• Bug Fixes:

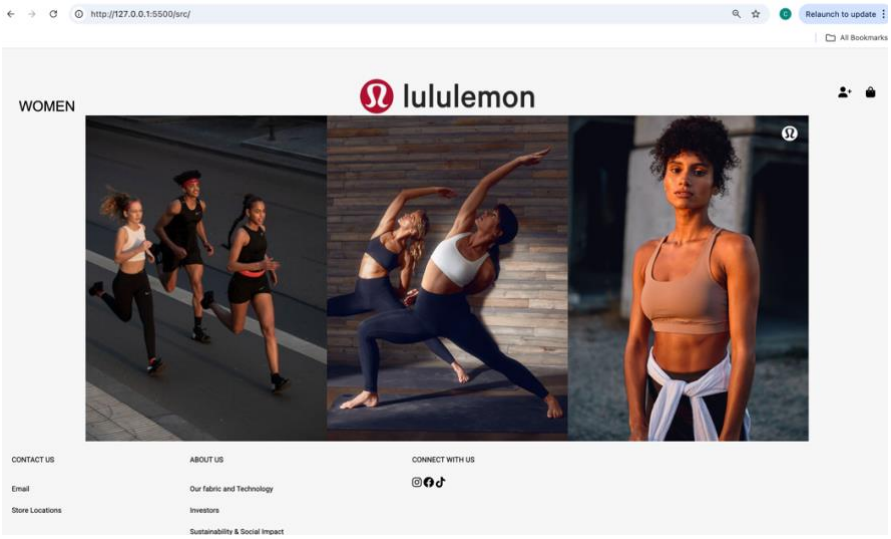
During testing, I encountered a significant bug related to the cart's image update when a user selected a color for a product. Initially, my logic for updating the cart image based on the selected color was not working correctly. The cart displayed the wrong image or no image at all. After reviewing my code, I realized I had overlooked a small detail in the function that was supposed to update the image based on the selected color.

To fix this, I adjusted the function to correctly handle the image change by ensuring the correct image path was linked to the color option selected. Once I corrected this logic, the cart displayed the proper images corresponding to the color choice.

Throughout the testing phase, I also used pen and paper to plan out the structure and logic of my functions, which helped me identify potential issues early on and improve the overall organization of the code.

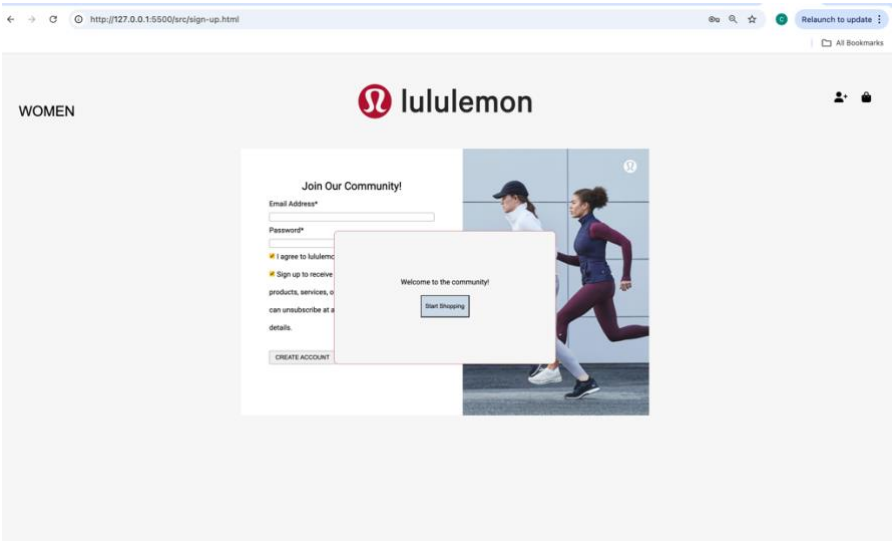
Final Product

- **Screenshots and “how to use”:**



Homepage Overview:

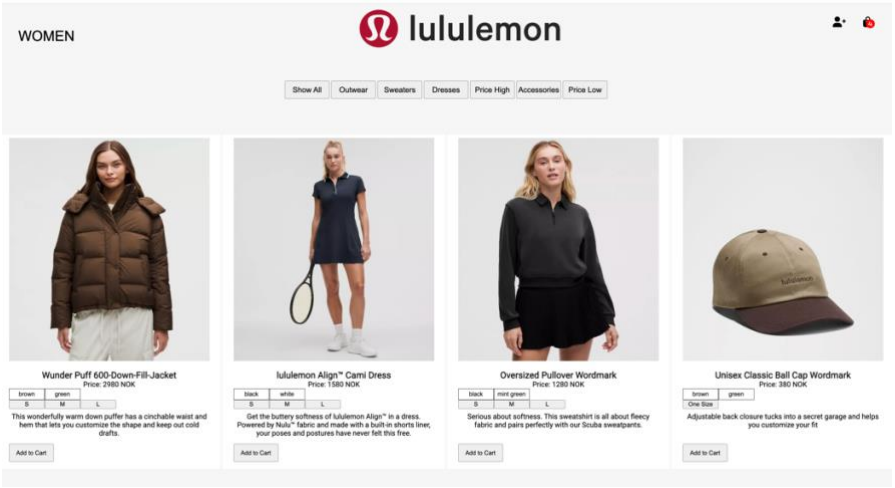
The homepage features a clean design with a header that prominently displays the "Women" section alongside two key icons: "Become a Member" and "Your Cart". Users are encouraged to begin their journey by signing up to become a member.



Join the Community:

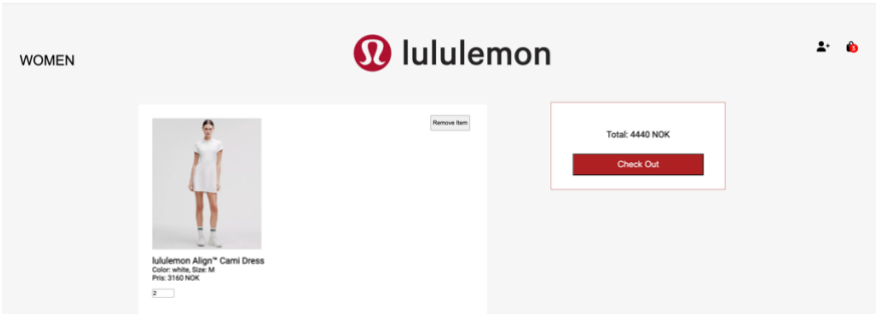
Navigate to the "Become a Member" section by clickin on the icon.

Fill in your email address and create a password to join the Lululemon community. Upon registration, you'll be greeted with welcome message, unlocking the shopping experience.



Explore Products:

Access the product overview page to browse the collection of activewear. Products can be sorted by category (Accessories, Outerwear, Sweaters, Dresses) or by price. Each product offers two color options to choose from, select your products and add them to your cart using the "Add to Cart" button.



Cart Functionality:

Click on the cart icon in the header to view your shopping cart.

The cart displays all selected items, along with options to adjust quantities or remove products entirely. A running total is calculated, providing a clear overview of your purchase before checkout.

Checkout Process:

Finalize your order by clicking the "Checkout" button.

Once the checkout is complete, all cart data will be cleared from localStorage, ensuring a clean slate for the next session.

Reflection

- **What You Learned:** This project provided an opportunity to connect the concepts from lectures to a real-life context. Working on this project helped me focus on mastering the "basics" of web development, as well as becoming more aware of common mistakes. I realized how important and interesting it is to prioritize functionality and the logic behind the code, even though I find visual design a bit motivating.

  One of the most valuable lessons was starting to notice patterns in how to approach problems, structure code, and implement solutions. While I still have a lot to learn, this project gave me a deeper understanding of the foundational skills needed in front-end development. That said, the process was often complex and sometimes frustrating, but the moments of clarity provided a great sense of accomplishment.

- **Future Improvements:** If I had more time, I would like to expand the functionality of the website. My initial prototype included a Women/Men section, and I also wanted to add features like password validation rules to enhance the "Become a Member" form. Additionally, the media queries are not fully optimized due to time constraints, and the hover effects on the buttons are not as polished as I would like. The cart page could also benefit from more attention to its CSS styling. Moving forward, I aim to improve my coding efficiency and explore more advanced concepts to move beyond the basic solutions I used here. I am excited to continue learning and growing in front-end development.

References

- Lectures and workshops at Høyskolen Kristiania, Fall 2024, in Front-End Development were a significant reference for the techniques and methods applied in this project. The concepts and technical solutions presented during the course guided my approach to developing and refining my web development process.
- https://www.w3schools.com/howto/howto_css_cards.asp#gsc.tab=0
- ChatGPT (for daily dialouges and brain storming)
- lululemon® Official Site