Project Report for Web Design & Development

Contents

1 Introduction 1

2 Link to Github Pages 1

3 Installation/Usage 1

4 Design Decisions Made 2

4.1 Look and Feel 2

4.2 Breakpoints 2

5 Performance 2

6 SEO 2

7 Accessibility 2

8 Wireframes 3

9 Reflection on your work 3

1.1 What went well? 3

1.2 What did not go well and if so, what would you do differently? 3

1.3 Any topics not covered in the module? 3

# Introduction

Project’s focus was to create a delivery service website with similar functionality as other concurring websites on the internet. Website features full functionality of a classic internet service website. That is the ability to register, log in, log out, change details and order a product online. All of the functionality is created by javascript files and data files that are hosted locally on the Github Pages.

# Link to Github Pages

<https://martin-strelec.github.io/DeliveryService/>

# Installation/Usage

There is defaultUser set initially. User can then logout and use their own created user account which is done through the registration page. All dummy users, cards and establishments are in the json directory stored in JSON files.

# Design Decisions Made

The whole design of the page is aimed to be as frictionless as possible. User is presented with only necessary decision making which was limited to minimum. This theme is used throughout the whole website. Unfortunately, this comes with a cost of a visual appeal. Although everything is fast and snappy, the website feels a bit “basic and plain”.

## Look and Feel

Bootstrap is used as building block for the whole look and feel of the website. This ensures a uniform look throughout the website. The only change that was made to bootstrap directly was changing the base colours of the main theme. This gave the website a “funky” visual that makes it more standout from the default bootstrap colour palette.

## Breakpoints

There are only two breakpoints used and those are the medium and large included natively in the bootstrap framework. The medium breakpoint was used when switching from device with wide screen to narrower ones such as mobile phones. Personal tests showed no visual artifacts or other difficulties caused by only using one breakpoint. However, on some pages the content was not behaving properly. This was caused mainly due to the amount of information being present on one page. Solution to this was to use the large breakpoint. This led to uniform look of every page on most of the devices.

# Performance

To make the site performance better a series of steps were taken. First and foremost, all of the javascript files are minified making the whole site faster to load. Apart from the performance improvement the minification helped to save space sometimes cutting the whole file size to 80% of its original size. Another performance killer are the images. To make the images load faster a different file type is used that a standard .png or .jpg. Project uses .avif file type which has great compression rate while maintaining almost the same quality as the original file. This file type is only demonstrated on some parts of the project. That is because the project is not so complex neither large.

# SEO

Improving SEO was done by including metadata such as description or keywords in the head section of every page. The only place where these were not used was in the user related pages (userDetails, login, register, cart,).

# Accessibility

Accessibility played a huge part in the whole project. The aim was to make the user do everything naturally without any struggle or hesitation. Tests were conducted before the final submission of the project just to see if the website is as straightforward to use as possible. User naturally knows when he is prompted to do something to proceed to the next step. Elements are dynamically being hidden based on what is user currently experiencing to make the experience more enjoyable.

# Wireframes

The initial wireframe made for this project was done as plain as possible to allow small changes during the development. The core usability features included in the wireframe are present in the final product. Only visual add-ons that make the site look better were added.

# Reflection on your work

## What went well?

Overall, I am happy how the website turned out. There is of course lot more to be done to make the website look more professional and ready for the “real-life”, but serving as a starting ground for web development, it has a lot of potential.

## What did not go well and if so, what would you do differently?

Almost everything. The whole bootstrap was a real pain to deal with sometimes. Combining this with the javascript, where it dynamically creates the bootstrap elements depending on the data fetched from the JSON files, I concluded that this is probably not the right the way to go. When I look back at the source code of the javascript files, they might seem a bit to overcomplicated than they needed to be. This led to refactoring some of the files as many as three times. This is probably coming from not spending enough time researching the whole bootstrap framework and js language. Which is obviously a fault of the individual, not the project itself. Overall it was a nice experience and I will definitely remember to put more effort in the research next time I will be working on a similar project.

## Any topics not covered in the module?

The only thing that was not covered in the module was the javascript. In the end the javascript code was almost half of the whole codebase for this project. It was difficult to do anything functional or pretty with the bootstrap. Difficult, but not impossible. I would appreciate if the module covered more of the javascript stuff. Other than that, the module was pretty solid and everything that was covered during the lectures or the labs was used in this project.