



DMIT1530: Assignment 4

2020/2021

Introduction

Assignment 4 is a single, responsive page built using the Bootstrap framework. All CSS styling will be done using Bootstrap's pre-written classes and no custom or external CSS will be needed.

Screenshots and images are provided in the assets folder. The completed site must demonstrate well-formed and structured HTML markup while utilizing Bootstrap's CSS classes. The layout and styles will best match the screenshots and adjust to different screen sizes using Bootstrap's grid system and predefined breakpoints.

Other Bootstrap components such as a responsive navbar, carousel, icons, cards, and a form will be required. As this is not a customized PSD design, do your best to mimic spacing and text styling by using the utility classes available in the framework.

Instructions

Following the steps of a build methodology:

1. Create a standard framework folder and an HTML page that brings in Bootstrap's CSS and JS via CDN. There will be no external CSS files or folder.
2. Markup the content using semantic and well-structured HTML. Use proper form structure and input types.
3. Use the grid system along with container classes to layout the content to match the screenshots. Starting with the mobile first layout, match the layout for each width using the class infixes for the available breakpoints.
4. Refer to Bootstrap's documentation page for examples of how to structure certain components required in the build. <https://getbootstrap.com/docs/5.0/getting-started/introduction/>
5. Optimize and compress image files.
6. Validate the markup and fix any errors.
7. Run a Google Lighthouse audit for both the mobile and desktop layout. Make any necessary adjustments to improve the performance, accessibility, best practice, and SEO scores. Talk to your instructor if you are unsure about the scoring. ***note: a framework with over 10,000 lines of CSS will unused CSS that could hurt the performance score.*



Things to note regarding styling:

- The header element is 'sticky' and stays at the top of the screen when scrolling.
- The navigation is fully responsive and expands at the large breakpoint.
- The navigation links can link to the different sections on the page, however, that is optional.
- Both the toggle navigation and the carousel require Bootstrap's JavaScript library.
- The typography sizing are the default sizes defined within the framework.
- All of the colours used come from the framework.
- The SVGs come from the icon library within Bootstrap. Increase their size to match the heading size (2em).
- Additional CSS is not needed and should be avoided.

Submission

Zip up your assignment and upload it to moodle.

LATE ASSIGNMENTS WILL NOT BE ACCEPTED!



Marking Guide

Weight:

This assignment is worth 15% of your final mark.

Marking Guide for Assignment 4

Task		Value
Bootstrap Navbar	A navbar component is correctly utilized and matches the example provided. The navbar contains a functional responsive toggle menu that expands to fit horizontally starting at the large breakpoint.	3
Bootstrap Grid System	The layout for all sections uses the mobile-first, 12 column grid system accordingly to Bootstrap's documentation. The container class, row class, and col classes are all used correctly. The content is positioned in the grid columns to best match the screenshots provided.	5
Bootstrap Responsive Layout	The content adjusts and repositions according to the screenshots. This is achieved using the above mentioned grid system along with breakpoint classes.	3
Bootstrap Styling & Utility Classes	Only the classes within the framework are utilized to closely mimic the screenshots provided. The necessary components and utility classes were correctly implemented.	5
Google Lighthouse Score	The build was optimized to score high for performance, best practices, accessibility and SEO according to a Google Lighthouse audit.	5
Deductions	Possible deductions could be not following best practice techniques, validation errors, unoptimized images, not using proper formatting or semantic tags, inappropriate CSS selectors, pages not linking, or spelling mistakes.	-3
Total		21



5 Marks Criteria

Task was completed with the highest of proficiency adhering to best practices and followed subject matter guidelines all tasks were completed to a professional standard.	5
Task was completed with some minor mistakes. Well above average work, shows good understanding of the task and high degree of competence.	4
Satisfactory work. Some features missing or incorrectly implemented. Shows a moderate level of understanding in the task with room for improvement.	3
Below average work. Task was poorly completed. Shows understanding of the task and the requirements to implement but implementation was poorly executed.	2
Some of the task was completed. Showed a lack of understanding in the subject matter and very poorly executed.	1
Not completed.	0

3 Mark Criteria

Proficient. Shows a high degree of competence in completing task.	3
Capable. Above average degree of competence in completing task.	2
Below average. Shows a satisfactory degree of competence in completing task.	1
Task was not completed.	0

1 Mark Criteria

Task completed satisfactorily.	1
Task was not complete.	0

-3 Mark Criteria

Proficient. Shows a high degree of competence in completing task.	0
Capable. Above average degree of competence in completing task.	-1
Below average. Shows a satisfactory degree of competence in completing task.	-2
Task was not completed.	-3