

DMIT 1530: Assignment 4

Introduction

Using the provided screenshots as a reference, you will build a single responsive web page using the Bootstrap front-end framework.

Your completed website must include semantically structured and valid HTML. The layout and styles will best match the screenshots and adjust to different screen sizes using Bootstrap's grid system and predefined breakpoints.

No custom or external scripts and styles will be required; instead, you will use Bootstrap's pre-written classes and components. Bootstrap components such as a responsive navbar, carousel, icons, cards, and a form are required as part of the layout.

Instructions

1. In your HTML document, link to Bootstrap's CSS and JS via CDN. There will be no external CSS files or folder.

Note: You are required to use the latest stable version, which is available via Bootstrap's official documentation.

2. Include Bootstrap's icon library.
3. Optimise and compress to provided image files.
4. Markup the content using semantic and well-structured HTML. Use proper form structure and input types.
5. Use the Bootstrap grid system to lay out the content to best match the screenshots. Starting with the mobile view, match the layout for each width using the class infixes for the available breakpoints.
6. Refer to Bootstrap's documentation page for examples of how to structure certain components required in the build.
7. Validate the markup and fix any errors.
8. Upload your completed website to a live web server. 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.

Note: You must include a screenshot of your Lighthouse report in the root of your framework folder. The address bar must be in the screenshot.

Submission

Push the assignment files to the GitHub Classroom assignment before the due date.

Late assignments will not be accepted.

Marking Guide

This assignment is worth 15% of your final mark.

Marking Guide for Assignment 4		
Task	Description	Value
Bootstrap Navigation	<p>A navbar component is correctly utilised and matches the example provided. It expands at the large breakpoint.</p> <p>The hamburger menu functions properly, without the use of additional or custom JavaScript.</p> <p>The navbar is sticky and remains at the top of the viewport when the user scrolls down the page.</p> <p>When clicked, the links take the user to each section, using on-page anchors (IDs).</p> <p>The footer navigation is properly marked up and styled using Bootstrap's utility classes.</p>	5
Bootstrap Grid System	<p>The website uses Bootstrap's mobile-first, 12-column grid system as per the official documentation.</p> <p>The container class, row class, and col classes are all structured and used correctly.</p> <p>The content is positioned in each column to best match the screenshots provided.</p> <p>Where appropriate, other display classes (ex. .d-flex, .d-block) and their associated utilities are used.</p>	10
Bootstrap Styling & Utility Classes	<p>Only the classes within the framework are utilised to mimic the screenshots provided.</p> <p>The necessary components and utility classes are correctly implemented for colours, typography, icons, etc.</p>	5
Lighthouse Performance Score	<p>When tested, the website performs highly in the performance, SEO, accessibility, and best practices categories.</p> <p>There are no 'easy-to-fix' suggestions in the Opportunities section of the report.</p> <p>The submission includes a screenshot of the Google Lighthouse report. This screenshot includes the address bar, which shows that the website was uploaded to a live server for testing.</p>	3
Deductions	<p>Potential deductions may include not using semantic HTML, not giving each document a unique title, directory structure and file naming errors, required files such as images and libraries missing from the project, pathing errors, or failing to follow best practices for the web.</p> <p>Any work that does not pass W3C Validation without errors or warnings will not receive a mark.</p>	-5
Total		23