Home exam DATA1200 fall 2024

- You are expected to do this home exam in groups of 3 to 5 students
- Create groups on Inspera
- Upload the site as a Zipped file

Assignment:

- Create a website with 4 pages
  - **index**.html should take the OsloMet "MatMod"-page as point of departure and reproduce the content (not design) in HTML & CSS.
  - One page must be "***Accessibility***" — see below
  - One page must be "***GitHub***" — see below
  - One **Activity page** should show an activity, a hobby, sport, interest or similar, and this page may have a different visual profile with colours and lay-out.
- All pages must share a single CSS and have a shared menu, linking all pages
- All pages must share
  - elements of visual design (e.g. colour palette, menu, etc., except "Activity")
  - a similar HTML structure (e.g. use of semantic and sectioning elements), but the 'index.html'-page may have a more complex sectioning structure
- Comment your code
  - A list of contents at the top of the CSS plus some "headings" in the CSS ***may*** be a good idea if it improves readability
  - All sectioning element deserves a very short comment on what it does
  - Classes that effect the lay-out usually deserves a very short comment on what it does
  - The main purpose for the comments should be to help a future developer take over your project and develop it further; for examiners, it helps weed out the most obvious copied-code-without-understanding issues

The entire site will be checked on at least one narrow screen (portrait), one regular wide (16:9) and one ultra-wide screen (21:9) — representing a mobile phone, a laptop, and a desktop. The same HTML + CSS should work well in all three formats! The site should work across at least two of the following, updated browsers: Chrome, Firefox, Safari.

We expect well-structured pages that link to each other through a working menu; that show correct use of standard elements, semantic elements, sectioning elements, selectors and inheritance; and coding that is concise, well structured, consistent, and commented in a way that will assist an imagined developer taking over the site. The site must be consistently universally accessible and follow standard HTML 5 and CSS 3. Please check the Sensors' guide to grading on Canvas. Tables, images, multiple heading levels etc expected.

Index page

The Content Management System for OsloMet.no has been used for 23 years, and it is more HTML 4 than HTML 5. (And bad craftsmanship.) Recreate the page content of "Mathematical Modelling" in plain HTML 5 & CSS 3, even if interactivity (like collapsed text-boxes) is lost. The subjects taught each semester should be presented in a table-like manner. A table-like visual presentation does not mandate the table element, but accessible tables are expected on the site; and if DIVs are used, be advised that the current nesting (number of levels) is sub-optimal. Ignore the JavaScript.

You can choose your own visual design, rather than the OsloMet yellow. You may (and possibly should) re-invent the structure and lay-out of the page! It is the content that is important.

Activity page

This page must contain at least 4 relevant images/ illustrations, several sub-headings, and at least 6 links inside the text/ in the main body. The text does not have to be long. All content may be copy-pasted from a site like UT.no, from one or several pages.

Accessibility-page

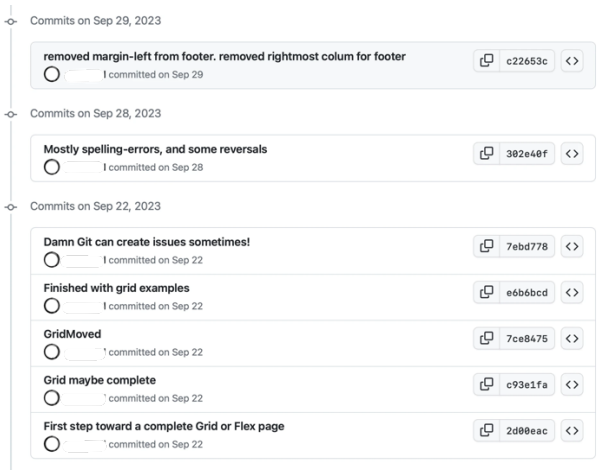
Short presentation of accessibility for your site. Test your site with an automated test. Write a very short text (between 400 and 500 words) about the coding choices you made for universal design beyond what an automated test could tell you. You are recommended to use screenshots from the testing site and of your code.

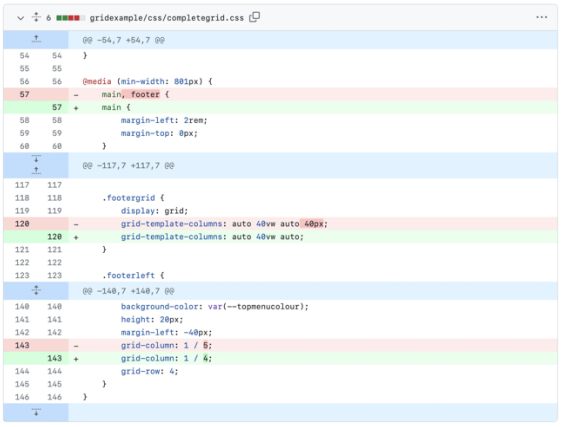
When using automated tests, you still have a responsibility to check the code manually as well. Errors/ non-compliance may appear even if the automated test gives an All clear-verdict.

GitHub-page

Include two images, one showing part of commits history, and one showing a specific change. See examples below. Write a short text (at least 200 words), split in paragraphs with sub-headings about collaboration in repositories like GitHub. Include

- EITHER a short list of benefits of Git, GitHub, OR LiveShare in VS Code;
- OR a short list of issues you had setting up Git-connection in VS Code, OR using GitHub





TOP: An example of a Commits history. Names redacted.
BOTTOM: An example of a specific change in a Commit.

Copying code

You should always cite in a comment where you have code from, if it is from a particular place. For example:
<!-- https://www.w3schools.com/html/html_images_picture.asp --> or
/* https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS_layout/Grids */

However, in most circumstances we shall *not* expect you to cite those two sites, as this is considered "general knowledge". And even if you do, you get full score for using the code correctly.

On the other hand, if you use more special code from sites like CodePen.io, you *should* always cite it. Furthermore, if you use the code as-is (i.e. don't make it your own through modification or application) you may not get any points from it.
/* https://codepen.io/Wandersonsc/pen/RMerRy */
In fact, you may *lose* points if you copy code without citing it or if you seem to not understand how it should be applied. The same applies for AI-generated code; please cite and be aware that it must be modified to be consistent with your own syntax and structure.

Using images

Always have photographer and source. (Both, one or none can be visible, or be hidden in a comment.)
The size of any individual photo should not be bigger than 1 MB.

Using JavaScript

There is a lot of resources and tools out there suggesting code that is almost ten years old. If you add JavaScript and it breaks the site,

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Explanations for grades: After the grades are published, please press the button in Studentweb to indicate that you want an explanation. These are given orally on 7th, 8th, and 9th January 2025. (https://student.oslomet.no/en/explanation)