

# CE154 – Assignment 1

Spring 2025

School of Computer Science and Electronic Engineering - University of Essex

Electronic Submission URL:

<https://www.essex.ac.uk/e-learning/tools/faser/>

## On Plagiarism

The work you submit must be your own. Any material you use, whether it is from textbooks, classmates, the web or any other source must be acknowledged in your work. Also, you are assumed to have read the booklet at [http://www.essex.ac.uk/plagiarism/docs/Plagiarism\\_and\\_how\\_to\\_avoid\\_it.pdf](http://www.essex.ac.uk/plagiarism/docs/Plagiarism_and_how_to_avoid_it.pdf)

*Please also see your student handbook for rules regarding the late submission of assignments*

**OBJECTIVE:** Design a portfolio website for a **photographer, graphic designer, or writer** including an online store.

## SUBMISSION, ASSESSMENT AND RULES

- This is assignment 1 (of 2) for CE154.
- The assignment is to be submitted individually. **This is not a group assignment.**
- Be sure to put your registration number as a comment at the top of all code and other files.
- The assignment must be submitted on FASER in a single zipped archive containing the following subfolders:

CE154/	All html files (.html .php)
CE154/images	All website image files (.gif .jpg)
CE154/css	All css files (.css)
CE154/inc	All common include files (.js .php)
CE154/docs	All supporting documentation (.doc .pdf .jpg .ppt)

**Note:** You are free to use any software you like for this assignment; however, we cannot provide support for packages other than *Notepad++*, *Firefox* and *Web Development tools (Firefox add-on)* on a Windows PC.

## **DESIGN BRIEF**

### **Design a Portfolio Website for a Photographer, Graphic Designer, or Writer Including an Online Store**

An innovative agency dedicated to promoting the work of creative professionals would like to create a portfolio website for each of the clients they manage. The website should include a simple online store that allows users to purchase products related to the client's work (e.g., digital downloads, merchandise, etc.). The agency has asked you to create an example of such a site using a professional of your choice (e.g., a photographer, graphic designer, or writer). The clients they manage are from a wide range of creative fields, so your design must be suitable for showcasing diverse types of work while appealing to stakeholders of the agency.

For the first phase (**Assignment 1**), you will provide the agency with a document containing design research, user research, wireframe designs, and evidence that you have completed early-stage evaluations of the graphic design and HTML/CSS code. You will also provide an HTML mock-up of the website using appropriate images and real navigation headings but with Lorem Ipsum text for content. The website you design should be appropriate for the creative profession you've selected (state the profession in your document).

The website should be coded correctly, with HTML used for structure and CSS for styling. The website must be optimized for a laptop screen of 1080-pixel width, but you may also make it suitable for viewing on a smartphone screen of 480-pixel width without horizontal scrolling. The website should be accessible to users with visual impairments.

**The website should contain at least five pages:**

- Homepage
- About a Photographer, Graphic Designer, or Writer / Biography
- Merchandise Listing (at least 5 items)
- Merchandise Details (including ID, title, description, item type, published date, thumbnail image)
- Basket (edit and remove items)

You may also wish to include additional pages or functionality, including user registration, featured merchandise on the homepage, or a facility for users to leave reviews of the merchandise. The navigation and design should be consistent across all pages.

No backend or payment functionality is required at this stage, i.e., the store does not need to work. It can be demonstrated with hard-coded examples. For this assignment, you can use content (text, images, etc.) from other sources, but you must have the source credited.

#### **Technical Requirements**

For this assignment, you will design a website using HTML, CSS and (possibly) JavaScript only.

**Libraries such as bootstrap and php frameworks are expressly forbidden for Assignment 1.**

## **TASK 1: User requirements and site specification**

Read the design brief above to get a good understanding of the requirements of the client. Search the web for webpages that display **similar information or functions** to offer you inspiration on pages and functionality you might want to include (and also to show what the competition are doing). List these websites and your thoughts in a document called **CE154\_assignment\_1.doc** under the section **Task 1**.

Based on this research you need to specify how the information on the website will be structured. In **CE154\_assignment\_1.doc**, define the sections of content, what they are used for and what name you will give them.

The sections of content must be named appropriately; however, dummy text **MUST** be used in your design to show where text will be added later. For this you can generate “Lorum ipsum” fake Latin text here <https://www.lipsum.com/>.

In addition you need to consider what types of users will access the pages and why. You should create user personas and user stories to define the user experience. You should also create a wireframe prototype page to show the website layout for the device(s) you are designing for.

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## **TASK 2: Website design**

Now that your website specification has been established, the next step is to gather design inspiration. You will search the web for websites related to your chosen profession (such as photographers, graphic designers, or writers) or other websites within a similar creative genre. They should reflect the kind of look and feel that would be appropriate for your selected genre.

In your document **CE154\_assignment\_1.doc**, under the section **Task 2**, you will list the websites you find, along with your thoughts on the design choices they made. These could include aspects like the overall layout, navigation structure, color schemes, typography, using either annotated wireframe layouts or graphical mock-ups. You can create these on paper and scan images to the **CE154\_assignment\_1.doc** or this can be done in PowerPoint and saved as images and imported to **CE154\_assignment\_1.doc**. You must justify why you have designed the page the way you have and how these elements might inform your own design decisions.

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### **TASK 3:    A CSS-based website**

For this task, you will implement your design for the homepage (to be saved as **index.html** in the "root" level folder, i.e., /CE154/) and the inner pages using an external CSS file (called **style.css** and saved in the CSS subfolder). Refer to HTML examples in the labs to get started.

Your design must not scroll horizontally and should be optimised for minimum data transfer.

The pages must take the following aspects into account:

- the correct type of graphics files for the images you want to show
- suitable font types and sizes
- appropriate use of colour and contrast
- functional navigation based on a linked unordered list
- avoid text in graphics
- add suitable alt tags to hyperlinks and images (for users with restricted vision)
- include copyright and updating information the page footer

You may use suitable imagery from the web but you **MUST** credit the source (do this by adding an HTML/CSS comment next to where you add the image). Navigation links should follow the site architecture.

Your HTML and CSS code **MUST** contain comments explaining what the major parts of your code do. The code should also be properly indented and not contain any "junk code" (this is commonly produced by Visual Studio for example). Your design should work for **Firefox (latest version)**.

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### **TASK 4:    Website review**

When you have completed building your CSS-based website from your original design, you now need to do some early-stage evaluations of the design.

#### **4.1 Evaluation with users**

Gather some opinions of potential users of the website. Design a simple questionnaire of at least 3 questions that may include:

- what do they like about the design?
- what's missing that they would like to see?
- what else would they suggest, e.g., particular colours, layout, etc.?

Synthesise your findings and add a short report to **CE154\_assignment\_1.doc** under **Task 4.1**. You may wish to action the findings as an iterative evaluation (if so, write it up as such).

#### 4.2 Automatic evaluation of code against W3C

Test your HTML pages against: [https://validator.w3.org/#validate\\_by\\_upload](https://validator.w3.org/#validate_by_upload)

Test your CSS file against: [https://jigsaw.w3.org/css-validator/#validate\\_by\\_upload](https://jigsaw.w3.org/css-validator/#validate_by_upload)

Provide a short report of your results in **CE154\_assignment\_1.doc** under **Task 4.2**. You may wish to fix any bugs in the code and rerun the evaluation (if so, provide a log of bugs you fixed).

#### 4.3 Self appraisal

Consider how you would like to change your design, what limitations are you facing, what CSS techniques do you need to learn, etc. Be honest with your appraisal of your own work. Include these thoughts in **CE154\_assignment\_1.doc** under **Task 4.3**. Also include the screenshot of the skill tree that you saved from Lab 1.

#### 4.4 Checklist

Finally, include your checklist of requirements for **Assignment 1**, with an accurate reflection of what you have included in your assignment deliverable.

### **MARKING BREAKDOWN** (out of 100%)

#### **Task 1. User requirements and specification: (20%)**

- User requirements captured
- Site appropriately specified

#### **Task 2. Website design: (20%)**

- Suitability of design for the client
  - Navigation
  - Layout
  - Colour and contrast
  - Aesthetics and imagery
- Quality and detail of design mock-ups/wireframes

#### **Task 3. CSS-based website: (40%)**

- Completeness in relation to design
- Functionality (displays correctly/links work/etc)
- Quality of CSS/HTML code
- Choice of files size and type
- Accessibility

#### **Task 4. Website review (20%)**

- Early stage evaluation
- Self evaluation
- Checklist