

Software Developer Course Assessment

Quantitative Assessment Practice

Course Name: Front-end Development

Current Week: (2024/05/13)

Introduction:

The purpose of this assessment is to help us understand how the class is doing in terms of the review material that we have covered during the previous couple of weeks. The only purpose of this assessment is for us to improve our approach to review and ensure that what we're currently doing is an effective strategy. Completion of this assessment is mandatory - if you don't submit a solution, it will be marked as incomplete. If you do submit a solution, it will be marked as complete, as you will receive full marks.

Again, the goal here is to help you all in the best way that we can, so please do be honest when answering the questions related to how long it took, which resources you used, etc. And please ensure that you do your own work – don't just copy off a friend to get it done, earnestly do your best with it. If you can't get it completely working, give us what you have. While it will be graded, the grade will not count against you, it's just a way for us to see where everybody is, and to know which concepts, if any, we, as a class, may be struggling with.

Deadline: You will have until the end of the day on **Saturday May 25, 2024 (4:00pm)** to submit your assessment solutions. Please ensure you answer all the questions outlined in the instructions portion of this document as well in your submission.

Instructions:

You are allowed to complete the assessment problems below in whatever way you can but please answer the following questions/points as part of your submission:

1. How many hours did it take you to complete this assessment? (Please keep try to keep track of how many hours you have spent working on each individual part of this assessment as best you can - an estimation is fine; we just want a rough idea.)
2. What online resources you have used? (My lectures, YouTube, Stack overflow etc.)
3. Did you need to ask any of your friends in solving the problems. (If yes, please mention name of the friend. They must be amongst your class fellows.)
4. Did you need to ask questions to any of your instructors? If so, how many questions did you ask (or how many help sessions did you require)?
5. Rate (subjectively) the difficulty of Making this all! from your own perspective, and whether you feel confident that you can solve a similar but different problem requiring some of the same techniques in the future now that you've completed this one.

Objective:

Practice writing HTML Markup and CSS, Using Media Elements, writing for the Web, and Using Open Archives.

Overview:

You are asked to **create a small automobile educational website**. You will **pick a brand** of car, and **research** this brand online. You will then **create a multimedia website** that uses resources about your chosen brand (e.g., images, audio, and video) from open web archives.

The web is full of both proprietary and open-licensed resources. The former cannot be reused by you: you can't take an image or logo from someone else's site and use it on your own. This is a copyright violation. However, there are also many open resources that you can copy and reuse. Learning how to find and use these correctly is important when building your own web content.

Requirements:

Step 1. Choose a Brand

Pick a brand to research from those listed in izmostock, see:

<https://www.izmostock.com/car-stock-photos-by-brand>

It can be any brand you like. Ideally you should choose a brand that is most common around you, but you are free to also choose something else that you find interesting. You must work on your own brand (i.e., you can't partner with other students in the course). Given the number of car brands in the world, it would be surprising if two students chose the same one.

Step 2. Research on izmostock

Research your chosen model using izmostock website OR any other preferred site. For example, if you were interested in the **2018-chevrolet-volt-premier-5door-hatchback-low-aggressive**, you would begin with the following page:

https://izmostock.photoshelter.com/gallery-image/Chevrolet-Volt-Premier-Hatchback-2018/G0000F4_zkQ2UFFI/i0000iQ7bK2otWV0/C0000le2ObpN.fYg

Learn as much as you can about the model. Take notes to help you with the creation of your website. You may NOT copy the text word-for-word, only use it as background material.

Step 3. Write come contents:

Prepare some real data to put in different sections of the website, remember no copy paste. If you don't want to write anything, you have lorem there.

Step 4. Convert to Markup

Convert your text to HTML and make a website of at least 3 pages. Make use of all appropriate HTML elements <https://developer.mozilla.org/en-US/docs/Web/HTML/Element>. For example, if you use lists

or acronyms, quotes or technical terms, dates, or definitions, etc. you should make use of the associated HTML5 elements.

In your final markup, you should try to use HTML5 semantic elements as much as possible (see <https://developer.mozilla.org/en-US/docs/Web/HTML/Element>), for example

- <meta> tags for document, author, topic details
- <title> for the document's title
- <article>, <header>, <footer> for the structure of your document
- <nav>, for navigation links
- Headings <h1>, <h2>, ...
- Definitions using <dfn>
- Figures using <figure>, <figcaption>
- Lists using , ,
- Paragraphs <p>
- Hyperlinks <a>
- Abbreviations <abbr>
- Quotes and Citations using <q>, <blockquote>, <cite>
- Data and Time using <time>, <data>
- Inline text with , <i>, ,

You will be judged on your knowledge and use of these elements, and how well you have used them to markup your text. You may NOT submit a series of plain text paragraphs with no other elements. Spend some time choosing and implementing your markup.

Step 6. Add Media

Find supporting media resources to help educate the reader on your topic. Media helps tell a story and is one of the secret powers that the web has over other print media.

Here's an example web page from the Globe and Mail newspaper that uses a mix of text and media well:

<https://www.theglobeandmail.com/canada/article-the-last-lighthouse-keeper-why-a-nova-scotian-couple-refused-to-leave/>

In this site you see all the following HTML5, and media being used:

- Text Headings and Paragraphs
- Images with captions
- Audio
- Video, both looping/muted in the background, and also embedded.

Your site doesn't need to be this elaborate, but hopefully you get some ideas to help guide your use of text and media.

You can use any **open licensed media** resource that allows reuse but **may not use copyright materials**. How do you know if something is copyright? Everything is copyright! Unless you are told you can reuse something that you find, assume that you can't. Open licensed materials will be marked as such.

Here are some links to help you find open licensed media:

- <https://support.google.com/websearch/answer/29508?co=GENIE.Platform%3DAndroid&hl=en>
- <https://www.wikihow.com/Find-Creative-Commons-Videos-on-YouTube>
- <https://search.creativecommons.org/>
- <https://unsplash.com/>
- <https://www.flickr.com/creativecommons/>

You are asked to include the following open licensed resources on your page:

- **At least 2 photos – any maximum**
- **At least 1 video (i.e. using the <video> element) or 1 YouTube embed (i.e., using an <iframe>)**
- **1 audio resource (i.e. using the <audio> element) in your page.** If you can't find audio directly related to your topic, get creative. Maybe you can use background sound or include a song from a band that uses the same name.

Use appropriate HTML to include these resources in your site along with the text you have written. You may link to external URLs where applicable (i.e., you don't have to download and use resources if they are publicly hosted). Make sure you do the following:

- All images should have **alt** text included and used captions to describe the image and give credit
- Videos and Audio should include **controls**.
- Use appropriate sizes for all media. You can use a tool like <https://squoosh.app/> to reduce the size of an image that is very big to download.

Step 7. Regarding design & CSS

Try to come up with some nice CSS OR use Bootstrap! Use Flexbox model to align contents. Use an external CSS file and link that same CSS file with all the pages and define all styles in one CSS sheet. **[You many want to make separate CSS for each page – but keep in mind the folder structures]**

Submission:

1. Remember to validate your HTML document through an online validator before submitting
(Remember no red elements/attributes should be in your HTML)
2. Also as mentioned in the class, always give comments in the beginning mentioning your name and assignment details.
3. When you are finished, save all the resources in a folder with your first name followed by underscore and qap1. Example: Alan Smith folder will look like "alan_qap1", zip it and submit it OR upload on github repository and share the link.

Enjoy coding!