Software Developer Course Assessment

Quantitative Assessment Practice -3

**Alex Ewida – Dec.4,2023**

Course Name: Programming with JavaScript

Current Week: (2023/11/20)

## 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 **Tuesday December 05,2023 (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: Your name: Alex Ewida

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.)

Answer 01: On November 22, at 6pm, I watched the mp4 instruction video from Noman. I spent about 2 hours building the index.html page and an app.css file on the VS Code program.

Answer 02: On November 23, At I spend about 2 hours building a app.js file to connect my webpage to the web services: <https://dog.ceo/api/breeds/list/all>

and <https://dog.ceo/api/breed/hound/images/random/3>.

Answer 03: On November 24, I arrived at Keyin college at 10:00am. I worked from 10am to 12:00pm building a top bar with five links and setting a background image for my project. Afterwards, I took a 1 hour lunch break before watching the Session 9 Seminar.

Answer 04: On November 27, at 2:00pm, I built a new background image on Adobe Photoshop by combining some PNG images from google images online. This only took me about 30 minutes to finish.

Answer 05: On November 29, at 10:00am after the first class, I spoke with Noman and he taught me how to add more font styles to VS Code. That only took about 5 minutes to finish.

Answer 06: On November 30 at 7:00pm, I decided to add more text and paragraphs to my webpage. For my index.html, I made an intro container with h2 text and a paragraph above the select breed buttons. Then I wrote the intro-container settings into my app.css file. I also made copyright text in a box at the bottom of the webpage. It took an hour and 45 minutes to finish these today.

1. What online resources you have used? (My lectures, YouTube, Stack overflow etc.)

* November 22, I studied this website: <https://code.visualstudio.com/api/references/vscode-api> and also watched some recordings of our previous classes for about an hour.
* November 23, I watched <https://www.youtube.com/watch?v=S0a7PEOi0do>

And <https://www.youtube.com/watch?v=tNKD0kfel6o>

- November 24, I researched websites: <https://www.royalcanin.com/ca/en_ca>,

And <https://www.akc.org/dog-breeds/>

- November 27, I collected some images from Google.

- November 29, I learned about the <https://fonts.google.com/?sort=alpha> website. With this website, I managed to add more different font styles for my webpage.

- November 30, I researched the <https://www.akc.org/compare-breeds/> website.

1. 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.)

No, I did not need to ask my friends for help while completing this project.

1. 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)?

On November 29, at 10:00am Noman taught me how to add more font styles to VS Code.

1. 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.

Building this webpage was a bit of a challenge, especially the app.js file to connect to the web services. I believe that I learned a lot from this work, and that I could confidently do a similar project in the future. I really enjoyed building this webpage.

## Objective:

Fetching and processing data by making API calls is an all-important skill that web developers need to have expertise of. The main objective of this assignment is to practice and learn the important concept of XMLHttpRequest and Fetch API to make http requests and process the received data. This assignment also tests understanding of DOM programming along with some of the basic JavaScript skills. Also use your muscles of HTML and CSS along with Bootstrap to show case your expertise there.

## Requirements:

The Dog API (<https://dog.ceo/dog-api/documentation/>) is a free web service that uses data from the Stanford Dogs Dataset (<http://vision.stanford.edu/aditya86/ImageNetDogs/>). This dataset contains images and information about 120 breeds of dogs and is used for machine learning and artificial intelligence training.

There are a few endpoints you can use with this API, but here you need to focus on these:

* <https://dog.ceo/api/breeds/list/all> - get a JSON formatted list of all breeds and sub-breeds
* <https://dog.ceo/api/breed/hound/images/random/3> - get a JSON formatted list of image URLs for hounds, returning 3 (we can ask for more or less) In other words the URL works like this: https://dog.ceo/api/breed/{name-of-breed}/random/{number-of-images-to-return}

So specifically, you need to do the following tasks:

1. Create a “validated” and semantically correct web page with an HTML <form>.
2. Create you own CSS, or if preferred use “Bootstrap” to style your page. The webpage should be all responsive by use of Grid or Flex model (whatever you select)
3. Use AJAX techniques to dynamically load all dog breeds into a <select> in the form. Again, its your choice to use either XMLHttpRequest or Fetch API.
4. Users can specify how many images they want to load: 1 to 100.
5. When the user selects a breed we’ll request the JSON list of images
6. Once we get the list of image URLs, we’ll start creating <img> elements in our page to show those dogs
7. Please look the attached video for a real run of the project/qap3. The run of the project is just for showing you core functionality; the UI is all your own world- be innovative and aesthetically pleasant as possible 😊
8. Never hesitate to ask the questions you may have.