HTTP5111 CSS Animation Project

Build a page with interactive and moving elements. For this project, I want you to show off your knowledge of **CSS3 and use transitions and keyframe animations to make an interactive page**. (Although Javascript can be used to trigger things, <u>the bulk of the animated items should be using CSS</u>. In other words, I don't want to see Canvas used for the bulk of the animations because that is JS-based.)

The page can be about anything but make sure that the content and your page elements actually make sense together and **the page should look like it is from an actual website**. In other words, don't just throw a random animation and some content in there.

The following are some ideas where you can use animations or transitions:

- In a form, animate a submit button to shoot a paper airplane and have the text change to "SUBMITTED" when clicked. You can also slide away or hide the form too. (Of course, this should not be the only animated item on the page as that would be too simplistic.)
- Wiggle or move button links subtly when you hover over them.
- Animate the background of your page. (Use wisely so that it's not too busy or headache-causing.)
- Make your background transition colour or change depending on time of day. (Hint: You'll need a combination of CSS and Javascript for this.)
- A simple game of memory.
- Create a game with HTML/CSS/JS with animated movements and/or characters.
- Develop another page for your portfolio site (maybe an Experiments page where you show off your HTML5/CSS3 skills). Even if you create an "Experiments" page for your portfolio, it should still look like it's part of your portfolio site and not random animations in the middle of a blank page.

The above are just some ideas, but you are not limited to these options. Some of the options above are small snippets of animations that can be used within a larger page (e.g. a contact form submit button). **Be creative!** This is a chance for you to let your imagination go wild. Make this project something you'll be proud of and something you'll want to put in your portfolio.

<u>My recommendation so that you can really have an interesting showpiece (and to make sure you demonstrate enough of your knowledge) is to come up with some sort of game.</u>

Although you can use *some* code (minor usage only) as help, make sure you <u>credit the original author</u> and **DO NOT just flat out copy an entire feature/page**. You need to extend anything you use to make it yours. Think about what you want to do first then see how you can put it together. I am allowing you to take inspiration from other peoples' code and you are allowed to use snippets, but I **<u>don't</u>** want an entire clone of someone's page or work with just a minor modification. You need to understand the code and how it works. If in doubt, ask. **<u>I would recommend that if you see something you like, write your own code without looking at the original code</u>**. This would prevent you from just straight copying the existing code. Only if you are stuck (for <u>one</u> part) can you see how the original coder's solution for that case. In other words, you can take inspiration of a concept from someone but the code logic should be your own.

For example, in the previously-mentioned idea of a game of memory, you can use the code for a card flip, but you will have to add your own code to actually make it work as a game and to show appropriate cards. You are here to learn, and if you copy the entire thing, you won't learn much (not to mention it's plagiarism). If you use a plugin, make sure you have permission to use it. And remember, if you are

using someone else's code, don't make it the only thing you use for your animated feature. I want to see some thought put into your work.

Make sure your page works in Chrome and Firefox.

The one thing you should still be aware of is that all <u>important</u> content (text or images) should be available even to screen readers. The animation may not be available, but no content should be hidden from screen reader users. (In other words, don't use "display: none" on **important** content.)

Expected files:

- HTML file (one or more, if you need it)
- <u>ONE</u> CSS file
- any images (to keep it neat, put these in a folder)
- any JS files as needed (jQuery allowed)

You will be marked on the criteria stated below. In Blackboard, the rubric has been scaled down to be out of a total of 1 and 9, respectively, rather than 5 and 25 so that you can see the actual weighted tally.

For the **<u>checkpoint (1%)</u>**:

1. **Idea (5):** What is your idea for your project? Is it a workable idea or is it too basic?

For the **<u>final submission (9%)</u>**:

1. **Concept (5):** How creative is your concept? How much thought went into your work? Is it cohesive?
2. **Syntax (5):** Are your HTML and CSS valid?
3. **Design (5):** How complete is the page? Does it look like a proper page from a website? Is the design presentable, professional, and responsive?
4. **Code Quality (5):** Is all important content always available to the user? Are alt attributes used? Is there only one H1 tag? Are accessibility techniques such as a "Skip to main content" button or an outline on focus used? Does the outline of your page make sense? How easy is it to use the page? Does it follow coding best practices? Is your code commented? Is your code properly indented? Are non-HTML files put in subdirectories? Are naming styles consistent?
5. **Animations/Transforms/Transitions (5):** What is your understanding of animations, transforms, and transitions? Do they work?

DO:

- Use validators for both HTML (https://validator.w3.org) and CSS (https://jigsaw.w3.org/css-validator/). I do check your code in both validators and you will have marks taken off if your code does not validate. (You should actually validate as you go along. Sometimes the issues you have with your styling is due to syntax errors. Validating should catch this.)
- Check your work in Chrome and Firefox.

CAUTION: As usual,

- Do <u>not</u> use inline CSS.
- Do <u>not</u> use <br /> or <hr />.
- Do <u>not</u> use tables for the layout. Tables should only be used for data tables.

- Do <u>not</u> use the border attribute <u>in your HTML</u>. This should be done via CSS only.

<u>**Zip**</u> all HTML/CSS/image/JS files together and <u>name the ZIP file with the course number, assignment name, and your first and last name</u>.

Expected format of file name: **HTTP5111-HTMLProject-JohnDoe.zip**

This is an <u>**individual assignment**</u> and is worth a total 10% of your mark. Please submit this assignment via **Blackboard**. **<u>DO NOT SUBMIT THIS ASSIGNMENT LATE</u>.** If it is incomplete just submit what you have so that it can get marked in time.

<u>Due Dates</u>:

Checkpoint – **November 28, 2023 at 11:59pm**
Final Submission – **December 13, 2023 at 11:59pm**