# CPSC 349 - Web Front-End Engineering

## Exercise 1 - Command-Line Tools and Basic HTML

This exercise may be completed individually, or in a pair with another student. If you work with another student, only one of you needs to submit to Canvas

## What are we trying to accomplish?

If you have been following along with the *Tasks* sections of the Course Website each week, you should have Node.js, NPM, Browsersync, and the command-line version of the Nu Html Checker installed, and you should have created some HTML while reading *How to Build a Website with HTML*.

In this exercise, we will double-check that you have a functioning environment.

## Documenting your results

In order to complete the exercise you will need to write a short report in PDF format documenting the results of each step.

One the first page of your report, include:

- Your name
- Your partner's name (if you worked with a partner)
- The semester, course number, and section number.
- The exercise number (this is Exercise 1)

For each item below:

- Clearly identify which step is being performed.

- Document performing the step itself, including any commands that were run and any code that was written or modified.

- Document the results of the step. Include a written description of the results, as well as screenshots clearly demonstrating its success or failure.

- Analyze and comment on the results. Include references that you consulted, variations that you attempted, issues you encountered, and troubleshooting steps that you needed to perform.

## Steps to complete this exercise

1. Follow through the assigned chapters 3-10 of *How to Build a Website with HTML*, modifying `index.html` as you go. The resulting file should include the following:

   - Inline and block elements

   - Nested elements

   - A tag with a `style` attribute

     *Note*: again, this is not a habit you should adopt long-term, but is fine for this assignment.

   - An `img` tag with a relative path to a JPEG file that you have downloaded locally

   - One or more hyperlinks

   *Note*: while you can certainly copy-and-paste the code snippets (the web version of the tutorials even include a handy *Copy* button), in order to learn as quickly as possible you should type the code in yourself. You may even find a mistake or two in the original text.

2. Run `vnu` from the command-line and demonstrate the HTML created by following the book is not valid.

3. Modify your HTML file to fix all errors and warnings from `vnu`. Show the resulting HTML source and demonstrate that `vnu` emits no messages.

4. Demonstrate Browsersync running and serving the rendered HTML from http://localhost:3000/.

5. Submit your results as a single PDF file uploaded to Canvas by the deadline. If you work with another student, only one submission is required as long as it includes the names of both students.