CS 3053
Homework: Prototype C
Due Thursday 2019.04.04 at 11:59pm.

All homework assignments are individual efforts, and must be completed entirely on your own.

In this assignment you will learn how to develop a basic web site using HTML, CSS, JavaScript, and jQuery. Specifically, you will learn how to write markup and define styles to lay out and populate two pages with data from a simple XML file of information about big screen movies.

Learning about HTML, CSS, JavaScript, and jQuery

The slides from class on Web Design provide a general overview of the capabilities of several common web development tools. However, learning web development is better accomplished through hands-on experience. To get started, spend significant time going through the (really nice!) tutorials about Hypertext Markup Language (HTML) and Cascading Style Sheets (CSS) at w3schools.com. On HTML, read at least from *Introduction* to *Images*, plus *Classes*, *File Paths*, and *Layout*. On CSS, read at least from *Introduction* to *Links*. Also devote a little time to gaining basic familiarity with JavaScript and jQuery, so that you can understand the provided code.

The Implementation Process

In this assignment, you'll write HTML and CSS to complete a skeleton version of a web site that I have provided for you. Go into the `edu.ou.cs.hci.assignment.prototypec` package in `ou-cs-hci`. Inside is a `site` directory containing the `.html`, `.css`, `.js`, `.xml`, and `.jpg` files that make up the web site. Inside several of these files are sections commented as `***TODO`. Those sections are the ones you'll modify and extend to complete the assignment.

You shouldn't need to modify the other files in the `site` directory. If you like, you may increase the size of the sample data set by extending `data.xml` (don't forget the copy in `script.js`) and adding `.jpg` files to the `images` directory. You may also use additional CSS files to help organize your style code. *Regardless, all new code must be yours.* Structure your HTML and CSS clearly, use understandable naming for everything, and document all new code thoroughly.

Implementing the Web Site Specification as a Prototype

The Design C instructions included a specification of a web site for browsing information about a movie collection. In this assignment, you will implement your Design C mockups as a horizontal prototype. All necessary interactive functionality is implemented for you in the `script.js` file.

I recommend that you work in the following order on the parts commented with `***TODO`:

- `style.css` — incrementally modify and add to the existing styles as you work on the HTML
- `main.html: layout` — read about layout options, then layout the parts of the main page
- `main.html: banner` — style and layout the banner at the top
- `main.html: footer` — style and layout the banner at the bottom
- `main.html: navbar` — style and layout the navbar of external links (keep it simple!)
- `script.js: buildItemSummary(), buildItemDetails(), insertAccordion(), insertFilter()` — tailor generation of the accordion item HTML for each movie
- `main.html: accordion` — style and layout the accordion itself (around its items)
- `main.html: sidebar` — style and layout the sidebar (around the existing input controls)
- `0003.html` — copy over your banner/footer/navbar code, then add code for that movie

You only need to implement the one info page (`0003.html`). Make sure that a user can readily perform the interaction sequence that you designed for the user task in your Design C mockups.

Remember, the goal at this stage of the design process is to **prototype** the components, layout, and shallow interactivity of your wireframe mockups. Reproduce the style of your design as best you can, but with relatively modest time and effort.

Turning It In

Turn in a complete, cleaned, renamed, zipped **COPY** of your `PrototypeC` directory:

- Take representative screenshots of your `main.html` and `0003.html` pages in your browser.
- Put the screenshots in the `Results` directory as `main.png` and `info.png` (JPEGs okay).
- Go into the `ou-cs-hci` directory.
  - Make sure it contains all of the modifications and additions that you wish to submit.
  - Clean up any leftovers that you don't wish to submit.
  - There's no Gradle usage this time, but do the usual cleanup if you ran it for some reason.
- Append your 4x4 to the `PrototypeC` directory; mine would be `PrototypeC-weav8417`.
- Zip your entire renamed `PrototypeC` directory.
- Submit your zip file to the Homework - Prototype C assignment in Canvas.

To score the assignment, we'll be looking at how many elements in your refined design appear as components in your prototype, how well the prototype reflects the design's *overall* layout and *general* style, how readily the prototype supports the individual steps in the interaction sequence and the user task overall, and how clearly your code is organized and documented. The maximum score is 20 out of 20.