Homework 01: Warm-up Web Technologies
Build a Baby Interactive Website with HTML5, CSS, SVG, jQuery

Out: Aug 25th 2022
Due: Sep 6th @11:59pm

1. Overview

By the end of this individual project, you:
- will have either learned or refreshed certain web programming skills, including HTML, CSS, JavaScript, jQuery. These are the basic building blocks behind using D3.

- will have practiced certain basic principles of visual design, such as color schemes and contrast, and the visual salience of various visual elements.

- will have practiced your SVG skills, and learned how to display graphical data on the web. SVG is the last building block you'll need for D3.

- will have set up the basic web framework that you will use to test and deliver future assignments.

Note: It is also possible to use D3 with js frameworks like React.js or Angular.js. However, for the purpose of this course, please abstain from using other technologies than the basic building blocks. Integration with such frameworks is often cumbersome and would place an undue burden on future teammates for the final project.

Note 2: Please also stay away from other web-content development frameworks and libraries than the ones stated in the bullet list above, because frameworks and libraries tend to hide the nitty-gritty detail of the basic building blocks. We are not looking for pretty, nimble, or quickly-developed websites; we are trying, literally, to make sure you understand the basic building blocks of web-programming. If the assignment is too easy for you and you are already comfortable with javascript and node.js, then please go

ahead and try to replicate for your website the UIC-themed template provided by Prof. Eriksson on github: https://github.com/bitslab/jakob_webpage

To encourage you to start early, we have already asked you to complete a set of short tutorials on HTML, CSS, JavaScript and jQuery. If you haven't complied, please do so right away.

Collaboration is not allowed on this project. However, you are encouraged to post questions and answer any questions related to web programming using the Piazza account for the course. Remember to tag the post as "HW01". If you get stuck at any point either in a tutorial or in your solution, by all means post---you have nothing to lose. Correct and helpful answers to questions posted by classmates will get the poster extra credit. Remember that you can always post anonymously to the class, if you so wish.

2. Build a basic website

If you are not familiar with web technologies, start by completing the tutorials linked from the course syllabus. Please start early, the tutorials require a few hours to complete; on the good side, although the tutorials state that completing them will take 1-4 hours, it assumes you don't know any programming (such as what a loop is, or a conditional statement)---you'll be a lot faster than that. The other good news is, the tutorials are a lot of fun, and by the time you are done, you will also more or less have a solution to the first part of the assignment.

For this assignment, you need to create a basic interactive website about yourself. The website must use HTML5, CSS, JavaScript, jQuery, and SVG as follows:
● Must include a picture of yourself
● Must include at least 2 paragraphs about yourself
● Must include at least 3 different pages, styled uniformly
● One of these pages must give credit to *all* the sources you have used to build the website. For jQuery etc, you may say something like this:
  This project was built using several Open Source components. The source code of these open source components along with license information can be found below. We acknowledge and are grateful to these developers for their contributions to the open source community.
  Project: jQuery
  License: MIT and jQuery License

- One of these pages needs to include a data-driven visualization image that you found on the web and that you particularly like (feel free to browse through bloomberg.com, nytimes.com, fivethirtyeight.com, nasa.gov), along with a one paragraph explanation of why you like it
- Must use CSS to style the pages, with specific styles for at least 5 elements
- Must include some graphical menu with buttons to navigate the website
- One of the pages must include an SVG canvas showing at the same time three animated (moving in time) and colored geometric shapes
- Must allow the user to click on the animated shapes and in response perform some action on the shapes (disappear them, freeze/unpause them etc).

Throughout the above, your solution needs to respect the visual perception and attention principles we discuss during the first two weeks of class. (e.g., organization on the page and use of visual elements to support scanning, color and motion etc.). The UIC template demonstrated in the cs529 website is not a bad start in terms of color schemes.

You may not use any other frameworks than the ones described above.

UIC students can set up their own websites by going to people.uic.edu and following the instructions there. You may upload files with SFTP.

If you get stuck at any point, please ask for help on Piazza.

Submission: Under Piazza, you will post a link to your website. Please submit a link to your solution on the Piazza forum for the class.

Grading Rubric:

5	5	20	10	10	10	10	15	15
Picture of yourself	2 paragraphs about yourself	3 pages styles uniformly	Credits	Visualization image and critique	CSS styling for at least 5 elements	Menu with buttons	SVG canvas with 3 animated shapes	Animated shapes interactions

Good luck, and have fun!