Web Fundamentals: HTML (including DOM), CSS, Javascript, and SVG
Programming Assignment 2 (3 points)

Submission Due Date: April 9, Monday, 11:59pm
(**Required** to demo to TA/Tutor in order to receive *any* credit for this assignment)
Demo Date: Monday, April 9, 2-4pm, 5-6pm (Location + Additional Hours will be announced on Canvas)

Submit the following 4 files on canvas:

1. **HTML** (.5 point) : Create a file titled "AmazingExample.html" that displays the contents as shown in enclosed pdf file "AmazingExample.pdf".
   Please note that this example is same as Figure 3.1 on page 27 of the book with the following differences: (i) "chills" is in italics, (ii) "Generate a visual representation." is in boldface. (iii) Add a clickable weblink at the end that takes you to the Scott Murray's Book website. In addition, your file **must** include the DOM including the following elements: html, head, body, title.

2. **CSS**: (.5 point) Extend the above file by creating a new file titled "AmazingExampleCSS.html" that displays the contents as shown in enclosed pdf file "AmazingExampleCC.pdf".
   Please note that this page has exactly the same content as the previous one but with the following style changes: (i) The text following the title has the appearance as shown on Page 33 with red background, bold text, large font size, and white text, (ii) The text following the three bullets starting with "It achieves…" is in blue while the three numbered items are highlighted as shown on Page 35.

3. **Javascript** (1 point): Create a file titled "fruit.html" that displays the contents as shown in enclosed pdf file "fruit.pdf".
   Use the array of fruit objects created on Page 39. Create a page that displays "12 grape", "98 kiwi" and "0 banana" each in a separate line with grape colored as red, kiwi colored as brown, and banana colored as yellow. *You must use Javascript code with a for loop.* You may have to use a background color to show the yellow banana. (Hint: you may need to use innerHTML command described in this handout earlier to output from Javascript to HTML. In addition, adding the color may be a bit tricky (or explore/experiment)! Do not sweat too much and ask for help if you get stuck after outputting the text but without the colors.)

4. **SVG** (1 point**):** Create a page that displays Figures 3.21, 3.22, 3.24, and 3.26. Submit the file titled as "Circles.html". The code is essentially given in the book.

Reminder: You must use the online method (described in Handout 1) to directly link to D3 by inserting the following command as follows:
<script type="text/javascript" src=https://d3js.org/d3.v4.min.js></script>
No credit will be provided unless this instruction is followed.

You are encouraged to help your peers to complete this assignment.

Recommended Reading Assignment (no submission required)

1. Read Chapter 3 of the book (except for pages 26-28 on Developer Tools and 29-30 on Rendering which will be discussed next week. Pages 40-41 on Json/geoJson will be covered later).
2. www.w3schools.com
3. https://developer.mozilla.org/en-US

Where/When/Who to Demo

Tutors: Karthik Balakrishnan, Christopher Bui, Janesh Chhabra
Tutor Hours and Locations: Starting Monday, April 9, check Canvas Announcements