

Advanced Web Development and Web Scraping
Fall 2018
Assignment #4 – Web Frameworks

1. The jQuery, Bootstrap4, and AngularJS tutorials on w3schools are great references for learning more about these frameworks. However for this assignment the following tutorials are the most relevant:
 - a. jQuery
 - i. https://www.w3schools.com/jquery/jquery_selectors.asp
 - ii. https://www.w3schools.com/jquery/jquery_css.asp
 - iii. https://www.w3schools.com/jquery/jquery_dom_set.asp (top only)
 - iv. https://www.w3schools.com/jquery/html_attr.asp
 - b. Bootstrap4
 - i. https://www.w3schools.com/bootstrap4/bootstrap_grid_basic.asp
 - ii. https://www.w3schools.com/bootstrap4/bootstrap_buttons.asp
 - c. AngularJS (coming soon)
2. Add **jQuery** statements to the `$(document).ready()` function in the `links.html` page to do the following:
 - a. Change the color of the h1 header to red (or another color)
 - b. When the mouse enters (*mouseenter* event) a link element (an `<a>` tag), the web address is displayed in the div with id = "url" and the display of this div is set to "block"; when the mouse moves away from a link (*mouseout* event), the div with "url" is hidden. Note that the *attr* method ([\(\(https://www.w3schools.com/jquery/html_attr.asp\)](https://www.w3schools.com/jquery/html_attr.asp) will need to be used to change the *href* attribute
3. Use **Bootstrap** and the appropriate *col-sm-** attributes to create a page with 3 rows that consist of 2, 3, and 1 columns (see screenshot on next page). Each column contains a button with a "btn btn-danger" style. Using **jQuery**, clicking on the button will change its style to "btn btn-success", and clicking the button again will change it back to "btn btn-danger". In order to do this, the following jQuery functions will be useful:
 - a. `hasClass("class")` – returns *true* if the element has the specified class; otherwise returns false
 - b. `addClass("class")` – adds the specified class to the element

- c. `removeClass("class")` – removes the specified class from the element



(after clicking on the middle button)



- 4. Use **AngularJS** ... (coming soon)