# HW 4 – JavaScript & jQuery

Your goal for this homework is to create a to-do list out of HTML, CSS, and JavaScript/jQuery. This assignment will give you practice manipulating the DOM with JavaScript and jQuery.

## Requirements (the things you’ll be graded on)

1. (1 point) User sees labeled ‘to-do’ and ‘completed items’ lists, which are empty upon page load. The lists are visually distinct from each other.
2. (3 points) User can add one ‘to-do’ item at a time using a text input field and an ‘add to list’ button.
3. (1 point) Each newly-added ‘to-do’ item appears at the top of the ‘to-do’ list (not the bottom).
4. (4 points total) User can click a button within each ‘to-do’ item to mark it as complete, at which point:
   1. (2 point) The ‘to-do’ item disappears from the ‘to-do’ list
   2. (1 point) The ‘to-do’ item appears at the top of the ‘completed items’ list.
   3. (1 point) Items on the ‘completed items’ list should be styled differently than those on the ‘to-do’ list as an additional visual indication of their completion.
5. (3 points total) User can click a button within each ‘complete’ item to ‘unmark’ it as complete, at which point:
   1. (2 point) The ‘complete’ item disappears from the ‘completed items’ list.
   2. (1 point) The ‘complete’ item appears at the top of the ‘to-do’ list with the same styling as the other ‘to-do’ list items.
6. Items on each list remain there until the user marks or ‘unmarks’ them.
7. (1 point) Your site has a title and intuitive labeling or instructions on how to use it.
8. (4 points) You can use only jQuery and JavaScript – no additional plugins/libraries.
9. (1 point) Your JS and CSS code is separate from your HTML (i.e., there should be no inline CSS styling or JavaScript within your HTML file).
10. (1 point) All of your JavaScript is commented appropriately.
11. (1 point) Your code is clean and concise (minimal repetition and unused code)

## Bonus (Choose ONE of the following – of course, you can always do more if you want, but you will only get up to 4 points extra credit)

1. (4 points) TOO MANY TO-DOs
   1. Allow the user to create multiple ‘to-do’ lists and switch back-and-forth between them.
   2. Each ‘to-do’ list should have the same functionality as the original requirements above, including its own ‘completed items’ list.
   3. Limit the user to 10 ‘to-do’ lists.
2. (4 points) PURE JS
   1. Create a second version of your original code from above only using pure JavaScript (i.e., no jQuery).
3. (4 points) ANIMATIONS
   1. Use jQuery to animate when a user adds a new item to the ‘to-do’ list.
   2. Use jQuery to animate item completion from requirement #2 above.
   3. Allow the user to rearrange items.
   4. You can use plugins for items a-c above.

## Tip

* Your web page doesn’t have to be beautiful, but it needs to be comprehensible. You are welcome to use any CSS framework to help you with styling.
* Try to encapsulate your code’s functionality as much as possible. This means create separate functions and decoupling functionality when possible.

## Submission

* Please create a new branch called ‘hw4’ that contains all of your files, then create a pull request on GitHub.
* If you’re having trouble with GitHub, please let one of us know.