



## Assignment 3: JavaScript library using JavaScript Libraries (30%)

**Due: June 20, 2017**

For this assignment you will need to produce a fully functional JavaScript library that will be able to demonstrate the following capabilities

- 1) Uses JQuery UI (<https://jqueryui.com/>) in addition to HTML and CSS for a user interface
- 2) User interface should incorporate animation and/or transitions.
- 3) Users should be able to enter/edit/delete information that can be store locally.
- 4) The application should use google visualization or D3.js to visualize data (charts. Graphs etc).
- 5) Demonstrates the usage of JavaScript custom objects, prototypal inheritance and JSON
- 6) Extends a JavaScript object by adding a custom method to that object.

### Requirements

1. Package your HTML and JavaScript code as a zip file and submit on D2L dropbox for assignment 3.

### Evaluation

This assessment is graded out of 30 points and will be evaluated using the following rubric.

Assessments that are not acceptable or not received will receive a grade of zero.

Criteria	Does Not Meet Expectations	Partially Meets Expectations	Meets Expectations	Max Points
<b>Uses JQuery UI, HTML and CSS for user interface</b>	Does not use JQuery UI and CSS for Interface (0 points)	Uses only HTML and CSS for user interface but does not use JQuery UI (2 points)	Uses JQuery UI and HTML with CSS for User interface (5 points)	5
<b>Information entered by user is saved and can be retrieved later</b>	Information entered by user cannot be saved and retrieved later on (0 points)	Information entered by user is saved but does not use HTML5 local storage. (3 points)	Information entered by users is saved using HTML5 local storage and can be retrieved after the browser has been closed and restarted. (5 points)	5

Criteria	Does Not Meet Expectations	Partially Meets Expectations	Meets Expectations	Max Points
<b>User interface incorporates animation and transition</b>	No animation or transition is incorporated (0 points)	Only one of animation or transition has been implemented (3 points)	Both animation and transition has been implemented (5 points)	5
<b>Uses google visualization or D3.js for charts/graphs to visually represent data entered by user</b>	Does not use google visualization or D3.js to visually represent the data entered by user (0 points)	Uses google visualization or d3.js to show visualization but does not visualize data entered by user (3 points)	Uses google visualization or D3.js for charts/graphs to visually represent data entered by user (5 points)	5
<b>Demonstrates the usage of javaScript custom objects, prototypal inheritance and JSON</b>	Does not demonstrate the usage of javaScript custom objects, prototypal inheritance and JSON. (0 points)	Demonstrates the usage of only one of the following 1) javaScript custom objects 2) Prototypal inheritance 3) JSON. (3 points)	Demonstrates the usage of javaScript custom objects, prototypal inheritance and JSON (5 points)	5
<b>Extends a JavaScript object by adding a custom method to that object</b>	Does not extend a JavaScript object by adding a custom method to that object (0 points)	Extends a JavaScript object by adding a custom method to that object but does not use the new method in the JavaScript code. (3 points)	Extends a JavaScript object by adding a custom method to that object and uses the new method in the javaScript application. (5 points)	5