HW Assignment: DOM and Events

Submit Assignment

Due Feb 11 by 11:59pm   **Points** 10   **Submitting** a file upload   **File Types** zip

For this assignment you should submit a single zip file that contains the following two files:

- index.html
- script.js

index.html should be a skeleton HTML page. So it should have the following tags:

- doctype
- html
- head
- meta
- title
- body
- script

If you were to open index.html without including the associated JavaScript it must be entirely blank.

You should then use JavaScript to create all of the content of this page and append it to the body of the page. That content should include:

- A 4x4 table
  - The top row should be a header row with header cells
  - The 4 header cells, from left to right should say "Header 1", "Header 2" ... "Header 4
  - The non header cells should contain their position. The upper left cell should contain the text "1, 1", the cell to its right "2, 1", the cell below it "1, 2" and so on.
- 4 directional buttons (up, down, left right)
- A button labeled "Mark Cell"

When the page is loaded the upper left, non-header cell of the table should be 'selected'. This is denoted by it having a thicker border than the other cells. If you push the directional buttons other cells should be selected instead. So if you press the right button, cell 1,1 should no longer be selected and 2,1 should be selected instead.

If you are already on the top row and hit 'up' nothing should happen (you should not be able to move into the header cells). Likewise if you are all the way right and hit right or all the way at the bottom and hit down.

Hitting the "Mark Cell" button should permanently change the background of the selected cell to yellow. This should persist even after other cells are selected or marked.

Suggestion: If you are having a lot of trouble getting the page populated the way you want using JavaScript, just manually make the HTML so that you can continue to work on the rest of the assignment involving selecting and marking cells.

Note: When generating content for the page you will not get credit for simply using the innerHTML property of the body element to parse a string of HTML content. The purpose is to use the process of creating and appending element nodes to the document.

Some Rubric (6)

Criteria	Ratings		Pts
Files could be opened correctly	1.0 pts Full Marks	0.0 pts No Marks	1.0 pts
html file *index.html should be a skeleton HTML page. It should have the following tags: doctype; html; head; meta; title; body; script*	1.0 pts Full Marks	0.0 pts No Marks	1.0 pts
html file *HTML doesn't have the content of the page*	2.0 pts Full Marks	0.0 pts No Marks	2.0 pts
The form: A 4x4 table *• The top row should be a header row with header cells ---- 0.25 point • The 4 header cells, from left to right should say "Header 1", "Header 2" ... "Header 4 ---- 0.25 point • The non header cells should contain their position. The upper left cell should contain the text "1, 1", the cell to its right "2, 1", the cell below it "1, 2" and so on ---- 0.25 point • When the page is loaded the upper left, non-header cell of the table should be 'selected'. This is denoted by it having a thicker border than the other cells ---- 0.25 point*	1.0 pts Full Marks	0.0 pts No Marks	1.0 pts
the form: 4 directional buttons (up, down, left right) *• 'selected' section moves with the buttons pushing ---- 0.5 point each (2 points in total) • If you are already on the top row and hit 'up' nothing should happen (you should not be able to move into the header cells). Likewise if you are all the way right and hit right or all the way at the bottom and hit down ---- 0.5 point each (2 points in total)*	4.0 pts Full Marks	0.0 pts No Marks	4.0 pts
The form: A button labeled "Mark Cell" *• Hitting the "Mark Cell" button should permanently change the background of the selected cell to yellow ---- 0.5 point • This should persist even after other cells are selected or marked ---- 0.5 point*	1.0 pts Full Marks	0.0 pts No Marks	1.0 pts
			Total Points: 10.0