## CPSC1520 - JavaScript 3 Exercise: Events! Functions! JS Resources!

#### Introduction

Events in JavaScript are the backbone to getting input from the user and making pages reactive. In class we've learned about how to add event listeners (and handlers), how to use the event object, how to prevent default event actions from happening and a whole bunch more.

In this exercise we're going to use this knowledge to keep our "More JavaScript Resources" page open and make it more user friendly by highlighting links as our users hover over them.

#### **Events Exercise**

Exercise Step 1 – Create Highlight the links when you have your mouse over them.

- 1. Link your JavaScript file.
- 2. Select the div list-group element of the javascript resources (not the list item).
- 3. Add an event listener on element selected in the previous step that will listen to the mouseover event. Ensure that you're passing in the event object to the event handler function.
- 4. Use console.log to print out the "event.target" to see the link list item elements are the event.target returned
- 5. On the event.target use the method "classList.add" to add the class named "active".
  - a. When you only highlight the first link item you should see something like this.

# **More Javascript Resources**

Awesome Javascript the github repo.
Dan's Javascript Playlist - on learning oreilly.
React a library we'll use in the future.
A graph to compare JS frameworks overtime

https://github.com/sorrycc/awesome-javascript

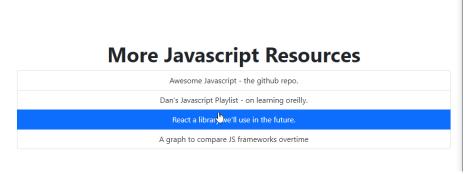
## Exercise Step 2 – Remove the Highlight on the links when you move your mouse away

1. You see an issue with your application, you only want to highlight the current link but you see that all links get highlighted when you go down the list and hover over the links. You need to fix this (probably with another event listener of mouseout)

a. It looks a bit like the following:



- 2. Add another event listener on the div list group selected in the first step (the last section) that will listen to mouseout events.
- 3. In the event handler, on the event.target use the method "classList.remove" to remove the class named "active". This will remove the class when you move away from a link.
  - a. When you **test the third link** it should now look something like this.



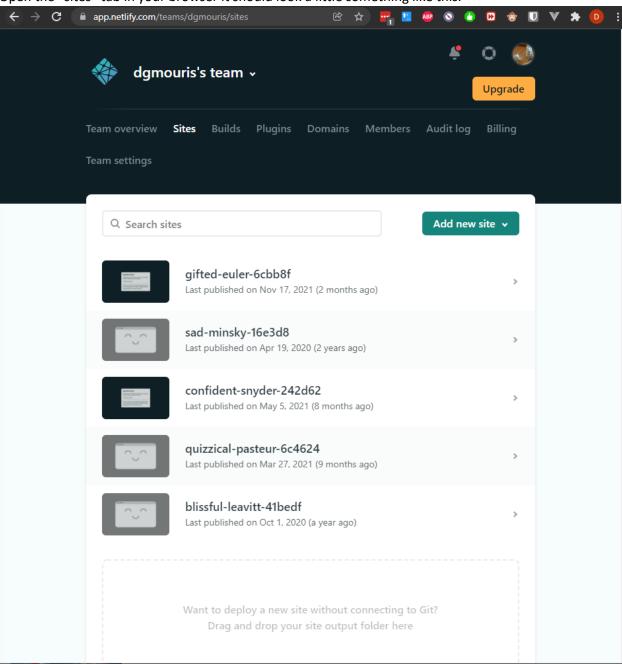
#### Exercise Step 3 – Open links in a new tab

- 1. Note that all of these are links, when you click a link currently it just navigates away from the page. We need to add another event listener so that opens the link in a new tab.
- 2. On the **list element** add an event listener that will listen to the "click" event.
- 3. Use the preventDefault function on the event object to prevent the page from navigating to the new page.
- 4. On the event.target get the attribute href (either directly with .href or with the "getAttribute" function on the target) print out to the console so you know that your getting the link value correctly and you're not navigating away from the page.
- 5. Use the function "window.open" and pass in the link url as a parameter (you got this on the last step).

reference: https://developer.mozilla.org/en-US/docs/Web/API/Window/open

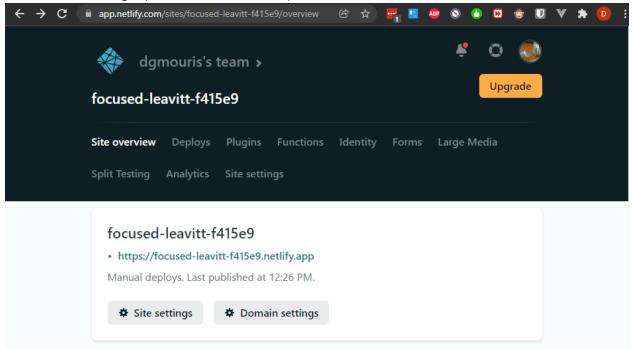
## Exercise Step 4 – upload your site to Netlify

- 1. Sign in (or signup if you don't have an account) to <a href="https://netlify.com/">https://netlify.com/</a>
- 2. Open the "sites" tab in your browser it should look a little something like this.

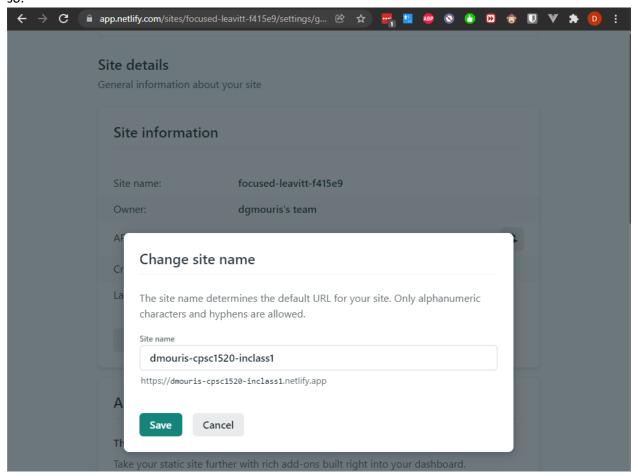


3. Drag and Drop the folder that your files are in into Netlify.

4. Click on "Site Settings" (the link is shown below)



5. Under site details change the site name to be "<your-nait-username>-lab-03" like so.



## Grading

I'll give full marks if:

- The name of your Netlify app is renamed to your name.
- You didn't change the html.
- List element is selected Event.target is used, other janky ways will not be accepted.
- The one single link is highlighted when I mouse over it.
- When I click any of the links it will open a new tab.

When I open your netlify project it should look like this.



If you don't follow the instructions you'll get a zero. There are no marks in between.