CSI 3140 – Laboratory 6

JavaScript & DOM, part I

Element tracking

A browser's DOM is a tree of elements that can be modified programmatically and on which events can be added. The goal of this exercise is to create the code that will visually display in a given page the element of the tree over which the mouse is currently. The target browsers are Firefox and Chrome.

First, fetch a web page from somewhere, and save it locally. I suggest you start with a simple page, such as
http://www.site.uottawa.ca/~gvj/Courses/CSI3140/lectures/index.html

Prepare a CSS file that you will use to show emphasize on elements (e.g. by coloring the background etc., be creative!)

You will then write the code JavaScript to track the current element under the mouse cursor and show it. The html file will be modified to include and call you script (and include you CSS), but no other modification to the file should be done.

Question 1

Use event listeners that work as *target listener* to implement this functionality. Be careful to properly restore the state of the element when the mouse leaves it (that is, the element should be back to its initial state).

Question 2

Same question, but this time using a *single* listener, working in bubbling mode. Then make it work in *capturing* mode. Why would you use one or the other?

Note: you can reuse the code of the object you have created Lab 5 – question 5.