

# Applied Computer Science

ACS-2909-050  
Internet Programming

Fall 2018

## Assignment 2

Due Date: Oct 24th, 2018 11:59 pm

Total Marks: 22

### Motification

The goal of this assignment is to give more exposure to events and changing position of elements, and working with the canvas object.

1. (10 marks) We want to create a page that allows a user to create boxes randomly within a large container. Each box that is created within the container should be draggable within the container. The box **SHOULD NOT** go outside of the container; i.e. if a box is dragged to the edges, it should not go past the edge of the container.
- Create HTML that has a *div* element with a width of 600px, a height of 600px and a black border around it. Create a *button* element that has an *id* of "createBoxes" and a text label of "Create Box".
- When you click the button, create a *div* element randomly positioned within the container with a height of 40px and a width of 40px and a border with a color of #00FF00.
- These created *div* elements should be clicked and dragged around the container. You should use the *mousemove* event rather than the *drag/drop* events.

## Assignment 2 (cont'd)

- When the *divs* are dragged to the edge of the container, they should stop dragging so that they are not outside of the boxes. I.e., No part of the *div* elements should end up outside of the main container
- 2) (12 marks) We want to draw various objects onto the Canvas object. Whenever a user clicks on the *canvas* object, we want to display a floating form. This form should allow the user to enter in details about the shape to draw, and once they click the 'ok' button, draw a shape on the canvas, at the position clicked, with the details entered in the form.
- Create a *canvas* object with a height and width of 600px.
  - Whenever you click on the *canvas*, a floating *div* should appear
  - This floating *div* should contain a form with one label and text input (for height/width or radius), a *select* element with the options of "Circle" and "Square" and a *button* element with a text content of "Ok"
  - When the "Ok" button is clicked, the selected shape should be created, with the height/width or the radius of the input, with the center of the shape at the location of where the user initially clicked.

## Hand In Instructions:

Zip all files into a single archive named *StudentNumber\_Assignment2.zip*. Submit the zip file to Nicole Van Hove at [vanhove-n@webmail.uwinnipeg.ca](mailto:vanhove-n@webmail.uwinnipeg.ca).