

**Assignment #3**

BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

School of Computing and Academic Studies

Due: Sat Nov 21, 2015 at 11:59 pm

Your third assignment is to develop an animated canvas application. This assignment will be done in pairs of two individuals. Partners will be selected randomly by your lab instructor.

---

## DIRECTIONS

---

The HTML5 `<canvas>` element is used to dynamically draw graphics with JavaScript. It is merely a container for graphics. You must use JavaScript to actually draw the graphics. You can draw lines, paths, rectangles, arcs, and other shapes. In addition, you can also add text, images and colors to these shapes in a variety of ways. In this assignment, you shall draw a simple home that appears to be three-dimensional (3D) and resembles the picture on the right side.

Your solution should not be exactly as the picture shown. Be creative and come up with a different drawing. You must, however, *animate the smoke* that is billowing out of the chimney.



NOTE: It is NOT intended here that the 3D drawing of your house should be rotated. All that is meant by 3D is that your house should appear to have depth.

---

## REQUIREMENTS

---

- Your solution must be based on the HTML5 *canvas* control
- The size of your canvas must be 300px by 300px
- The house in your canvas must appear to be 3-dimensional
- You must *animate* the smoke billowing out of the chimney
- The animation should be *continuous* and only stops when the web page is closed
- You are not allowed to simply add an image to the background of the canvas. This means that you must draw the house & smoke and subsequently fill them with appropriate colors using standard *functions* associated with the *canvas* control.
- Your web page should be named *index.html*.
- Be creative and ensure that your drawing is *colorful* and *neat* looking.
- All JavaScript and CSS must be placed in files external to your web page.
- Put the names (*LastName, FirstName* format) of team members in the page `<title>` tag.

- Your web page should not be bland. Add a suitable header and, instead of a *readme.txt* file, add content to your *index.html* page with the following information:
  - Your names, student numbers, email addresses, and set
  - What you have completed
  - What you have not completed
  - Any major challenges

## HTML

---

- Your house should NOT be identical to the one above. You are encouraged to be creative.
- Your HTML page must conform to HTML5 standards and will be tested and marked using Google Chrome
- Use cascading style sheets for all formatting.
- Make proper use of HTML5 semantic elements
- Add appropriate comments to your JavaScript code

## SUBMISSION:

---

- Your submission consists of a ZIP file named:  
*"FirstNameLastName(1)\_FirstNameLastName(2)\_set\_assign03.zip"*. (Example:  
*JohnDoe\_JaneBond\_1B\_assign03.zip*)
- Your ZIP file will include the main HTML file, the JavaScript file, CSS file (optional), and any image files (\*.jpg, \*.gif, \*.png)
- Submit your ZIP file into the BCIT share-in directory.

## MARKING GUIDE

---

COMP1536 & ACIT1620 assignment 3 marking guide:

Set \_\_\_\_\_

Name 1: \_\_\_\_\_

Name 2: \_\_\_\_\_

Task	Max Mark	Actual Mark
3-D house drawing sufficiently creative	3	
Animation of smoke billowing from chimney	4	
JavaScript code well commented	1	
Content and layout of page	2	
TOTAL:	10	

If your submission does not comply with submission rules, then you will lose 10% of the mark. Also, if you work on this assignment individually (unless approved by your lab instructor) then you will also lose another 10% of the mark.