CPRG256

MIDTERM ASSESSMENT

**Part One:**

Under ‘htdocs’ create a directory titled ‘midtermassessment’ and a Virtual Host titled [www.midterm.net](http://www.midterm.net) listening on port 7777. The index page will be displayed when the browser is set to: [www.midterm.net:7777](http://www.midterm.net:7777) .

This ‘index.html’ will be the main page for this assignment and is located at the root of ‘midtermassessment’. This index.html file will contain the following:

Your name and SAIT ID number.

A brief description of each part of the assignment and a hyper link to each of the web applications you have created for this assignment.

5 Marks

**Part Two:**

Create an application that will track your favourite web pages. Your page will contain a text box where you can enter the URL for a web page. A submit button will convert the URL to an ‘anchor’ tag and store the the tag as a string in an array. As you add a new URL, the links will appear on the web page below the input box..

For a URL to work correctly, you need to pre-pend it with ‘http://’ e.g. If you enter [www.sait.ca](http://www.sait.ca) the actual html in the ‘<a>’ tag must be ‘http://www.sait.ca’

When a user clicks on a link the page will appear in a new tab. To enable that, you need to add ‘target=”\_blank” within the ‘<a>’ tag.

e.g. <a target=”\_blank” href=<http://www.sait.ca>>www.sait.ca</a>

Your page must use CSS to create an interesting and pleasing interface.

10 Marks

**Part Three:**

Under ‘midtermassessment’ create a subdirectory titled ‘travelsite’. Create a slide show for a travel and tourism company. Use between 8 and 12 pictures that will automatically change every 1 to 3 seconds. The pictures must use a type of ‘transition’ ie Fade in/Fade out when the pictures change. Each picture must include a brief caption describing it. You can choose to use a background image or a type of gradient in the background.

The page will include a ‘header’ that provides the name of the company and a logo. Use the CSS ‘text-shadow’ property on the company name. The page must include a ‘footer’ section with the address and contact information of the company.

15 Marks

**Part Four:**

A landscaping company builds custom planters from clients. Create a customized page with appropriate background colours or images. Include a header that lists the company name and contact information. Your page will contain a form that prompts the user for the following:

First and last name

Address

Postal Code

Phone number

E-mail

Control the user input as follows:

Use HTML 5 inputs

All the fields must be entered

Validate the data (except address) using patterns or regular expressions.

‘Autofocus’ must be set to the First Name

The planters are in the following shapes:

Square/Rectangular Cubes

Flat bottomed cylinders

½ Spherical

Truncated cone

The formulas for each of these shapes are:

Square/Rectangular Cubes V= length\*width\*height

Flat bottomed cylinders V= \*radius\*radius\*height

½ Spherical V=1/2 \* (4/3\*\*radius\*radius\*radius)

Truncated cone V=1/3\*\*(radius1\*radius1+radius1\*radius2+radius2\*radius2)\*height

The dimensions entered will be in cm and the volume in cm3. The costs for each type of planter are as follows:

Square/Rectangular Cubes: 10 cents per cm3

Flat bottomed cylinders: 12 cents per cm3

½ Spherical: 15 cents per cm3

Truncated cone: 20 cents per cm3

Use JavaScript event handling to control the data entry for the planter type.

Example: If a user selects a square/rectangular planter, only the dimensions for length, width and height can be entered.

Example: If the user selects the ½ spherical planters, only the radius (or diameter) can be entered.

When the user submits the form, the volume and planter cost are calculated. The information that the user entered will be displayed centred on the page below the form as follows:

Order Form

Last Name, First Name

Address

Postal Code

Type of Planter

Dimensions and Volume

Total cost

20 Marks

**Submission Requirements:**

**All pages must be validated. Use the W3C Schools validator to check your pages. Pages that fail validation will lose 30% of their grade!**

All pages must be well formatted. Use CSS to control the presentation of the content in all of your pages.

All of your work must be original. Do NOT use any third party packages or code unless explicitly allowed by your instructor.

Submit the ‘zipped’ contents of ‘midtermassessment’ under ‘Assignments/Midterm Assessment’.

**DUE: NOON, MONDAY MARCH 6, 2017**