

1 - Basic Web Programming

1. Learning Outcomes

On completion of this lab you will have reviewed basic HTML and CSS language features and implemented code fragments for creating and styling common web page elements in the browser.

2. Organisation

Please complete the exercises individually.

3. Grading

This worksheet is worth up to 10% of your overall module grade. You must attend and sign in at the labs in order to obtain the credit for the associated worksheets. You may work on this worksheet during lab 1 and lab 2 with instructor assistance. You must also demonstrate your submission in order to receive credit - see below.

4. Submission

The deadline for submission is Wednesday Sep 28, 2016 @23:59 through Webcourses.

5. Demonstration

You will give a brief demonstration of your submission to the lab instructor in lab 3.

6. Requirements

For this lab you will need to

- Use your own laptop with local tools or,
- Sign up for a free account with JS Bin (<http://jsbin.com>). It is **strongly recommended** to also have free account with Github (<http://github.com>) which you can use to authenticate to JS Bin. This allows you to publish Gists directly from your JS Bin workspaces which can be useful if you want to post questions or have a discussion regarding a problem or exercise in your module labs.

7. Resources

You are free to research whatever you need to solve the problems in this lab. Some recommended resources include:

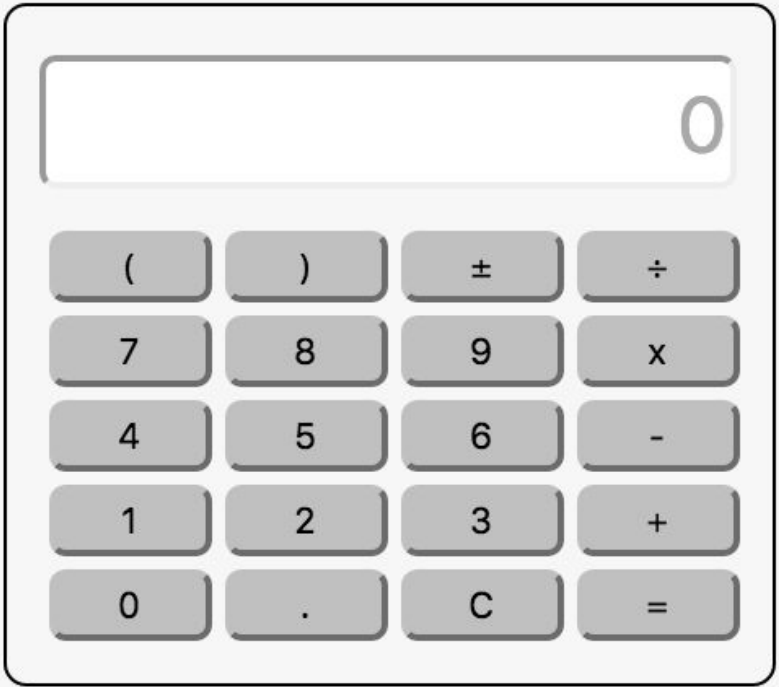
- <https://developer.mozilla.org/en-US/docs/Web/Guide/HTML>
- <https://developer.mozilla.org/en-US/docs/Web/CSS>

8. Problem Sets

Provide HTML and CSS code for the following problems in JS Bin. Put each solution into a separate *bin* and note the JS Bin URLs of your individual solutions. If you have created an account with JS Bin, your bins can be accessed under the “File/My Bins” option. You will use these URLs to submit your solution.

Note: Keep your URLs private to you. Do not share these with class colleagues.

1	<p>Create a page fragment as follows:</p> <p>Top-level enclosing <code><div></code> element having 2 <code><article></code> child elements. The article elements, in turn, have, as child elements, a <code><h2></code> title, a <code><h3></code> sub-heading and 3 <code><section></code> elements.</p> <p>Create sample headings and subheadings for your articles.</p> <p>Set the default font style for the whole fragment to “Verdana”. Add example text to the first section of the first article. Make the font size for section text be 12px;</p>	15 Marks
2	<p>Provide the HTML and CSS for the this calculator front-end:</p>	25 Marks

	 <p>Your solution should look as close as possible and you are permitted to use any approach you like. Can you do it without using a <code><table></code> ?</p>	
3	<p>Build a web form for a hypothetical checkout page for some e-commerce service on the web. Your form should contain the following elements:</p> <ul style="list-style-type: none"> • One or more text boxes • Labels and placeholders • A text area • Two or more radio buttons • One or more checkboxes • A dropdown selector • A submit button • A cancel button <p>Note 1: the buttons don't have to actually do anything</p> <p>Note 2: Extra credit will be given for presentation and clarity of layout in your solution. Use CSS for this</p>	30 Marks
4	<p>Given the following HTML5 code, provide the CSS code to make it layout as shown in the figure below. It doesn't have to be perfect but try to get as close as you can.</p> <p>You are not allowed to change the HTML5 code given</p>	30 Marks

```
<header>
  <h1>
    Title
  </h1>
</header>
<section id="content">
  <header>
    Article title
  </header>
  <section>
    <p>Article para1 ...</p>
  </section>
</section>
<aside id="sidebar">
  <header>
    Aside
  </header>
  <ul>
    <li>
      Item 1
    </li>
    <li>
      Item 2
    </li>
  </ul>
</aside>
<footer>
  <address>
    Kevin St, Dublin 8
  </address>
</footer>
```

	<div><h1><i>Title</i></h1><div><div><p><i>Article title</i></p><p>Article para1 ...</p></div><div><p><i>Aside</i></p><p>Item 1 item 2</p></div></div><p><i>Kevin St, Dublin 8</i></p></div>	
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