

University of St Andrews School of Computer Science

CS2003 — Internet and the Web — 2020/21

Tutorial 2: Web programming: HTML and CSS

Date: Week 3: 1-2 Oct 2020

1. Explain the roles of *HTML*, *CSS*, and *HTTP* for the world-wide web.
2. Explain the structure of the Uniform Resource Locator (URL) below:
`https://recipes.blob.com:8080/recipes/vanilla_ice_cream.html`
3. Below is some HTML:

```
<html>

<head>
  <title>My Home Page</title>
</head>

<body>
  <h1>My Home Page</h1>

  <p>A work in progress!</p>

  
</body>

</html>
```

- a) Create the Document Object Model (DOM) ‘tree’ diagram for this web page.
 - b) Why is the DOM tree an important abstraction to have for the HTML page?
4. The client-server model for the WWW can make use of *caching*.
 - a) What the are advantages and disadvantages of *client-side caching*?
 - b) What the are advantages and disadvantages of a *caching server* or *proxy server*?
 5. To get ready for next Web lectures: Where does computation happen in the original web model. Where else do you need computation and what possibilities does this make available? What problems are introduced?

6. Look at the file `vanilla_ice_cream.txt`. Rename it as a HTML file called `vanilla_ice_cream.html`, and place it in your web filespace at:

`~/nginx_default/cs2003/wk02/vanilla_ice_cream.html`

Now, add HTML markup to that file (and some CSS if you want), in order to create a more sensible structure for the recipe page. (You can add an image if you like, also.)

There is no single, 'correct' way of doing this! Your attempts at this will be viewed by the whole group during the tutorial, and you can discuss within your groups the different approaches that people have taken.

7. Finally, make sure that you have registered on the PeerWise system following the instructions in the separate handout. Create one question covering the topics from week 2, and tag this question with the tag "week-2". You should also try to answer at least one question with the same tag. Your tutor will pick a question at random during the tutorial and you can go through it together as a tutorial group.