Week 5 unassessed exercises on creating an HTML file and uploading it to the server

The aims of this exercises are:

- to familiarise yourself with the editor you're using (such as Vim or Atom)
- to familiarize yourself with the process of checking the correctness of your code
- to familiarize yourself with the process of uploading a file to the webserver

Step 1:

Make sure your editor is set to UTF-8 as text encoding

Step 2:

Type in the following text (do not copy/paste)

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="utf-8">
  <title> military leaders </title>
</head>
<body>
  <p>Some famous historical military leaders:</p>
  <ul>
    <li> Philippe Pétain </li>
    <li> Friedrich der Große </li>
    <li> Owain Glyndŵr </li>
  </ul>
</body>
</html>
```

For entering the non-ASCII special characters (é, ß and ŵ) either:

- look up the Unicode decimal codepoint (0233 for é) and enter it while holding the ALT key (so ALT-0233 for é)
- start up Windows Character Map (you find it under "Windows Accessories" in the start menu), select the relevant character and copy/paste it into the text

Save your file as index.html

Step 3 (optional):

If there is a binary editor installed on your computer,[1] you might want to use it to open the file you have just saved. From what the binary editor displays, can you see:

- whether the end of lines are in UNIX/Linux (LF) or in DOS/Windows (CR-LF) format?
- whether the special characters are encoded in UTF-8 format?

1 An overview of binary editors (sometimes called *hex editors*) for Windows, Mac and Linux is available at https://en.wikipedia.org/wiki/Comparison_of_hex_editors
For Windows, we recommend *HxD* and *Frhed*. For Linux, we recommend *Okteta*.

Normally you don't need to check this, unless you experience problems when displaying the file in a browser, and you need to see what the file looks like on byte level.

Step 4:

Upload your file (named index.html) to validator.w3.org
If all is well, it should be validated without any errors or warnings

Step 5:

Upload your file to the school's project webserver. For this, you need to do the following:

1. Connect to the University's VPN. Instructions to do so can be found at: https://intranet.cardiff.ac.uk/students/it-support/wireless-and-remote-access/remote-access/vpn-virtual-private-network
2. Once you have connected to the University's VPN, you need to access *websites.cs.cf.ac.uk*[2] by using the CIFS protocol. Instructions to do so can be found at: https://wiki.cs.cf.ac.uk/index.php?title=Accessing_Your_University_Files_Remotely

Keep in mind that you won't be able to access your files on the webserver unless you are connected to the VPN.
Once you have access to the filespace on the webserver (using your local file explorer on Windows, Mac or Linux) you will see two folders: *users* and *project*. For purposes of the Web Applications module, we will use the *project* folder. To test if everything is working, copy your file *index.html* to the *project* folder.

Step 6:

If all is well, your file is now accessible on the webserver. Use a browser to go to https://project.cs.cf.ac.uk/CaminadaM/ (replace CaminadaM with your own email name) and see whether it displays properly. If you're accessing the server from outside of the labs, you may be asked for your username and password.

2 Access to *websites.cs.cf.ac.uk* has to be done through your (Windows/Mac/Linux) file explorer. You cannot access this though a web browser (it is not a URL).