Unit:
Designing and Developing a Website

Assignment title:
NCC Sports Academy

Sample Assignment

Important notes

- Please refer to the *Assignment Presentation Requirements* for advice on how to set out your assignment. These can be found on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.

- You must read the NCC Education documents *What is Academic Misconduct? Guidance for Candidates* and *Avoiding Plagiarism and Collusion: Guidance for Candidates* and ensure that you acknowledge all the sources that you use in your work. These documents are available on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.

- You **must** complete the *Statement and Confirmation of Own Work*. The form is available on the NCC Education website. Click on 'Policies & Advice' on the main menu and then click on 'Student Support'.

- Please make a note of the recommended word count. You could lose marks if you write 10% more or less than this.

- You must submit a paper copy and digital copy (on disk or similarly acceptable medium). Media containing viruses, or media that cannot be run directly, will result in a fail grade being awarded for this assessment.

- All electronic media will be checked for plagiarism.

Introduction

NCC Sports Academy has received funding and is looking to expand its sporting activities within the local community. They currently offer football, rugby, ballet and gymnastics training but they are looking to expand their provision to include wrestling, taekwondo, judo and volleyball.

Scenario

NCC Sports Academy have approached you and asked you to develop a new website for them. Although they currently won't be taking any booking payments online, they hope to develop this later in the year. They need you to create a website which will allow residents within the local community to see the sports on offer and book sessions. The website should be visual and should be viewable on different devices.

NCC Sports Academy have the following basic requirements for the contents of the website:

- **Home Page:** This page will introduce visitors to the NCC Sports Academy and it will include relevant images of the sports that are currently on offer eg football, rugby, ballet and gymnastics. Relevant social media buttons and search bar should be included on a clean looking home page which includes interactive elements that grab the attention of the visitor. The page should include hidden menu changes (eg hamburger menu style). There should be a link to the booking form well highlighted and relevant media coverage (eg Olympics news stories) and a video that automatically plays in the background on the right of the page when the visitors loads the page.
- **Blog**: This page will provide up to date information about the Sports Academy and the different events that the residents take part in.
- **Register:** this page will allow customers to register an account – this needs to include a subscribe email button/box. Registration will be via email following the completion of an online form.
- **About**: This page should give visitors an overview of the NCC Sports Academy and the funding that it gets from the community and national sports body.
- **New Activities**: This page should include details of the new activities that are to be included eg wrestling, taekwondo, judo and volleyball and should include a forum where the residents can ask questions.
- **Book Online**: This page should provide an online booking form. This will initially be through email and should be designed to include accessibility features to complete the form.
- **Events**: This page provides a list of local competitors that residents can come and watch happening within NCC Sports Academy.

At the initial stage of the development process, you are required to make an HTML/CSS prototype of the website that will clearly show NCC Sports Academy how the final website could work.

Content hasn't been provided. Suitable content can be found on the web e.g. images of plastic pollution in the oceans. Use creative commons (http://search.creativecommons.org/) or Wikimedia Commons

(http://commons.wikimedia.org/wiki/Main_Page) as a starting point to find content. Remember the content you include in your site must be licensed for re-use. Do not spend excessive amounts of time researching and gathering content. The purpose is to provide a clear indication of how the final website could look and function. The client would provide the actual content at a later point if they are happy with the website you have proposed.

Task 1 – HTML (30 Marks)

The website must be developed using HTML 5 **and** feature a minimum of SEVEN (7) interlinked pages which can be viewed also on a mobile device. The website must feature the content described above **and** meet the following criteria:

- Feature between SEVEN (7) and TEN (10) HTML pages.
- Be usable in at least TWO (2) different web browsers including a mobile device. You should consult your tutor for guidance on the specific browsers and versions you should use.
- Be viewable on monitors with screen resolutions of 1024x768 without users having to scroll horizontally.
- Booking form button well highlighted.
- Integrate **and** use a range of media appropriately including a background video that automatically plays.
- Relevant social media buttons **and** search bar.
- User Registration form to subscribe to a newsletter including a subscription button.
- Inclusion of twitter feed.
- Book online form. Accessibility will be given consideration including the online booking form.
- Demonstrate a good application of web design principles and include at least **two** different accessible features for disabled users.
- Links to media coverage eg Olympics news feed.
- Hidden menu changes (eg hamburger menu style).

Task 2 – CSS (25 Marks)

Create an external CSS file that specifies the design for the website. Each of the HTML pages must link to this CSS file. There should be no use of the style attribute **or** the <style> element in the website.

The boxes on the home page should include relevant elements such as border radius, box-shadow, hover etc.

Add in a mediarule which creates a responsive navigation menu which can be displayed horizontally on large screens **and** vertically on small screens.

Include on-page text search to allow users to find content in the page using appropriate jQuery.

Task 3 – Test the Website and Write a Test Report (15 Marks)

You must use the W3C validation service (http://validator.w3.org/) to check your HTML **and** CSS code. You should attempt to remove as many non-compliant features as possible. Make sure *show source* is selected **and** save the output from this tool.

You must also test your website for accessibility using a relevant screen reader **and** note the findings from the testing. You should describe how the site works for disabled users.

You must test your website on TWO (2) browsers and give a description of differences between the browsers **and** the reasons for these.

You do NOT need to modify your code to correct any differences between browsers. Please consult your tutor for advice on the specific browsers you should use for testing.

Write a short report describing your testing. Provide a description of any outstanding problems **and** recommendations for fixing them.

The written part of your report should not exceed FIVE HUNDRED (500) words.

Task 4 – Critical Evaluation (30 Marks)

You are required to write a short report - FIVE HUNDRED (500) words, analysing the website you have submitted.
You should:

- Evaluate **and** demonstrate an understanding of accessibility issues with specific reference to the TWO (2) accessibility features you have included in your own website.
- Evaluate the effectiveness of the CSS **and** what improvements you feel should be made to this file now you have completed it.
- Explain the advantages **and** disadvantages of using user-centred web design when designing and creating a website.
- Explain the advantages **and** disadvantages of dedicated web hosting.
- The ways in which the website has been designed to support mobile users
- Recommend improvements for further development of the website.

Additional Information for Clarification

Consult with your tutor/lecturer if you are uncertain about any aspects of the assignment. The website must be developed using XHTML 1.0 Strict or HTML 5 and CSS. No other technologies should be used. You do not need to write any computer programs for this assignment.

The purpose of this assignment is to show abilities in web design. Although you should be wary of needlessly adding features, websites that demonstrate a range of HTML features used appropriately have the potential to gain higher marks. For example, a form that features a range of different form elements applied in a useful **and** relevant way would generally score a higher mark than a simple form that only uses text boxes to gather data.

Submission guidelines

- A word-processed, printed document containing all the written components of the assignment (Tasks 3 and 4), signed and dated by your tutor/lecturer.
- A copy of all the word-processed material (Tasks 3 and 4) together with the website (Tasks 1 and 2) on appropriate media (CD, USB flash drive, etc.). Ensure that the web pages can be viewed directly from the submitted media. Do not submit any server-side code; it is not required for this assignment.

Candidate checklist

Please use the following checklist to ensure that your work is ready for submission.

Have you read the NCC Education documents *What is Academic Misconduct? Guidance for Candidates* and *Avoiding Plagiarism and Collusion: Guidance for Candidates* and ensured that you have acknowledged all the sources that you have used in your work?	❏
Have you completed the *Statement and Confirmation of Own Work* form and attached it to your assignment? **You must do this.**	❏
Have you ensured that your work has not gone over or under the recommended word count by more than 10%?	❏
Have you ensured that your work does not contain viruses and can be run directly?	❏