Level 3 Programming in HTML5 with JavaScript and CSS3

(4520-635)

ICT Professional Competence

Assignment guide for Candidates

Assignment A

January 2019

Version 1.0

Contents

Level 3 Programming in HTML5 with JavaScript and CSS3 (4520-635)

Assignment A

Level 3 Programming in HTML5 with JavaScript and CSS3 (4520-635)

Introduction – Information for Candidates

About this document

This assignment comprises all of the assessment for Level 3 Programming in HTML5 with JavaScript and CSS3 (4520-635)

Health and safety

You are asked to consider the importance of safe working practices at all times.

You are responsible for maintaining the safety of others as well as your own. Anyone behaving in an unsafe fashion will be stopped and a suitable warning given. You will **not** be allowed to continue with an assignment if you compromise any of the Health and Safety requirements. This may seem rather strict but, apart from the potentially unpleasant consequences, you must acquire the habits required for the workplace.

Time allowance

It is recommended that both Assignment A, Part 1 (Website Design Project) and Assignment A, Part 2 (Written Review) be submitted no later than 4 weeks after the completion of instructor led training.

Level 3 Programming in HTML5 with JavaScript and CSS3 (4520-635)

Assignment A, Part 1: Website Design Project (70% of total grade)

Candidate Instructions

Candidates are advised to read **all instructions** carefully before starting work and to check with your assessor, if necessary, to ensure that you have fully understood what is required.

Time allowance: 4 weeks from the completion of instructor led training.

Scenario

You are seeking a position as a new member of a web development team. As part of the selection process the web development team-lead has asked you to demonstrate your skills in HTML5, JavaScript and CSS3 by creating a website.

Task Part 1

In this task you are required to create a website to demonstrate your web development skills in HTML5, JavaScript and CSS3. You are free to choose the subject matter of the web site, however, keep the following points in mind when choosing a project:

- It must be challenging and interesting for you

- This is a front-end, client-side web development project

- The project requires your primary focus to be on web development and not on web design

Also, very importantly, your project must contain working code that demonstrates and provides concrete evidence that indicates you have a clear understanding of each of the following requirements (place comments in your code to highlight where each requirement has been met):

1. Create HTML5 web pages using HTML5 elements and attributes and CCS3 style sheets

2. Use JavaScript with HTML5 for at least one of the following:

    - Handle events

    - Manipulate HTML DOM

    - Extend objects

3. Create an operational web form using HTML5

4. Use XMLHttpRequest objects to communicate data

5. Use CSS style sheets and selectors to style HTML5 to style block elements and texts

6. Include interactive pages created using HTML5 APIs to:

    - Embed media files in pages

    - Collect user location data

7. Support offline applications

8. Implement an adaptive User Interface

9. Use Scalable Vector Graphics for interactive graphics and use the HTML Canvas element

10. Use CSS transitions for elements on an HTML5 page to animate a User Interface

11. Use the Web Sockets Application Programming Interface with JavaScript to send and receive real time communications data

12. Create, run and monitor a Web Worker process

Level 3 Programming in HTML5 with JavaScript and CSS3 (4520-635)

Assignment A, Part 2: Written Review (30% of total grade)

Candidate Instructions

Candidates are advised to read **all instructions** carefully before starting work and to check with your assessor, if necessary, to ensure that you have fully understood what is required.

Time allowance: 4 weeks from the completion of instructor led training.

Scenario

As a member of the web development team, your employer has tasked you with writing a report reviewing a publicly available website. You are free to choose the website, however, the only condition imposed on your choice is that the website must be in the same business/industrial sector as your employer's business.

Constraints

The following constraints define the written reports limitations and they must be applied.

Choosing a Website to Review

- Choose any publicly available website in the same business/industrial sector as your employer
- The chosen website **must be** approved by your assessor

Word Count:

- The word count must not be less than 800 words and must not be greater than 1200 words
- In calculating the word count of your response, headings for tables, labels on diagrams, embedded references and the reference list are to be excluded. In-text references, the content of tables and appendices are to be included in the word length
- Include the word count of your report at the end of your report

References

- Use the Harvard Referencing System when citing a reference

Task Part 2

In this task you are required to write a report reviewing a publicly available website in the same business/industrial sector as your employer's business/industry. The constraints outlined above are important and must be adhered to.

Divide your report into 8 sections:

1. Title Page
2. Table of Contents Page
3. Introduction
4. Website Structure
5. Main Features of the Website
6. Website Critique
7. Summary
8. Appendix A: References

Include the following in each of the sections:

1. Title Page

   Include the following on the Title Page:
   - Document Title and Subtitle
   - Author's Name
   - Submission Date
   - Document Description

2. Table of Contents Page

   A table of contents showing the reader where the various sections of the report are located

3. Introduction

   Briefly introduce the website; detailing its purpose, products or services, and target audience

4. Website Structure

   Explain the structure of the website and include a sitemap

5. Main Features of the Website

   Provide a description of the main features of the website

6. Website Critique

   Critique the website and offer suggestions for future development

7. Summary

   Outline the key messages that you want your reader to take away from the report

8. Appendix A: References

Notes on Submitting Your Completed Assignment

- Candidates should produce the following for their Assessor:
    - A hard-copy printout of:
        - All HTML, JavaScript and CSS files
        - The report

        NOTE: every printed page must have your handwritten signature
    - An electronic copy of:
        - All HTML, JavaScript and CSS files in an appropriate folder structure
        - The report:
            - The document file must be in Microsoft Word **doc** or **docx** format (any other format will not be accepted)

- When naming the folder for your submission and the report file you must use the following naming format:

    `635-A-[Your-Name]` where `[Your Name]` is your first name and last name separated by a hyphen, for example, if your name is Jane Doe then your submission folder will be named `635-A-Jane-Doe` and your report file name will be `635-A-Jane-Doe.docx`