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Institute of Canterbury
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Assessment for AS91635

Version 3

Implement complex procedures to produce a specified digital media outcome

Course Code
91635

Semester Two 2017

Due date: 3 November 2017

Credits: 4

Student Name/ID .....

Date	√	Result	Tutor Signature
		Achieved (A) for satisfactory performance	Comment:
		Merit (M) for very good performance	
		Excellence (E) for outstanding performance	
		Not achieved (N) if student does not meet the criteria of the standard	
Entered to Database:			
Date	Signed		

Student has complied with occupational health and safety guidelines and recommendations in relation to working environment and work practices and the requirements of the Health and Safety in Employment Act 1992 and its subsequent amendments.

This assessment has seven (7) pages including the cover sheet.

Achievement Criteria

Achievement	Achievement with Merit	Achievement with Excellence
Implement complex procedures to produce a specified digital media outcome	**Skilfully implement complex procedures to produce a specified digital media outcome**	**Efficiently implement complex procedures to produce a specified digital media outcome**
• selecting software based on the features of the program(s) that enables the student to effectively demonstrate skills in creating, editing and integrating media types	• showing accuracy in the application of complex tools, techniques and procedures	• applying complex tools and techniques, and producing the outcome in a manner that economises the use of resources (e.g. optimised tool selection, batch processing images, use of master pages, use of libraries, timely production)
• applying a set of complex tools and techniques to present content in a media type	• showing independence with regard to decision making in the selection of software and application of complex tools, techniques and testing procedures	
• applying data integrity and testing procedures to ensure the outcome meets the specifications		
• following legal, ethical and/or moral requirements appropriate to the outcome		

Required learning

Before undertaking this assessment, you are expected to have satisfactorily completed (at least) the XAMPP, Website, phpMyAdmin, and PHP Tutorials. Practise the techniques you will use to create your website and database until you can apply them efficiently and confidently. You should also know how to describe them.

This assessment will require you to be familiar with the processes and techniques involved in creating a dynamic database-driven website, producing server-side scripts, and creating a back-end database that include those covered in the teaching provided in class and the tutorials available on Moodle.

You will also be able to edit images including resizing, changing resolution, and saving to an appropriate web format.

Introduction

You are required to create a dynamic website that uses the following complex tools and techniques:

- Web page design utilising HTML for page structure and CSS for style
- A server-side scripting language such as PHP
- Dynamic data handling passing data (images and text) to and from the website to a database
- Interaction between the user and content
- Image manipulation requiring images to be optimised for the web

In creating the website, you will build your website from source code, manipulated images, or other digital media. This will include the following steps:

- Create the front-end website, adding HTML for structure and CSS for design
- Create the back-end database
- Add server-side scripting code to build a dynamic website
- Test your website

A suggested theme for the assessment is an online member's database that manages information and uses an administration interface with user logins.

You are however free to develop your own theme for the website in consultation with your tutor, as long as the website meets the definition of a dynamic website and uses the complex tools and techniques listed above.

Conditions of assessment

This is an individual task. You may discuss your assessment project with other students and/or use your research skills for support, but you may not share your assessment work with others, and all work submitted **must be your own**.

You have six weeks of time to complete the assessment for this Standard.

You will be assessed on the extent to which your website meets the specifications and the manner in which you apply techniques and testing procedures to create the specified outcome. Your independence, as well as your accuracy and efficiency, will be taken into account.

Creating content is not part of this assessment activity. You may download suitable text and other content from the Internet as long as you address any legal (copyright and privacy), ethical and moral issues. However, if you do use someone else's content, you must reference it appropriately.

Although you may not have created the text yourself, you are responsible for presenting it in the best possible way for reading on the web. This includes ensuring that it has suitable headings, subheadings, main body text structure, and uses CSS to style it appropriately.

Images used on the website need to be edited using techniques such as cropping (to remove unwanted content), resizing, optimisation for the web, and saving in an appropriate format.

You may refer to existing web templates for information and ideas, but you may not simply download such a template and change its appearance – to do this would not fulfil the requirements of the task.

Specifications

The following specifications must be adhered to:

- The website will must contain a minimum of two pages, and feature authenticated logon for authorised users. You may choose to create more pages if you prefer (i.e. home page, login page, members page, logout page, edit profile page, etc.)
- User interaction with the website must generate pages dynamically
- A back-end database must be used to store data which is to be retrieved and displayed by the website using server-side scripting
- The database must hold at least one table
- The website structure must use HTML5 to structure the web page content
- The website must incorporate a valid external (i.e. linked) cascading stylesheet (CSS3) to control the page layout and style distinct elements
- The HTML and PHP must include commenting so that the code can be easily followed and understood by others
- At least two media types must be used in the website. At a minimum, these are to include images and server-side scripting. However, you are free to use other digital media types such as animation, audio and video

Documenting the process

In the assessment tasks, you are required to keep a record of what you did. To do this, you could keep a log including screen shots to provide evidence of incremental development.

Assessment Tasks

1. Planning the website

Excellence - applying complex tools and techniques, and producing the outcome in a manner that economises the use of resources

1.1 Read the information and specifications provided on pages 3 and 4 carefully.

1.2 Identify and develop an appropriate design concept.

- You must ensure that you are confident enough to meet the requirements of the chosen design concept, which may include divisions, linking, embedding content, and design principles. You **do not have to provide evidence** of this.

1.3 Create a step-by-step plan that you will outline for your tutor before you begin development.

- This is created as it is good practice to have a step-by-step plan for your finished website before starting to create it.
- This is an **Excellence requirement** as it forms crucial evidence towards demonstrating that you created your site in a straightforward, deliberate manner.

1.4 Think about your site structure and what content will go where (i.e. pages, navigation, content structures, headings, etc.).

- You may wish to make some brief notes or draw some plans, and while these **will not be assessed**, they may help you to create a more considered design.

1.5 Think about the design for your database. This will include the tables and fields including the data types.

- Again, this **will not be assessed**, but you may wish to make some notes or drawings to help guide your development process.

2. Software selection

Achieved - selecting software based on the features of the program(s) that enables the student to effectively demonstrate skills in creating, editing and integrating media types

Merit - showing independence with regard to decision making in the selection of software and application of complex tools, techniques and testing procedures

2.1 Review the theory sections of the XAMPP, Website, phpMyAdmin, and PHP Tutorials and conduct your own research to evaluate the software you will be using to build the website and the database.

2.2 Outline the features of the software you will be using and explain why these are effective in producing the complex digital outcome.

3. Develop a test plan

Achieved - applying data integrity and testing procedures to ensure the outcome meets the specifications

Merit - showing independence with regard to decision making in the selection of software and application of complex tools, techniques and testing procedures

Data integrity and testing procedures need to be applied when developing digital media outcomes.

3.1 Develop your own test plan with a checklist of test tasks that includes the following components. Ensure your test plan and checklist cover the following areas:

- Data Integrity
- Content
- Links
- Functionality
- Browser Compatibility

3.2 As you go about the task, keep evidence of what you do, when you do it, the results of testing/checking, and how you correct any errors during testing.

4. Create the website

Achieved - applying a set of complex tools and techniques to present content in a media type

Merit - showing accuracy in the application of complex tools, techniques and procedures

Excellence - applying complex tools and techniques, and producing the outcome in a manner that economises the use of resources (e.g. optimised tool selection, batch processing images, use of master pages, use of libraries, timely production)

4.1 Use the selected tools to create your dynamic website, following your plan, and keeping to the specifications.

You will need to show evidence of accuracy in the application of complex tools, techniques and procedures.

4.2 Keep evidence in your log of what you do as you create your website, and how you address the problems you encounter. Include screenshots to capture stages in the development.

You will need to show evidence of:

- independence with regard to decision making in the application of complex tools, techniques and testing procedures
- applying complex tools and techniques, and producing the dynamic website in a way that economises the use of resources.

4.3 Apply data integrity testing procedures as appropriate to the media.

The plan, the log, and any other documentation you may generate will provide you with an additional opportunity to demonstrate to the marker the manner in which you were working.

5. Legal, ethical and moral considerations

Achieved - following legal, ethical and/or moral requirements appropriate to the outcome

5.1 Identify the source of your website content, including text, images and other forms of digital media.

5.2 For content which is not original, explain what steps you have taken to ensure you have complied with relevant legislation.

5.3 Explain what steps you have taken to ensure you have followed legal, ethical, and/or moral requirements to produce the dynamic website.

The material submitted for assessment, including all photographs, diagrams and illustrations must not breach copyright or privacy issues. Evidence submitted for assessment should be such that the assessors can be confident that they are making a judgement about an individual candidate's understandings.

All information from sources other than the candidate's own work must be acknowledged and contain the following:

- The name of the publication or website
- The author and/or publisher and/or the owner of the information
- The publication date (for books and printed material) or the data accessed (for websites)
- The page number or full URL

An example of an acknowledgement:

Website - www.howstuffworks
Author – Tom Harris
Date Accessed – 20/7/2017
*URL - http://www.howstuffworks.com/file-c*ompression.htm

Final note

When you have finished, hand in copies of:

- ☐ Your step-by-step plan for the creation of your site.
- ☐ Your software evaluation and selection.
- ☐ Your log that records the process you went through to create your dynamic website.
- ☐ Your website and database content. This will include any PHP and CSS files, an exported database, and any images used in your website.
- ☐ Records of testing and the results, including any corrections made.
- ☐ Any other documents that you created as you developed your final outcome.