|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Student Name |  | Student Number | |  |
| Unit Code/s & Name/s | ICTWEB304 Build simple web pages  ICTWEB305 Produce digital images for the web  ICTWEB431 Create and style simple markup language documents | | | |
| Cluster Name  *If applicable* | Web Elements | | | |
| Assessment Name | Build and test a website | Assessment Task No. | | 4 of 4 |
| Assessment Due Date |  | Date submitted | | / / |
| Assessor Name |  | | | |
| **Student Declaration:** I declare that this assessment is my own work. Any ideas and comments made by other people have been acknowledged as references. I understand that if this statement is found to be false, it will be regarded as misconduct and will be subject to disciplinary action as outlined in the TAFE Queensland Student Rules. I understand that by emailing or submitting this assessment electronically, I agree to this Declaration in lieu of a written signature. | | | | |
| Student Signature |  | | Date | / / |

|  |  |
| --- | --- |
| **Instructions to Student** | General Instructions:  Read and familiarise yourself with the Project Scenario before proceeding with this assessment. Confirm anything you are not sure about with your Client (Teacher). It is essential you understand the task you are undertaking before proceeding.  You will need to refer to the following Web Project Scenario file for all parts of this assessment:  ICTWEB431\_ICTWEB304\_ICTWEB305\_LHO\_WEB\_PROJECT\_SCENARIO\_TQR\_V1  There are six (6) parts to this assessment. Read the Project Scenario then complete Part 1 to 6 of this assessment:  Part 1 – Review Website Requirements  Part 2 – Establish Website File Structure  Part 3 – Produce Digital Images for the Web  Part 4 – Build the Website  Part 5 – Test the Website  Part 6 – FTP Upload to Server  Your teacher/supervisor will take on the role of the Client and the Manager throughout this project. You will be interacting with your teacher/supervisor in some parts of this assessment. Ensure to record the outcome of each discussion.  Materials Required:  Students are required to provide their own storage device  Materials to be Supplied:  Web Project Scenario (Project Brief)  ICTWEB431\_ICTWEB304\_ICTWEB305\_LHO\_WEB\_PROJECT\_SCENARIO\_TQR\_V1  Images register to record details of all images (Excel file)  ICTWEB431\_ICTWEB304\_ICTWEB305\_LHO\_IMAGES\_REGISTER\_TQR\_V1  Assessor to Provide Access to:  Computer with internet connection  User requirements relating to website  Common web browsers to allow testing of website  Client specifications  required hardware and software components  selected integrated development environment (IDE)  web servers and browsers  storage media  required FTP client software  secure passwords and access procedures.  image editing/manipulation software  industry standard hardware, digital devices and storage devices  client briefs relating to images to be produced  image sources. |

|  |  |
| --- | --- |
|  | Work, Health and Safety:  The work environment should be assessed for safety prior to class. Special considering should be taken regarding potential ICT related hazards such as tripping hazards, electromagnetic radiation, ergonomics and posture. TAFE Queensland health and safety policies and procedures should be followed at all times.  Details of Location:  TAFE will provide a simulated work environment in the classroom. Research activities may be conducted in the classroom or at home.  **Time Restrictions:**  This is a portfolio assessment designed to take place over 8 weeks. The student is expected to attend the class for 3 hours per week (this includes theory sessions) and should be able to commit up to 3 hours per week in their own time.  **Level of Assistance Permitted:**  Teachers and tutors will be available in class, and accessible by email for students working from home. Staff cannot directly show students answers but guide them to where to go to complete tasks individually. Students with disability will receive reasonable adjustments.  If you are unable to attend the assessment you must notify your teacher before the assessment and supply a doctor's certificate and approval from the team manager for an extension. Reasonable adjustments will be made for students as and when appropriate, after consultation with the Disability and Counselling team. Extra time may be given for Language literacy and numeracy (LLN) or extenuating circumstances – you must see your teacher before assessment regarding this.  Interactions:  Aspects of this assessment require supervisor approval. Please consult the marking criteria and benchmark to ensure approval is correctly and consistently granted. |

|  |  |
| --- | --- |
|  | Assessment Criteria:  To achieve a satisfactory result, your assessor will be looking for your ability to demonstrate the following key skills/tasks/knowledge to an acceptable industry standard:  Oral communication  Reading  Writing  Creating and styling markup language documents  Producing digital images for a website  Testing and reviewing a website  Refer to the marking criteria for specific details:  ICTWEB431\_ICTWEB304\_ICTWEB305\_AT4\_MC\_TQR\_V1  **Due Date:**  Session 16  **Naming Convention:**  Provide your answers in this document and save it as Web\_Elements\_AT4\_PE\_Documentation\_YourName  Complete the Images Register file and save it as  Web\_Elements\_LHO\_IMAGES\_REGISTER\_YourName  Create a single zip file which contains this document, the images register and the entire website with original and modified images and save it as  Web\_Elements\_Complete\_AT4\_YourName |
| **Submission details** (if relevant) | Insert your details on page 1 and sign the Student Declaration. Include this form with your submission.  Upload the single zip file Web\_Elements\_Complete\_AT2\_YourName into Assessment 2 dropbox in Connect  TAFE Queensland Learning Management System:  Connect url: <https://connect.tafeqld.edu.au/d2l/login>  Username; 9 digit student number  For Password: Reset password go to: <https://passwordreset.tafeqld.edu.au/default.aspx>> |

|  |  |
| --- | --- |
| **Instructions to Assessor** | **Specifications of Assessment:**  There are six (6) parts to this assessment and all must be completed correctly to achieve a satisfactory result for this assessment.  Students will be able to resubmit their work a second time if they are not successful on the first attempt. Refer to benchmark answers for guidance.  **Equipment or Material Requirements:**  Students are required to provide their own storage device  Materials to be Supplied:  Web Project Scenario (Project Brief)  ICTWEB431\_ICTWEB304\_ICTWEB305\_LHO\_WEB\_PROJECT\_SCENARIO\_TQR\_V1  Images register to record details of all images (Excel file)  ICTWEB431\_ICTWEB304\_ICTWEB305\_LHO\_IMAGES\_REGISTER\_TQR\_V1  Students will Require Access to:  Word Processing application  Spreadsheet application  Project Scenario and Images Register  Browsers  a computer with internet access  IDE/Tool to build a website  Industry-standard image editing software  Image sources  FTP Client/Server  **Details of Location:**  TAFE will provide a simulated work environment in the classroom; however, it is also possible to complete these tasks at home with internet access.  **Time Restrictions:**  This is a portfolio assessment designed to take place over 8 weeks. The student is expected to attend the class for 3 hours per week (this includes theory sessions), and also should be able to commit up to 3 hours per week in their own time. |

|  |  |
| --- | --- |
|  | **Level of Assistance Permitted:**  Teachers and tutors should be available in class, and accessible by email for students working from home. Staff cannot directly show students answers but guide them to where to go to complete tasks individually. Students with disability will receive reasonable adjustments.  **WHS requirements:**  All workplace health and safety legislation and policy should apply to the practical activities  **Interactions:**  Teamwork skills are essential in the IT industry therefore you should work in teams to consult and collaborate on practical activities. However, each student is to complete the tasks below individually and will be required to show their work (unless indicated).  **Contingencies:**  Reasonable adjustments can be made for students who require variations to assessment conditions.  **Work Health and Safety:**  A work health and safety check of the assessment environment is to be conducted before the assessment and any hazards addressed appropriately.  **Assessment Conditions:**  Skills in this unit must be demonstrated in a workplace or simulated environment where the conditions are typical of those in a working environment in this industry. This includes access to:  Software package  Computer with internet connection  User requirements relating to website  Common web browsers to allow testing of website  Individual users  Software package  Computer with internet connection  User requirements relating to website  Common web browsers to allow testing of website  Individual users  image manipulation software  industry standard hardware, digital devices and storage devices  client briefs relating to images to be produced  required image editing software  image sources |
| **Note to Student** | An overview of all Assessment Tasks relevant to this unit is located in the Unit Study Guide. |

**Start of Assessment**

Read and familiarise yourself with the Project Scenario before proceeding with this assessment. Confirm anything you are not sure about with your Client (Teacher). It is essential you understand the task you are undertaking before proceeding. Your Teacher will take on both the role of the Client and the Manager for this project.

### Part 1 – Review Website Requirements

**Establish Client Website Design Requirements, Tools and Standards**

1. Review the client requirements in the Project Scenario to establish the needs of the client. Record the outcome of your discussion with your Client (Teacher) below:

|  |  |
| --- | --- |
| Client Name |  |
| Business Domain | <what type of business is it> |
| Target Audience | <who is the website aimed at> |
| Client Requirements: | |
| <Provide a brief summary of the client website requirements including the website design, layout, and a description of each page – approx. 150 words> | |

**Establish appropriate Mark-up Language, IDE/Tool and Industry Standard Image Editing Software to be Used for Development.**

1. Discuss and confirm the Mark-up Language, IDE/Tool and the Industry Standard Image Editing Software and their suitability for use in the project with your Manager (Teacher)

Your Mark-up Language and IDE/Tool must be approved by your Manager and must not automatically generate code

Record the details of this discussion by completing the table below.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Mark-up Language Selected | | <state the mark-up language and version you will use>  <state why you have selected this – approx. 20 words> | | |
| IDE/Tool Selected and Features | | <state the IDE/Tool you will be using to build the website>  <state why you have selected this IDE/Tool – approx. 20 words>  <List three (3) features of your selected IDE that you will use to assist you when developing the website>  1.  2.  3. | | |
| Industry Standard Image Editing Tool Selected | | <state the mark-up language and version you will use>  <state why you have selected this – approx. 20 words> | | |
| Manager Approval: | | | | |
| Mark-up Language is suitable for client requirements: | | | Yes  No | |
| IDE/Tool is suitable and does not automatically generate code: | | | Yes  No | |
| Industry Image Editing Tool selected is suitable for client requirements: | | | Yes  No | |
| Approval to proceed with Project Design and Development: | | | Yes  No | |
| Manager: |  | | Date: |  |

**HTML, CSS and Web Accessibility Standards**

1. Complete the three (3) tables below identifying HTML, CSS and Web Accessibility standards you will follow when building the website (approx. 10 words each).

Identify three (3) HTML Coding Standards you will follow when building your website.

Identify three (3) CSS Coding Standards you will follow when building your website.

Identify three (3) Web Accessibility Standards you will follow when building your website.

### Part 2 – Establish Website File Structure

**Set up the Site Folder Structure**

1. Set up one (1) appropriately named website folder structure in preparation for storing your images as outlined in your Project Scenario. You must create and store files inside their appropriate folders throughout the project

|  |
| --- |
| <Provide a screenshot of your entire folder structure as shown in the Project Scenario> |

### Part 3 – Produce Digital Images for the Web

**Analyse Client Image Needs**

1. Refer to the Project Brief (Scenario), following organisational policies and procedures in relation to confidentiality, and familiarise yourself with the client’s image requirements.

Analyse the client needs relating to image content, quality and size by completing the table below.

|  |  |  |  |
| --- | --- | --- | --- |
| Image | Image Content | Expected Image size (on disk) | Expected Image Resolution/Quality |
| Logo | <Brief Description of the Logo – approx. 15 words> |  | Low  Medium  High |
| Banner | <Brief Description of Banner – approx. 15 words> |  | Low  Medium  High |
| Social Media Icons | <List the 3 Social Media icons to be displayed in footer>  1.  2.  3. |  | Low  Medium  High |
| Main Page Image | <Brief Description of the Main Page Image – approx. 15 words> |  | Low  Medium  High |
| Gallery Images | <Brief Description of the 3 Gallery Images – approx. 15 words>  1.  2.  3. |  | Low  Medium  High |

**Source Images and Record in Images Register**

1. Refer to the Images Requirements section of your Project Scenario.

Source the nine (9) appropriate images required for the Website according to the Project Scenario from appropriate online sources.

Adhere to relevant copyright legislation and industry standards or creative commons licensing requirements. Document and check the copyright status for each image and record this information in the image register.

Create a “Documents” folder within your website structure to store the image register.

**Back-up Original Images**

1. Create a subfolder inside the images folder called originals.

Backup your original untouched images you have sourced to this folder.

Provide a screenshot of the contents of your “images\originals”.

|  |
| --- |
| <Provide a screenshot of the contents of your “images\originals” ensuring Name, Date, Type, Size are visible in your file listing> |

**Edit, Resize and Create a Range of Effects**

1. Using your selected image editing software you will edit, resize and export your images into the most appropriate format (e.g .png, .jpeg, .svg) while maintaining their individual effects such as aspect ratio.

Apply the effects outlined below across a minimum of three (3) different images

Note that all images may need resizing though you only need to demonstrate the application of each image effect outlined in the table below only once.

Record any changes you make to the images in the image register. Save edited images directly into the “\images” folder.

Provide clear screenshots of images both before and after modifications have been made below.

|  |  |  |
| --- | --- | --- |
| Image Effect  (apply at least once, across a minimum of 3 images) | Original Image  <screenshot> | Modified Image  <screenshot> |
| Crop | <original image screenshot> | <modified image screenshot> |
| Resize | <original image screenshot> | <modified image screenshot> |
| Rotate | <original image screenshot> | <modified image screenshot> |
| Brightness/Contrast | <original image screenshot> | <modified image screenshot> |
| Colour manipulation | <original image screenshot> | <modified image screenshot> |
| Brush or smudge/ blur effect | <original image screenshot> | <modified image screenshot> |

**Present Images to Client for Feedback**

1. Present your modified images to your client (teacher) for feedback and make a list of any suggested changes or improvements from this meeting. Carry out any suggested changes as required (add more rows if necessary)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Image | Recommended Changes | | | Tick when changes complete |
|  |  | | |  |
|  |  | | |  |
|  |  | | |  |
|  |  | | |  |
|  |  | | |  |
| Comments: |  | | | |
| Modified Images Approved by Client: | | Yes  No | Date: |  |

**Confirm Final Image Requirements with Required Personnel and Obtain Sign-off**

1. Present your final completed images to your Client (Teacher) for approval. Copy, paste and complete the “Image Deployment Checklist” from the Project Scenario below.

|  |
| --- |
| <Paste a copy of the “Image Deployment Checklist Here” and tick off all appropriate sections as evidence of client approval> |

### Part 4 – Build the Website

**Set Preferences for the IDE/Tool**

4.1 Set preferences in the IDE/Tool including the File Transfer Protocol (FTP) and provide a screenshot of some of the settings you have selected.

|  |
| --- |
| <Screen shot of IDE Preferences and FTP Client settings> |

**Build the 3 Page Website Using Coding Standards and Appropriate File Structure**

4.2 Refer to the Project Scenario to build the three (3) page website as per client requirements following the correct standards of design.

* Use your selected IDE/Tool and mark-up language to mark-up sections of document to depict structure and layout using CSS as specified by client.
* Refer to the wireframes to create and use a single external CSS file to mark-up elements and to create consistent style and format for all your documents
* Insert and format appropriate text content, images, data tables, and forms according to wireframe structure
* Create appropriate links between the three (3) pages using images and text
* Create the appropriate Navigation Bar and Header/Footer structure
* Create an appropriate Form and Data table on the Contact Page as outlined in the Project Scenario
* Follow the HTML and CSS coding techniques and Web Content Accessibility Standards you have previously identified
* Store files appropriately within the website directory structure.

Complete all sections of the table below once the website is complete and provide screenshots as evidence of task completion:

|  |  |
| --- | --- |
| Home Page | <Screenshot of home page displayed in browser here>  <consistent style must match wireframes> |
| Gallery Page | <Screenshot of gallery page here>  <consistent style must match wireframes> |
| Contact Page | <Screenshot of contact page here >  <consistent style must match wireframes> |
| Website Folder Structure | <Screenshots of your site folder structure showing contents of each folder> |
| List some of the IDE/Authoring Tool features you have used | <list some of the features of the IDE/Tool you have used while building your website – approx. 50 words >  1.  2.  3. |
| HTML Coding Techniques | <Screen shot some of your HTML code evidencing usage of the three (3) HTML standards you outlined in Section 1.3> |
| CSS Coding Techniques | <Screen shot some of your CSS code evidencing usage of the three (3) CSS standards you outlined in Section 1.3> |
| Web Content Accessibility Guidelines (WCAG) Standards | <Screen shot some of your Web Content Accessibility Standards evidencing implementation of the Web Accessibility standards you outlined in Section 1.3> |

**Refine Structure with Client, Recommend Changes and Obtain Feedback from Client**

4.3 Present your completed website to your client (teacher) for feedback. Review the consistency and structure of each page with your client and record any comments below.

From this discussion, the client has recommended a site map to be included on the Home page to help guide navigation. This has been added to the recommended changes below. Document any other recommended changes discussed in the table below, take corrective action and present to you client.

|  |  |  |  |
| --- | --- | --- | --- |
| Issues/Recommended Changes | | Page/URL | Actioned |
| Site map required on the Home Page | | Home | Yes  No |
| <List any other recommended changes from your Client – add more rows if necessary> | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
|  | |  | Yes  No |
| Corrective Action has been taken and demonstrated to client | | | Yes  No |
| Supervisor: |  | | |
| Date of meeting: |  | | |

**Troubleshooting - Test and Validate Website (HTML and CSS)**

4.4 Validate your three (3) HTML and single CSS file against W3C standards. Provide screenshots of the initial validation reports below.

|  |  |
| --- | --- |
| Page to Validate | Initial Validation Report |
| Home Page | <Paste a copy of the validation report here> |
| Gallery Page | <Paste a copy of the validation report here> |
| Contact Page | <Paste a copy of the validation report here> |
| CSS File | <Paste a copy of the validation report here> |

**Access and modify HTML or CSS and Re-Validate**

4.5 Carry out any fixes from the initial validation reports and re-validate pages and provide copies of successful reports below.

|  |  |
| --- | --- |
| Page to Validate | Re-Validation Reports |
| Home Page | <Paste a copy of the re-validated report here> |
| Gallery Page | <Paste a copy of the re-validated report here> |
| Contact Page | <Paste a copy of the re-validated report here> |
| CSS File | <Paste a copy of the re-validated report here> |

### Part 5 – Test the Website

Identify Testing Methodology, Test Cases and Document Results According to Organisational Procedures

5.1 Discuss two (2) suitable Website Testing Approaches/Methodologies for this website with your Manager (Teacher) and record in the table below.

Discuss and negotiate three (3) test cases for each testing methodology with your Client and list them in the table below.

Conduct tests of all test cases across three (3) different browsers and browser versions.

The Client would like the results documented on the Testing Template below and would like to receive a copy once testing is complete as per organisational procedures outlined in 1.6 of the Project Scenario.

|  |  |  |  |
| --- | --- | --- | --- |
| Website Testing Template | | | |
| Test Version Number: |  | | |
| Date of Test: |  | | |
| Conducted By: | <your name> | | |
| List the Browsers and Browser Versions used for test cases:  (Note: Test Cases must be tested across all three (3) browsers listed below) | <Browser Name and Version> | | |
| <Browser Name and Version> | | |
| <Browser Name and Version> | | |
| Testing Approach/Method | Test Cases  (Tested Across 3 Browsers) | Compliant  Yes/No | Comment |
| 1. | 1. | Yes  No |  |
| 2. | Yes  No |  |
| 3. | Yes  No |  |
| 2. | 1. | Yes  No |  |
| 2. | Yes  No |  |
| 3. | Yes  No |  |
| Test results forwarded to client: | | Yes  No | |
| Corrective Action Taken: | | Yes  No | |
| Report Sent by: | <your name> | Date: | <Date the report was sent> |

**Correct and Re-test Non-compliant Test Cases**

5.2 Present the results of the testing process to your Client and explain any non-compliances. Make recommendations and carry out any corrective action. Re-Test the website and present to your Client

|  |  |
| --- | --- |
| Website testing results have been presented to client | Yes  No |
| Non-compliances have been explained | Yes  No |
| Appropriate recommendations for corrective action have been discussed with client | Yes  No |
| Corrective action has been taken | Yes  No |
| Re-Testing has taken place and demonstrated to Client | Yes  No |
| Testing Completion Approval: | |
| Website has been testing according to requirements and appropriate corrective action has been taken: | Yes  No |
| Date: |  |

**Browser Compatibility Testing**

5.3 Capture how each of your pages displays across three (3) different browsers and versions and provide screenshots in the table below (adjust the row height so your pages are clear). Include browser names versions used.

|  |  |
| --- | --- |
| Browser 1 Name: |  |
| Browser Version: |  |
| Home Page | <Paste a screenshot of the Home Page displayed in Browser 1> |
| Gallery Page | <Paste a screenshot of the Gallery Page displayed in Browser 1> |
| Contact Page | <Paste a screenshot of the Contact Page displayed in Browser 1> |

|  |  |
| --- | --- |
| Browser 2 Name: |  |
| Browser Version: |  |
| Home Page | <Paste a screenshot of the Home Page displayed in Browser 1> |
| Gallery Page | <Paste a screenshot of the Gallery Page displayed in Browser 1> |
| Contact Page | <Paste a screenshot of the Contact Page displayed in Browser 1> |

|  |  |
| --- | --- |
| Browser 3 Name: |  |
| Browser Version: |  |
| Home Page | <Paste a screenshot of the Home Page displayed in Browser 1> |
| Gallery Page | <Paste a screenshot of the Gallery Page displayed in Browser 1> |
| Contact Page | <Paste a screenshot of the Contact Page displayed in Browser 1> |

**Identify, Explain and Correct Observed Browser Differences or Inconsistencies**

5.4 Identify and explain any observed differences or inconsistencies in how the three browsers displayed your pages to your Client.

Record inconsistencies the table below and take corrective action. You can add more rows if necessary.

**List of Notable Differences Across Browsers (if any)**

**User Acceptance**

5.5 Present your corrected website to your Client and obtain final sign-off for the Testing phase.

|  |  |
| --- | --- |
| Final Testing Sign-Off | |
| * All browser inconsistencies have been rectified * All non-compliant test cases have been discussed with Client (Teacher) * Appropriate rectifications have been carried out and demonstrated to Client. * Re-testing has been carried out satisfactorily and demonstrated to Client. | |
| Only tick “Yes” below once you have obtained your Client (Teacher’s) approval | Yes  No |
| Date Presented: |  |

**Obtain Final Approval from Client for Website.**

5.6 Check you have met all client requirements such as page structure, image requirements, consistency and security features by completing the Website Requirements Checklist in Section 1.2 of the Project Scenario with your Client.

Paste a copy of the completed checklist below once all requirements have been met and sign-off has been approved.

|  |
| --- |
| < Paste a copy of the completed Website Requirements Checklist here> |

### Part 6 - FTP Upload to Server

**Upload completed website to the Server.**

6.1 Set the FTP client for your web authoring tool and provide a screenshot of this and any other of your IDE/Tool settings in the table below.

Create a secure Password Protected Account in preparation for uploading your Website.

Login and upload the modified website to the corresponding website folder on the server preserving its original structure.

Take screenshots of the entire process as evidence of task completion and paste in the table below.

|  |
| --- |
| <Screenshot of FTP client configuration> |
| <Screenshot of secure Password Protected Account you have created on the server> |
| <Screenshots of the FTP process including successful file transfer reports, and the preserved original website structure> |

**End of Assessment**