# Student Version

| Section A – Program/Course details | | | |
| --- | --- | --- | --- |
| **Qualification code:** | ICT40120 | **Qualification title:** | Certificate IV in Information Technology (Programming) |
| **Subject Code:**  **Unit code:** | (CPRO5)  ICTWEB431  ICTWEB432  ICTWEB433  ICTWEB452 | **Subject Title:**  **Unit title:** | (Website Design Fundamentals)  Create and style simple markup language documents  Design website layouts  Confirm accessibility of websites  Create a markup language document |
| **Department name:** | BDIT, Computer and Information Technology | **CRN number:** | Enter CRN number |

| Section B – Assessment task details | | | |
| --- | --- | --- | --- |
| **Assessment number:** | 2 of 2 | **Semester/Year:** | 1/2022 |
| **Due date:** | Session 9 | **Duration of assessment:** | 3 weeks |
| **Assessment method** | Portfolio | **Assessment task results** | Ungraded result (S/NS) |
| Other: Click here to enter text. |

| Section C – Instructions to students |
| --- |
| **Task instructions:** |
| This assessment is comprised of 5 steps.   Step 1. Design website layout Step 2. Develop website  Step 3. Deploy website to w3schools  Step 4. Confirm accessibility of websites  Step 5. Answer knowledge questions  In step 1, you are required to design a personal website for a client using a design software.  In step 2, you are required to develop the website, according to the design created in step 1, using HTML and CSS.  In step 3, you are required to deploy the website developed in step 2 to w3schools.  In step 4, you are required to run several accessibility tools to confirm the accessibility of the website deployed in step 3.  In step 5, you are required answer knowledge questions.  You will find detailed information for each step in the supporting document section.  For all parts in this assessment   * Learners are required to correctly answer all questions to a satisfactory level for each question of this assessment task to be given a satisfactory result by the assessor. If this is not achieved on the first attempt, then an opportunity to resubmit is allowed. * Once learners have completed all the questions, the assessment must be uploaded and submitted along with the signed assessment coversheet via Brightspace. * If a supplied answer is incorrect or requires further information, the learner will be requested to correct the issues and resubmit the assessment via Brightspace. * Learners must contribute to and abide by organisational standards including intellectual property and privacy laws. * Learners may use the internet for research purpose however the learner’s answer must be in their own words. * See supporting documentation for further instructions. |

| Section D – Conditions for assessment | |
| --- | --- |
| **Conditions:**  Student to complete and attach Assessment Submission Cover Sheet to the completed Assessment Task. | |
| * This assessment is to be completed individually. * You must meet all criteria listed in the marking guide to be satisfactory in this task. * You may resubmit this task if not successful within the enrolment period as per Holmesglen conducting assessment procedure. * This is an individual task; however, you are required to get information, feedback and ideas from your assessor, peers and industry to help complete the assessment planning guide. * It is expected all documents will be completed and submitted electronically but if this is not possible, make alternative arrangements for submitting the documents with your assessor. * You will have the opportunity to resubmit if any part of the assessment is deemed unsatisfactory (one resubmit allowed per task). * You can appeal an assessment decision according to the Holmesglen Assessment Complaints and Appeals Procedure. * If you feel you require special allowance or adjustment to this task, please decide with your assessor within one week of commencing this assessment. * The learner may use the internet for research purpose only. | |
| **Equipment/resources students must supply:** | **Equipment/resources to be provided by the RTO:** |
| Students intending to learn remotely will require access to: A Mac or PC/laptop with the following minimum specification:   * 8GB of RAM * CPU with minimum 2ghz processor or faster * 200GB of Storage * Monitor 24" (PC only, dual monitor optional but preferred) * Headset with microphone (webcam optional but preferred) * Access to internet connection (ADSL or cable connection desirable)   Applications:   * Microsoft Word - access through Holmesglen MyHorizon * WebEx - free to download * Visual Studio Code – free to download * 7Zip or an equivalent compression utility - free to download * Google Chrome – recommended web browser * Onedrive or google drive/dropbox account for storage * w3schools account * Web accessibility validation tools * Web design tool * Visual Studio Code | A Mac or PC/laptop with the following minimum specification:   * 8GB of RAM * CPU with minimum 2ghz processor or faster * 200GB of Storage * Monitor 24" (PC only, dual monitor optional but preferred) * Headset with microphone (webcam optional but preferred) * Access to internet connection (ADSL or cable connection desirable)   Applications:   * Microsoft Word - access through Holmesglen MyHorizon * WebEx - free to download * Visual Studio Code – free to download * 7Zip or an equivalent compression utility - free to download * Google Chrome – recommended web browser * Onedrive or google drive/dropbox account for storage * w3schools account * Web accessibility validation tools * Web design tool * Visual Studio Code |

|  |  |  |  |
| --- | --- | --- | --- |
| Section E – Marking Sheet - Student Answer Sheet | | | |
| **Subject code:**  **Unit code:** | (CPRO5)  ICTWEB431  ICTWEB432  ICTWEB433  ICTWEB452 | **Subject Title:**  **Unit title:** | (Website Design Fundamentals)  Create and style simple markup language documents  Design website layouts  Confirm accessibility of websites  Create a markup language document |

| **Criteria for assessment** | | **Satisfactory** | | **Comment** |
| --- | --- | --- | --- | --- |
| **Yes** | **No** |
| **The following has been submitted for assessment:** | | | | |
| Website design documentation | |  |  |  |
| Website test plan documentation | |  |  |  |
| All website source codes | |  |  |  |
| Test report documentation | |  |  |  |
| Supporting document with all questions answered | |  |  |  |
| Signed cover sheet | |  |  |  |
| **Marking criteria for each product document/s supplied:** | | | | |
| **Part 1. Design website layout** | | | | |
| Q1.1 | Candidate identified the client business requirements to develop the website, using listening and questioning techniques when communicating with client. |  |  |  |
| Q1.2 | Candidate identified applicable standards and design principles required in website development. |  |  |  |
| Q1.3 | Candidate identified the appropriate hardware and software required to develop the website |  |  |  |
| Q1.4 | Candidate used the template below and conducted user analysis and determined user profile and needs. |  |  |  |
| Q1.5 | Candidate identified user content, operating system and requirements. |  |  |  |
| Q1.6 | Candidate determined applicable design principles for website. |  |  |  |
| Q1.7 | Candidate determined user experience design requirements according to user needs |  |  |  |
| Q1.8 | Candidate designed and created page hierarchy and structure according to design protocol |  |  |  |
| Q1.9 | Candidate reviewed content and confirmed user content requirements are met |  |  |  |
| Q1.10 | Candidate applied required information hierarchy to site design. |  |  |  |
| Q1.11 | Candidate designed and implemented process flow according to client requirements. |  |  |  |
| Q1.12 | Candidate tested website layout against user needs and amended as required. |  |  |  |
| Q1.13 | Candidate completed and documented design structure |  |  |  |
| **Part 2. Develop website** | | | | |
| Q2.1 | Candidate developed testing approach and test cases based on requirements and refine with user, using provided test plan template. |  |  |  |
| Q2.2 | Candidate selected appropriate markup language |  |  |  |
| Q2.3 | Candidate identified and confirmed required documentation, and defined document structure |  |  |  |
| Q2.4-1 | Candidate created and assigned basic elements of document considering accessibility and document requirements |  |  |  |
| Q2.4-2 | Candidate markup and defined sections of document and described structure and layout according to document requirements |  |  |  |
| Q2.4-3 | Candidate styled and formatted documents using CSS according to user requirements |  |  |  |
| Q2.4-4 | Candidate laid out document elements using CSS according to user requirements |  |  |  |
| Q2.4-5 | Candidate confirmed styling of web page meets document specifications and requirements |  |  |  |
| Q2.5 | Candidate, for each web page, identified and evaluated the components required |  |  |  |
| Q2.6 | Candidate incorporated required web page components into the web pages |  |  |  |
| Q2.7-1 | Candidate recorded test result in a report and report file was attached. |  |  |  |
| Q2.7-2 | Candidate verified the website in two different browsers and results were recorded in the test report. |  |  |  |
| Q2.7-3 | All issues identified in the test have been corrected and the correction has been re-tested and recorded in the test report |  |  |  |
| Q2.7-4 | All gaps identified in the test have been recorded, and changed has been implemented. |  |  |  |
| Q2.7-5 | Candidate listed any outstanding issues and corrective actions. |  |  |  |
| Q2.7-6 | Candidate recommended, agreed, and undertook any outstanding corrective actions with the user to achieve user acceptance |  |  |  |
| Q2.8 | Candidate confirmed requirements were met and finalised documentation |  |  |  |
| Q2.9 | Candidate presented the finalized website and test result to client and obtained sign-off from client |  |  |  |
| **Part 3. Deploy website to w3schools** | | | | |
| Q3.1 | Candidate provided a valid URL to the website hosted on w3schools. |  |  |  |
| Q3.2 | Candidate provided screenshot to each page of the website |  |  |  |
| **Part 4. Confirm accessibility of websites** | | | | |
| Q4.1 | Candidate checked text equivalent for every non-text element is present in website where feasible |  |  |  |
| Q4.2 | Candidate checked text-only pages were logical and accessible |  |  |  |
| Q4.3 | Candidate checked document could be read without style sheets. |  |  |  |
| Q4.4 | Candidate checked information and pages were not dependent on colour and could operate in monochrome environment. |  |  |  |
| Q4.5 | Candidate check pages operate on text-to-speech browser. |  |  |  |
| Q4.6 | Candidate tested site with different user groups and confirmed site transforms and maintained accessibility. |  |  |  |
| Q4.7 | Candidate applied and documented changes to all pages according to the test results. And confirmed priorities identified in analysis of web development standards were met and completed. |  |  |  |
| Q4.8 | Candidate confirmed website was compliant with accessibility checklist requirements, and obtained signed off from client |  |  |  |
| **Part 5. Answer Knowledge Questions** | | | | |
| Q5.1 | Candidate understood copyright and intellectual property requirements applicable to designing web layouts. |  |  |  |
| Q5.2 | Candidate understood the role and responsibility of customer and business liaison that is applicable to designing website layouts. |  |  |  |
| Q5.3 | Candidate understood webpage design principles related to different internet connectivity impacts. |  |  |  |
| Q5.4 | Candidate identified at least two page load times measurement tools |  |  |  |
| Q5.5 | Candidate understood technical specifications procedures and documentation procedures |  |  |  |
| Q5.6 | Candidate understood standards applicable to website design. |  |  |  |
| Q5.7 | Candidate understood website design methods and standard website structures |  |  |  |
| Q5.8 | Candidate understood design and cyber security procedures and protocols |  |  |  |
| Q5.9 | Candidate understood media queries relevant to designing website layouts documentation techniques applicable documenting website layout designs |  |  |  |
| Q5.10 | Candidate understood what applications are relevant to designing website layouts and how they are budgeted for. |  |  |  |
| Q5.11 | Candidate understood markup languages, including HTML and CSS, and their associated standards, advantages, and disadvantages |  |  |  |
| Q5.12 | Candidate understood standard web and CSS design principles |  |  |  |
| Q5.13 | Candidate understood the application of HTML/XHTML to CSS |  |  |  |
| Q5.14 | Candidate understood CSS standards for design |  |  |  |
| Q5.15 | Candidate understood hypertext transfer protocol (HTTP) and HTTP Secure (HTTPS) |  |  |  |
| Q5.16 | Candidate correctly explained at least two CSS testing tools and processes and associated advantages and disadvantages |  |  |  |
| Q5.17 | Candidate understood troubleshooting processes relating to CSS and websites |  |  |  |
| Q5.18 | Candidate understood features and limitations of at least two common web browsers, and their accessibilities |  |  |  |
| Q5.19 | Candidate understood organisational procedures to document test results |  |  |  |
| Q5.20 | Candidate understood the use of the following markup languages including  •hypertext markup language (HTML)  •virtual reality modelling language (VRML)  •extensible markup language (XML) |  |  |  |
| Q5.21 | Candidate understood the standards set by the World Wide Web Consortium (W3C) applicable to markup language |  |  |  |
| Q5.22 | Candidate correctly explained at least two common website accessibility issues |  |  |  |
| Q5.23 | Candidate understood documentation techniques, web page components and organisational procedures and guidelines relevant to creating a markup language document to specification. |  |  |  |
| Q5.24 | Candidate understood document validation procedures |  |  |  |
| Q5.25 | Candidate understood browser and device compatibility |  |  |  |
| Q5.26 | Candidate researched and identified, specific user groups with particular accessibility requirements. |  |  |  |
| Q5.27 | Candidate identified general legislated and industry accessibility standards and requirements |  |  |  |
| Q5.28 | Candidate identified at least two web development standards |  |  |  |
| Q5.29 | Candidate consolidated specific and general standards and requirements, and generate an accessibility checklist, with at least 6 items. |  |  |  |
| Q5.30 | Candidate identified legislation, regulations and codes of practice, applicable to access, equity and security |  |  |  |
| Q5.31 | Candidate identified computing and programming standards applicable to access and equity |  |  |  |
| Q5.32 | Candidate technical performance measurement principles |  |  |  |
| Q5.33 | Candidate listed at least three automatic testing tools and software |  |  |  |
| Q5.34 | Candidate Web Accessibility Initiative (WAI), and its mission |  |  |  |
| Q5.35 | Candidate understood standards and guidelines including:  •World Wide Web Consortium (W3C)  •Web Content Accessibility Guidelines (WCAG)  •Authoring Tool Accessibility Guidelines (ATAG)  •User Agent Accessibility Guidelines (UAAG) |  |  |  |

**Assessment Submission Cover Sheet (VET)**

|  |  |
| --- | --- |
| **Student Declaration – Must be signed before submission** |  |
| By submitting this assessment task and signing the below, I acknowledge and agree that:  • This completed assessment task is my own work.  • I understand the serious nature of plagiarism and I am aware of the penalties that exist for breaching this.  • I have kept a copy of this assessment task.  • The assessor may provide a copy of this assessment task to another member of the Institute for validation and/or benchmarking purposes. | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Student ID:** | **100655651** | **Student name:** | **Jovan Mostanovski** |

|  |  |
| --- | --- |
| **Submission or observation date:** |  |
| **Student signature**  For electronic submissions: By typing your name in the student signature field, you are accepting the above declaration. | **Jovan Mostanovski** |

| Section F – Feedback to Student | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| **Has the student successfully completed this assessment task?** | | | | | **Yes** | **No** |
| **☐** | **☐** |
| **Additional Assessor comments (as appropriate):** | | | | | | |
|  | | | | | | |
| **Resubmission allowed:** | **Yes ☐** | **No ☐** | **Resubmission due date:** |  | | |
| **Assessor name:** |  | | | | | |
| **Assessor signature:** |  | | | | | |
| **Date assessed:** |  | | | | | |

**Supporting document**

# Project Brief and Instructions

|  |  |  |  |
| --- | --- | --- | --- |
| **Subject code:**  **Unit code**: | (CPRO5)  ICTWEB431  ICTWEB432  ICTWEB433  ICTWEB452 | **Subject title:**  **Unit title:** | (Website Design Fundamentals)  Create and style simple markup language documents  Design website layouts  Confirm accessibility of websites  Create a markup language document |
| **Student ID:** | 100655651 | **Student name:** | Jovan Mostanovski |
| **Date of submission:** |  | **Student signature:** | Jovan Mostanovski |

|  |
| --- |
| **Project Brief** Read through the brief below take note of the needs and requirements outlined in the brief. |
| **Introduction**  This assessment task requires you to develop a personal website for a client using HTML5 and CSS3. Your teacher will be playing the role of the client & user for this assessment task. Alternatively, the website you develop may be about or for any other topic, company or community of your choice. As long as the website meets the requirements outlined in this project.  This project has been divided into 5 key steps. Each step must be completed as per the instructions.  Step 1 - Design the website layout  Step 2 - Develop the website  Step 3 - Deploy the website to w3schools  Step 4 - Confirm accessibility of the website  Step 5 - Answer knowledge questions  **General requirements**   * Home Page and one additional page * Ensure correct flow of information architecture * The overall colour scheme and style is up to your own discretion * Fonts must be suitable for web design: web safe / google fonts * Images must be copyright free * You must consider good accessibility and usability standards * Browser support: Chrome, Firefox, MS Edge etc. * Website to be deployed on w3schools * Website to be validated with accessibility testing tools. * All questions to be answered for each step.   **Technical requirements**   * HTML5 & CSS3 are to be used to develop page structure, layout and design * The website must be accessible to people with disabilities * The design style for the web consistent, keeping with what is currently on trend   **Website design requirements**   1. A home page with the at least 3 sections 2. A second page with the content you selected 3. A navigation bar for all pages 4. A web form 5. At least one section with images 6. At least one internal link (i.e. go to a section in the same page or another page) 7. At least one external link (i.e. go to social media) 8. Accessibility considerations in design and function 9. Test website in at least TWO browsers 10. All styles and layouts are coded in an external CSS file 11. Validate HTML and validate CSS   **Other Standards**   * HTML Standards must be adhered to wherever possible * CSS Standards must be adhered to wherever possible * HTML accessibility standards   Refer to W3C website for the standards and specifications  <https://www.w3.org/Style/CSS/specs.en.html>  Refer to w3cschools for more information  <https://www.w3schools.com/html/default.asp>  <https://www.w3schools.com/css/default.asp> |

## Step 1. Design website layout

Note: for this step you are required to complete the following designs

* create page hierarchy
* content structure of each page
* wireframe design of each page

You are not required to design

* colour theme
* graphic design of each page

For design tool, you are free to choose any one of the following tools

* <https://wireframepro.mockflow.com/>
* Adobe Photoshop
* Adobe Illustrator
* Any other equivalent tools

|  |
| --- |
| **Q1.1.** Read the project brief and communicate with client to identify the business requirements for the website.  You are required to uses listening and questioning techniques when communicating with client, and record the requirements below. |
| **Answer:** |
| **Q1.2.** Identify applicable standards and design principles required in website development. You are required to discuss at least two standards AND two principles |
| **Answer:**  Standards  1.  2.  Principles  1.  2. |
| **Q1.3.** Identify the appropriate hardware and software required to develop the website |
| **Answer:** |
| **Q1.4.** Use the template below and conduct user analysis and determine user profile and needs. |
| **Answer:**  Who they are (profile)  What they do, when and where (context)  Why they do it (needs, goals, tasks)  How they do it (experience)  What they like or dislike |
| **Q1.5.** Communicate with client to identify user contents of the website, web hosting operating system and its requirements |
| **Answer:**  user contents of the website  web hosting operating system and its requirements |
| **Q1.6.** Determine applicable design principles for website (based on the identified principles in Q1.2) |
| **Answer:** |
| **Q1.7.** Determine user experience design requirements according to user needs. Explain the user experience design for each part of the webpage. An example has been given. |
| **Answer:**   1. Navbar design – *the navbar is a two-level navigation system. The first level is a horizontal navbar with multiple nav items, and the second level are dropdown vertical list with multiple list items. The dropdown list will be displayed upon hovering the curse onto the level 1 nav item.* 2. Image gallery – 3. … 4. … |
| **Q1.8.** Design and create page hierarchy and content structure of each page according to design protocol |
| **Answer:**  Screenshot of the page hierarchy  Content structure of each page  1. page one  2. page two  … |
| **Q1.9.** Review content and confirm user content requirements are met |
| **Answer:**   |  |  | | --- | --- | | User content requirements are all met and confirmed with client. |  | |
| **Q1.10.** Apply required information hierarchy to site design. Provide screenshots of the wireframe design of each webpage. |
| **Answer:** |
| **Q1.11.** Design and implement process flow according to client requirements. You are required to design at least 3 process flows, and an example has been given. |
| **Answer:**   |  |  |  | | --- | --- | --- | | **#** | **Description** | **Process flow(s)** | | **1** | for user who know this website and need to find the contact information | Home page 🡪 About page 🡪 Contact section | | **2** | for user who visit this website for the first time |  | | **3** |  |  | |
| **Q1.12.** Test website layout against user needs and amend as required. You must design at least three test cases, then conduct the test and record the results. |
| **Answer:**   |  |  |  |  | | --- | --- | --- | --- | | **Test Case #** | **Test steps** | **Expected result** | **Actual result** | | **1** |  |  |  | | **2** |  |  |  | | **3** |  |  |  | |
| **Q1.13.** Use the template below to complete and document web design structure |
| **Answer:**   |  |  | | --- | --- | | **Item** | **Screenshots** | | **Page hierarchy (website structure)** |  | | **Content structure of each page** |  | | **Wireframe of each page** |  | |
| **Documentation generated in the part are listed below. You are required to include all the documentations in your final submission.** |
| |  |  | | --- | --- | | **Documentation Name** | | | 1. Website design documentation (wireframe) |  | |

## Step 2. Develop website

|  |
| --- |
| **Q2.1.** Develop testing approach and test cases based on requirements and refine with user, using provided test plan template. |
| **Answer:**  Provide the file name of the test plan documentation. |
| **Q2.2.** Select appropriate markup language |
| **Answer:** |
| **Q2.3.** Identify and confirm required HTML documentation, and define HTML document structure. Please explain how many webpages are to develop and what is the content structure of each webpage. |
| **Answer:** |
| **Q2.4.** Create HTML document structure, format, style and layout each element. Specifically, you are required to   * **Q2.4-1**: Create and assign basic elements of document considering accessibility and document requirements * **Q2.4-2**: Markup and define sections of document and describe structure and layout according to document requirements * **Q2.4-3**: Style and format documents using CSS according to user requirements * **Q2.4-4**: Lay out document elements using CSS according to user requirements * **Q2.4-5**: Confirm styling of web page meets document specifications and requirements   You must finish creating and styling all components of the website. And for each component, provide three screenshots as evidence   * A screenshot of the component displayed in the browser view * A screenshot of the HTML code of the component * A screenshot of the CSS codes of the component |
| **Answer:**  **#1 Header component**   |  |  |  | | --- | --- | --- | |  | **Screenshot** | | | **Browser view** |  | | | **HTML code** |  | | | **CSS codes** |  | | | **I confirm styling of this component meets document specifications and requirements** | |  |   **#2 Portfolio component**   |  |  |  | | --- | --- | --- | |  | **Screenshot** | | | **Browser view** |  | | | **HTML code** |  | | | **CSS codes** |  | | | **I confirm styling of this component meets document specifications and requirements** | |  |   Add more sections using the template above as needed. |
| **Q2.5.** For each web page, identify and evaluate the components required. |
| **Answer:**   |  |  |  | | --- | --- | --- | | **Page Name** | **Components included** | **Evaluation** | | Home page |  |  | |  |  |  | |  |  |  |   Add more rows as needed. |
| **Q2.6.** Incorporate required web page components into the web pages. For each web page, provide three screenshots as evidence  • A screenshot of the web page displayed in the browser view  • A screenshot of the HTML code of the web page  • A screenshot of the CSS codes of the web page |
| **Answer:**  **#1 Home page**   |  |  | | --- | --- | |  | **Screenshot** | | **Browser view** |  | | **HTML code** |  | | **CSS codes** |  |   **#2**   |  |  | | --- | --- | |  | **Screenshot** | | **Browser view** |  | | **HTML code** |  | | **CSS codes** |  |   Add more sections using the template above as needed. |
| **Q2.7.** Test and validate the web pages. Specifically, you are required to   * Validate markup language document against specifications and record outcomes * Test website in different browsers according to test approach and cases, and correct and re-test issues * Validate compatibility of markup language document in different browsers and devices and record outcomes * Identify gaps between specifications and requirements and markup language document and apply changes as required, according to organisational procedures * Confirm requirements are met and finalise documentation according to organisational procedures * Document test results and provide to user to explain any outstanding issues and corrective actions * Recommend, agree, and undertake any outstanding corrective actions with the user to achieve user acceptance |
| **Answer:**   |  |  | | --- | --- | | **Item** | **Your answer** | | **Q2.7-1: Provide test report file name.** |  | | **Q2.7-2: I confirm the test has been done in at least two different web browser and result has been recorded in the test report.** | **Yes, and evidence has been recorded in the test report.** | | **Q2.7-3: I confirm all issues identified in the test have been corrected and the correction has been re-tested and recorded.** | **Yes, and evidence has been recorded in the test report.** | | **Q2.7-4: I confirm all gaps identified in the test have been recorded, and changed has been implemented.** | **Yes, and evidence has been recorded in the test report.** | | **Q2.7-5: List any outstanding issues and corrective actions.** | |  | | --- | |  | |  | |  | |  | |  | | | **Q2.7-6: Recommend, agree, and undertake any outstanding corrective actions with the user to achieve user acceptance.** | **Client name:**  **Client Signature:**  **Date:** | |
| **Q2.8.** Confirm requirements are met and finalise documentation |
| **Answer:**  **I confirm that all requirements for the website are met.**  **I confirm that all the following documentation has been submitted.**   |  |  | | --- | --- | | **File Type** | **File Name** | | **Design document** |  | | **Website source code** |  | | **Test plan** |  | | **Test report** |  | |
| **Q2.9.** Present the finalized website and test result to client and obtain sign-off from client. |
| **Answer:**  **Client name:**  **Client Signature:**  **Date:** |
| **Documentation generated in the part are listed below. You are required to include all the documentations in your final submission.** |
| |  |  | | --- | --- | | **Documentation Name** | | | 1. Website test plan documentation |  | | 2. All website source codes |  | | 3. Test report documentation |  | |

## Step 3. Deploy website to w3schools.com

|  |
| --- |
| **Q3.1.** Provide the URL to the website hosted on w3schools. |
| **Answer:** |
| **Q3.2.** Provide screenshot to each page of the website. |
| **Answer:** |

## Step 4. Confirm accessibility of websites

|  |
| --- |
| **Q4.1.** Accessibility test #1  Check text equivalent for every non-text element is present in website where feasible. That is all “area” “img” and “input” tags must have a “alt” attribute and proper value. |
| **Answer:**   |  |  | | --- | --- | | **Auto test tool/software** |  | | **Screenshot the results** |  | | **Results analysis** |  | | **Change recommendation** |  | | **Change Priority**  **(Low/Medium/High)** |  | |
| **Q4.2.** Accessibility test #2  Check text-only pages are logical and accessible |
| **Answer:**   |  |  | | --- | --- | | **Auto test tool/software** |  | | **Screenshot the results** |  | | **Results analysis** |  | | **Change recommendation** |  | | **Change Priority**  **(Low/Medium/High)** |  | |
| **Q4.3.** Accessibility test #3  Check document can be read without style sheets. |
| **Answer:**   |  |  | | --- | --- | | **Auto test tool/software** |  | | **Screenshot the results** |  | | **Results analysis** |  | | **Change recommendation** |  | | **Change Priority**  **(Low/Medium/High)** |  | |
| **Q4.4.** Accessibility test #5  Check information and pages are not dependent on colour and can operate in monochrome environment. |
| **Answer:**   |  |  | | --- | --- | | **Auto test tool/software** |  | | **Screenshot the results** |  | | **Results analysis** |  | | **Change recommendation** |  | | **Change Priority**  **(Low/Medium/High)** |  | |
| **Q4.5.** Accessibility test #6  Check pages operate on text-to-speech browser. |
| **Answer:**   |  |  | | --- | --- | | **Auto test tool/software** |  | | **Screenshot the results** |  | | **Results analysis** |  | | **Change recommendation** |  | | **Change Priority**  **(Low/Medium/High)** |  | |
| **Q4.6.** Accessibility test #7  Test site with different user groups and confirm site transforms and maintains accessibility.  You are required to test the website with at least two people from different user groups with transformed site (e.g. text-only view, text-to-speech view …). |
| **Answer:**  **User group #1**   |  |  | | --- | --- | | **User name** |  | | **Transform type** |  | | **Results analysis** |  | | **Change recommendation** |  | | **Change Priority**  **(Low/Medium/High)** |  |   **User group #2**   |  |  | | --- | --- | | **User name** |  | | **Transform type** |  | | **Results analysis** |  | | **Change recommendation** |  | | **Change Priority**  **(Low/Medium/High)** |  | |
| **Q4.7.** Apply and document changes to all pages according to the test results. And confirm priorities identified in analysis of web development standards are met and completed.  Provide screenshot of source code (e.g. HTML/CSS) of each change. You must include at least 2 changes. |
| **Answer:**   |  |  |  |  |  | | --- | --- | --- | --- | --- | | **#** | **Priority** | **Screenshot before change** | **Screenshot after change** | **Accessibility standards are met (Y/N)** | | **1** |  |  |  |  | | **2** |  |  |  |  | |
| **Q4.8.** Confirm website is compliant with accessibility checklist requirements, and obtain signed off from client. |
| **Answer:**  Website accessibility check list   |  |  |  | | --- | --- | --- | | **Accessibility Test Item** | **Pass** | **Not Pass** | | Text equivalent for every non-text element is present in website where feasible |  |  | | text-only pages are logical and accessible |  |  | | document can be read without style sheets |  |  | | information and pages are not dependent on colour and can operate in monochrome environment |  |  | | pages operate on text-to-speech browser |  |  | | Test site with different user groups and confirm site transforms and maintains accessibility |  |  |   **Accessibility results have been confirmed with client.**  **Client Name:**  **Client Signature:**  **Date:** |

## Step 5. Answer Knowledge Questions

|  |  |
| --- | --- |
| **Q5.1.** | **Discuss copyright and intellectual property requirements applicable to designing web layouts.** |
|
| **Answer:** | |
| **Q5.2.** | **Discuss the role and responsibility of customer and business liaison that is applicable to designing website layouts.** |
|
| **Answer:** | |
| **Q5.3.** | **Discuss webpage design principles related to different internet connectivity impacts.** |
|
| **Answer:**   |  |  | | --- | --- | | **Internet connectivity type** | **Design principles** | | **High speed** |  | | **Low speed** |  | | **Unlimited data** |  | | **Limited data** |  | | |
| **Q5.4.** | **Identify at least two page loading times measurement tools.** |
|
| **Answer:**   |  |  |  | | --- | --- | --- | | # | Tool Name | URL | | 1 |  |  | | 2 |  |  | | |
| **Q5.5.** | **Explain technical specifications procedures and documentation procedures. Please discuss the procedure of creating the following specification and documentation.**   * **Website structure diagram** * **Wireframes** * **Colour scheme** * **Graphic design** |
|
| **Answer:** | |
| **Q5.6.** | **Discuss standards or best practices applicable to website design.**  **You are required to discuss the standards or best practices for the following topics:**   * **Consistent branding.** * **Clear CTAs** * **Intuitive navigation** * **Clean design** * **Storytelling** * **Visuals** * **Mobile-first design** * **Accessibility** * **Prioritize search engine optimization (SEO)** * **Monitor site speed** * **Heatmaps** * **A/B Testing** |
|
| **Answer:** | |
| **Q5.7.** | **Discuss website design methods and standard website structures.**   * For website design methods, you are required to discuss waterfall and agile methodology. * For website structures, you are required to discuss hierarchical, sequential, and matrix structure |
|
| **Answer:**  Web design methods   |  |  | | --- | --- | | **Method name** | **Your answer** | | Waterfall |  | | Agile |  |   Standard website structure   |  |  | | --- | --- | | **Structure type** | **Your answer** | | Hierarchical |  | | Sequential |  | | Matrix |  | | |
| **Q5.8.** | **Discuss design and cyber security procedures and protocols.**  **Refer to the SANS checklist and discuss at least three of the following cyber security items**  [**https://www.sans.org/white-papers/1389/**](https://www.sans.org/white-papers/1389/)   * **Risk Assessment** * **Authentication** * **Authorization and Access Control** * **Session Management** * **Data and InPut Validation** * **Cross Site Scripting (XSS)** * **Command Injection Flaws** * **Buffer Overflows** * **Error Handling** * **Logging** * **Remote Administration** * **Web Application and Server Configuration** |
|
| **Answer:** | |
| **Q5.9.** | **What is CSS media query rule?**  **Discuss the best practices of using CSS media queries rules for responsive web design.** |
|
| **Answer:**  What is media query rule  Best practices of using media query | |
| **Q5.10.** | **Explain what applications are relevant to designing website layouts and how they are budgeted for.**  **You are required to discuss at least three tools.** |
|
| **Answer:**   |  |  |  |  | | --- | --- | --- | --- | | **Tool Name** | **Tool Link** | **Brief description** | **Cost** | |  |  |  |  | |  |  |  |  | |  |  |  |  | | |
| **Q5.11.** | **Discuss markup languages, including HTML and CSS, and their associated standards, advantages, and disadvantages** |
|
| **Answer:**   |  |  |  | | --- | --- | --- | |  | **Advantage** | **Disadvantage** | | **HTML** |  |  | | **CSS** |  |  | | |
| **Q5.12.** | **Discuss standard CSS design principles for web. How web components are built with HTML and CSS. You may use an example (e.g. a navbar) to explain.** |
|
| **Answer:** | |
| **Q5.13.** | **Discuss the application of HTML/XHTML to CSS** |
|
| **Answer:** | |
| **Q5.14.** | **Briefly describe the following CSS** **standards for design**   * **Selectors level 3:** [**https://www.w3.org/TR/selectors-3/**](https://www.w3.org/TR/selectors-3/) * **CSS Color Module Level 3:** [**https://www.w3.org/TR/css-color-3/**](https://www.w3.org/TR/css-color-3/) * **CSS Backgrounds and Borders Module Level 3:** [**https://www.w3.org/TR/css-backgrounds-3/**](https://www.w3.org/TR/css-backgrounds-3/) |
|
| **Answer:**   |  |  | | --- | --- | | **Standards** | **Your description** | | Selectors level 3 |  | | CSS Color Module Level 3 |  | | CSS Backgrounds and Borders Module Level 3 |  | | |
| **Q5.15.** | **Explain hypertext transfer protocol (HTTP) and HTTP Secure (HTTPS)** |
|
| **Answer:** | |
| **Q5.16.** | **Discuss at least two web** **testing tools and processes and associated advantages and disadvantages** |
|
| **Answer:** | |
| **Q5.17.** | **Discuss troubleshooting processes relating to CSS and websites** |
|
| **Answer:** | |
| **Q5.18.** | **Discuss features and limitations of at least two common web browsers, and their accessibility features.** |
|
| **Answer:**   |  |  | | --- | --- | | **Browser #1 name** |  | | **Features or advantages** |  | | **Limitations** |  | | **Accessibility features** |  |  |  |  | | --- | --- | | **Browser #2 name** |  | | **Features or advantages** |  | | **Limitations** |  | | **Accessibility features** |  | | |
| **Q5.19.** | **Explain organisational procedures to document test results** |
|
| **Answer:** | |
| **Q5.20.** | **Explain the use of the following markup languages including:**   * **hypertext markup language (HTML)** * **virtual reality modelling language (VRML)** * **extensible markup language (XML)** |
|
| **Answer:** | |
| **Q5.21.** | **Explain the standards set by the World Wide Web Consortium (W3C) applicable to markup language, such HTML and CSS.** |
|
| **Answer:** | |
| **Q5.22.** | **Explain at least two common website accessibility issues.** |
|
| **Answer:** | |
| **Q5.23.** | **Discuss documentation techniques, web page components and organisational procedures and guidelines relevant to creating a markup language document to specification.** |
|
| **Answer:** | |
| **Q5.24.** | **Discuss HTML/CSS document validation procedures.** |
|
| **Answer:** | |
| **Q5.25.** | **What is browser and device compatibility.** |
|
| **Answer:** | |
| **Q5.26.** | **Research and identify, specific user groups with particular accessibility requirements. You must research at lest two user groups** |
|
| **Answer:** | |
| **Q5.27.** | **Identify general legislated and industry accessibility standards and requirements** |
|
| **Answer:** | |
| **Q5.28.** | **Identify at least two web development standards** |
|
| **Answer:** | |
| **Q5.29.** | **Consolidate specific and general standards and requirements, and generate an accessibility checklist, with at least 6 items.** |
|
| **Answer:**  Website accessibility check list   |  |  |  | | --- | --- | --- | | **Accessibility Test Item** | **Pass** | **Not Pass** | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | |  |  |  | | |
| **Q5.30.** | **Identify legislation, regulations and codes of practice, applicable to access, equity and security.** |
|
| **Answer:** | |
| **Q5.31.** | **Identify computing and programming standards applicable to access and equity** |
|
| **Answer:** | |
| **Q5.32.** | **Discuss technical performance measurement principles** |
|
| **Answer:** | |
| **Q5.33.** | **List at least three automatic testing tools and software. Give the URL of each tool or software.** |
|
| **Answer:**   |  |  |  | | --- | --- | --- | | **Tool or software name** | **Description** | **URL** | |  |  |  | |  |  |  | |  |  |  | | |
| **Q5.34.** | **What is Web Accessibility Initiative (WAI), and its mission.** |
|
| **Answer:** | |
| **Q5.35.** | **Discuss the following standards and guidelines.** |
|
| **Answer:**   |  |  | | --- | --- | | **Standards / Guidelines** | **Your answer** | | World Wide Web Consortium (W3C) |  | | Web Content Accessibility Guidelines (WCAG) |  | | Authoring Tool Accessibility Guidelines (ATAG) |  | | User Agent Accessibility Guidelines (UAAG) |  | | |

*End of document*