|  |  |
| --- | --- |
| **ASSESSMENT MATRIX** | **Uncontrolled when printed**  **19/08/2014**  **FM02\_09b** |

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit Code & Name** | **ICAWEB505A Develop complex web page layouts** | | |
| **Elements, Performance Criteria, Critical Aspects, Required Skills, Required Knowledge** | | **Assessment Type & Part Number** | |
| **P1**  **Practical**  PAa\_P1 | |
| 1. **Element 1. Build a web page according to the design prototype** | | |  |
| 1.1 Identify main sections of the web page layout | | T1 | |
| 1.2 Create web page structure | | T1 | |
| 1.3 Position web page elements to achieve design specification | | T2 | |
| 1. **Ensure web page is validated and tested in major browsers** | |  | |
| 2.1 Validate cascading style sheet (CSS) against ***industry standards*** | | T3.4 | |
| 2.2 Correct ***browser*** incompatibilities using the most robust techniques | | T3.1 | |
| 2.3 Test website in various browsers | | T3.1 | |
| 1. **Ensure website is accessible** | |  | |
| 3.1 Check website is ***accessible*** to ensure it can be viewed | | T2.2/T3.5 | |
| 3.2 Check website sections to ensure accessibility | | T3 | |
| 3.3 Check web page elements to ensure accessibility | | T3 | |
| **Critical Aspects** | |  | |
| * develop a complex website layout | | T1-3 | |
| * layout page elements to suit a variety of devices | | T2 | |
| * test web pages in a variety of browsers | | T3.1 | |
| * validate the pages against industry standards. | | T3.4 | |
| **Required Skills** | |  | |
| analytical skills to identify appropriate CSS rules to be applied to obtain desired result | | T2 | |
| communication skills to liaise with end users | | T2 | |
| initiative and enterprise skills to recommend design features | | T | |
| literacy skills to: | |  | |
| follow documented instruction from a supplied guide | | T1-2 | |
| interpret workplace instructions and other technical documents | | T1-2 | |
| keep up-to-date with latest industry guidelines | | T1-3 | |
| numeracy skills to: | |  | |
| work with document element dimensions | | T2 | |
| work with relative and absolute measurements | | T2 | |
| planning and organisational skills to: | |  | |
| create the CSS in allocated timeframe | | T1-3 | |
| plan the layout of the web page | | T1 | |
| problem-solving skills to: | |  | |
| create web pages that will function in a variety of screen resolutions | | T2 | |
| resolve browser incompatibilities | | T3 | |
| research skills to identify latest industry guidelines | | T3 | |
| learning skills to keep up-to-date with industry guidelines and make recommendations | | T3 | |
| technical skills to: | |  | |
| produce valid accessible web pages | | T1-3 | |
| use CSS in the most efficient and effective way. | | T2 | |
| **Required Knowledge** | |  | |
| overview knowledge of design principles | | T1-3 | |
| detailed knowledge of: | |  | |
| hypertext markup language (HTML) and eXtensible hypertext markup language (XHTML) | | T2 | |
| CSS | | T2 | |
| hypertext transfer protocol (HTTP) | | T2 | |
| World Wide Web Consortium (W3C) standards | | T3 | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit Code & Name** | ICAWEB506A Develop complex cascading style sheets | | |
| **Elements, Performance Criteria, Critical Aspects, Required Skills, Required Knowledge** | | **Assessment Type & Part Number** | |
| **P1**  **Practical**  PAa\_P1 | |
| Element 1. Determine requirements and develop CSS | | |  |
| * 1. Obtain user requirements for style | | T1 | |
| * 1. Develop CSS to match user requirements | | T2 | |
| **Element 2. Use advanced CSS techniques to create web pages** | |  | |
| 2.1 Style elements of a web page using advanced CSS techniques | | T2 | |
| 2.2 Position document elements using advanced CSS | | T2 | |
| 2.3 Apply style sheets to multiple pages in a website | | T2 | |
| **Element 3. Ensure web page and CSS are validated and tested in all major browsers** | |  | |
| 3.1 Validate CSS against industry standards | | T3 | |
| 3.2 Test website in various browsers | | T3 | |
| 3.3 Rectify browser differences to ensure website is accessible | | T3 | |
| **Critical Aspects** | |  | |
| develop a complex website styled and formatted using CSS | | T2 | |
| create a complex page layout using CSS | | T2 | |
| test web pages in a variety of browsers | | T3 | |
| validate the CSS against industry standards. | | T3 | |
| **Required Skills** | |  | |
| analytical skills to identify appropriate CSS rules to be applied to obtain desired result | |  | |
| communication skills to liaise with end users | | T1-3 | |
| initiative and enterprise skills to recommend design features | | T3 | |
| literacy skills to: | |  | |
| follow documented instruction from a supplied guide | | T1-2 | |
| interpret workplace instructions and other technical documents | | T1-2 | |
| numeracy skills to work with: | |  | |
| document element dimensions | | T2 | |
| relative and absolute measurements | | T2 | |
| planning and organisational skills to: | |  | |
| create the CSS in allocated timeframe | | T1-3 | |
| plan the layout of the web page | | T1 | |
| problem-solving skills to: | |  | |
| create web pages that will function in a variety of screen resolutions | | T2 | |
| resolve browser incompatibilities | | T3 | |
| research skills to identify latest industry guidelines and make recommendations | | T3 | |
| learning and literacy skills to keep up-to-date with Industry guidelines | | T2-3 | |
| technical skills to: | |  | |
| produce valid accessible web pages | | T2-3 | |
| use CSS in the most efficient and effective way. | | T2 | |
| **Required knowledge** | |  | |
|  | |  | |
| overview knowledge of design principles | |  | |
| detailed knowledge of: | |  | |
| hypertext markup language (HTML) and eXtensible hypertext markup language (XHTML) | | T2 | |
| CSS | | T2 | |
| hypertext transfer protocol (HTTP) protocol | | T2 | |
| World Wide Web Consortium (W3C) standards | | T3 | |

|  |  |  |  |
| --- | --- | --- | --- |
| **Unit Code & Name** | **ICAWEB502A Create dynamic web pages** | | |
| **Elements, Performance Criteria, Critical Aspects, Required Skills, Required Knowledge** | | **Assessment Type & Part Number** | |
| **P1**  **Practical**  PAa\_P1 | |
| 1. Identify client and server-side dynamic content | | |  |
| 1.1 Review technical requirements | |  | |
| 1.2 Identify sections of the website requiring client-side dynamic content | |  | |
| 1.3 Identify sections of the website requiring server-side dynamic content | |  | |
| 1.4 Select appropriate ***languages*** and technology to meet the requirements | |  | |
| 2. Create dynamic content | |  | |
| 2.1 Create pages using appropriate languages | |  | |
| 2.2 Ensure code conforms to current industry best practice and standards | |  | |
| 3. Test dynamic pages | |  | |
| 3.1 Test website in a variety of ***browsers*** | |  | |
| 3.2 Ensure required dynamic content functions according to specified requirements | |  | |
| **Critical Aspects** | |  | |
| * produce dynamic web pages that include both client and server-side dynamic content | |  | |
| * create efficient and effective code to meet technical requirements. | |  | |
| **Required Skills** | |  | |
| * analytical skills to: | |  | |
| * + determine functional requirements | |  | |
| * + identify dynamic client and server-side requirements | |  | |
| * communication skills to liaise with the client | |  | |
| * initiative and enterprise skills to provide feedback and recommend the most appropriate technology solutions | |  | |
| * literacy skills to: | |  | |
| * + follow documented instructions | |  | |
| * + interpret workplace instructions and other technical documents | |  | |
| * + keep up-to-date with latest industry guidelines | |  | |
| * problem-solving skills to: | |  | |
| * + identify and rectify website functional problems | |  | |
| * + identify and resolve bugs in the created code | |  | |
| * + select the most efficient and effective algorithms | |  | |
| * research skills to: | |  | |
| * + find solutions to encountered problems | |  | |
| * + keep up-to-date with industry trends | |  | |
| * technical skills to: | |  | |
| * + apply basic hypertext transfer protocol (HTTP) | |  | |
| * + apply web programming concepts | |  | |
| * + create hypertext markup language (HTML) and eXtensible hypertext markup language (XHTML) pages | |  | |
| * + create software in a variety of languages, including client and server-side languages | |  | |
| * + create aesthetically pleasing web pages. | |  | |
| **Required Knowledge** | |  | |
|  | |  | |
| * web-programming concepts, including: | |  | |
| * + authentication and web security | |  | |
| * + HTTP | |  | |
| * + session management | |  | |
| * + stateless programming | |  | |
| * detailed knowledge of: | |  | |
| * + internet technology | |  | |
| * + programming control structures | |  | |
| * + object-oriented programming. | |  | |