Sample Case Study

Create an XML document for the employee personal data below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Employee Number** | **FirstName** | **LastName** | **Address** | **Email** |
| 1001 | George | Jamieson | 5 Unknown Street, USA | [gc@yahoo.com](mailto:gc@yahoo.com) |
| 1002 | Sophie | Garner | 4 Berry Street, Sydney | [sgarner@hotmail.com](mailto:sgarner@hotmail.com) |

Section 1: XML document design and development

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| Legislation, standards and procedures  *Identify:*   * *One applicable legislation and its relevance to XML document development* * *Two applicable standards and its relevance to XML document development* * *The procedures that you will follow to develop your XML documents.* | <See previous discussion and student guide> | |
| XML documents  *Describe the two XML documents you are going to design and develop, including:*   * *purpose* * *expectations for the document* * *required functionality.* | Purpose: To store employee data  Expectations for the document:  The xml file for the employee data is expected to store employee data. It is also expected to be valid. | |
| XML Tree Structure  *Provide a diagram of the Tree Structure for each XML document. This can be hand drawn here or developed on a computer in which case you should attach a screenshot.* |  | |
| Design methodology and iterative development  *Document the design methodology that you will use for your XML documents.*  *Explain how the methodology will incorporate iterative development.* | The methodology used is as follows:  Design: Developed tree structure of employee table  Build: Coding XML and DTD document  Test:   * Testing the validation of XML with DTD * Testing with two browsers * Testing with two devices * Testing the xml document online | |
| Software and tools  *List the software and tools you will use to develop your XML documents.* | Software and tools used:  Text Editor: Atom  Browsers: Chrome and Edge | |
| Document Type Definition  *Describe the DTD you will use for your XML documents.* | <!ELEMENT employees (record\*)>  <!ELEMENT record (employeeNumber, firstName, lastName, address, email)>  <!ELEMENT employeeNumber (#PCDATA)>  <!ELEMENT firstName (#PCDATA)>  <!ELEMENT lastName (#PCDATA)>  <!ELEMENT address (#PCDATA)>  <!ELEMENT email (#PCDATA)> | |
| Entities, elements and attributes  For each XML document you are to define the:   * entities * elements * attributes | <!ELEMENT employees (record\*)>  <!ELEMENT record (employeeNumber, firstName, lastName, address, email)>  <!ELEMENT employeeNumber (#PCDATA)>  <!ELEMENT firstName (#PCDATA)>  <!ELEMENT lastName (#PCDATA)>  <!ELEMENT address (#PCDATA)>  <!ELEMENT email (#PCDATA)> | |
| XML document development  *You are to develop the XML documents you have identified.*  *Document the coding in the software and tools you have selected.*  *Take screenshots of your work to attach to your portfolio.* | See employees.xml | |
| XML Styling  *You are to style your XML documents using the software and tools you have selected.*  *Summarise the details of your styling work here.*  *Take screenshots of your work to attach to your portfolio.* | Please see files and description below:  Employees.xml. When this xml document is opened from the local server, it displays it in table layout with background color blue. See screenshot below:    Employees.xsl. This file is used to style employees.xml so that it displays data in table layout.  Employees.css. This file links to xsl so that the web page have a background color of blue, and font style is arial. | |
| *Paperclip* Attach: | Screenshots |  |

Section 2: XML document testing and finalisation

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| Testing  *You are to test both of your XML documents off line to check if they are working.*  *Describe the testing process you undertook and take screenshots of your work to attach to your portfolio* | The testing process are as follows:   * Testing the validation of XML with DTD * Testing with two browsers * Testing with two devices * Testing the xml document online | |
| Browser and devices  *You are to test that your XML documents work on:*   * *Two different types of browsers* * *Two different types of browsers*   *List the two browsers you tested your XML documents on and the two devices.*  *Take screenshots of your work to attach to your portfolio* | <Follow instruction. Note that one is for browser and the other is for devices.> | |
| Test documents online  *You are to test both of your XML documents online to check if they are working.*  *Provide the link to your documents to at least two people e.g. a friend and/or a fellow student.*  *List their names here.*  *Ask them to check that they can see the document that you have created.*  *Get them to send you a screenshot of what they can see so that you check if the documents are working.* |  | |
| Assessment of test results  *Based on all the testing that you have done, update your XML documents.*  *If there are no errors your assessor will provide you with an example for you to fix.*  *Take screenshots of the work you undertook to fix errors.* | One screenshot of error, and other screenshot of the fix. | |
| *Paperclip* Attach: | Screenshots |  |