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| Faculty of Applied Sciences and Technology |
| **XML Data Processing** |
| ITC5202 - Project |
|  |
| **Cezmi Aktepe & Timothy Burns** |
| **[Pick the date]** |

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| This document explains how to process Order/Item XML data …………………………. |

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# Question 1 :

(Describe you answer. How did you prove that the document is well-formed and valid? Add screenshots)

# Question 2 and 3 : XML Structure

(1) Explain the major steps that you take to create DTD. Did you create a .dtd file, or you keep the DTD declaration inside the XML file? Why?

(2) Explain the major steps that you take to create XML Schema.

(3) How did you validate them? Add screenshots.

(4) Compare the DTD and Schema and show how DTD declaration are matched with Schema.

(1)

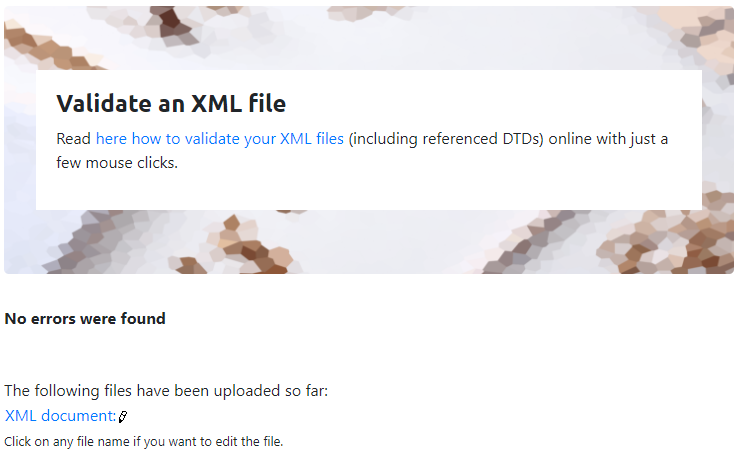
I declared DOCTYPE and I found root element. I searched all elements and attributes along with their occurrences. I defined root element and added sub-root elements then I added attributes. Finally, I added occurrences of elements.

I kept the DTD declaration inside the XML file because it seems more tidy and clean code for me.

(2)

(3) DTD

I used a web site to validate the DTD. Here is the screenshot.



(3) XML Schema

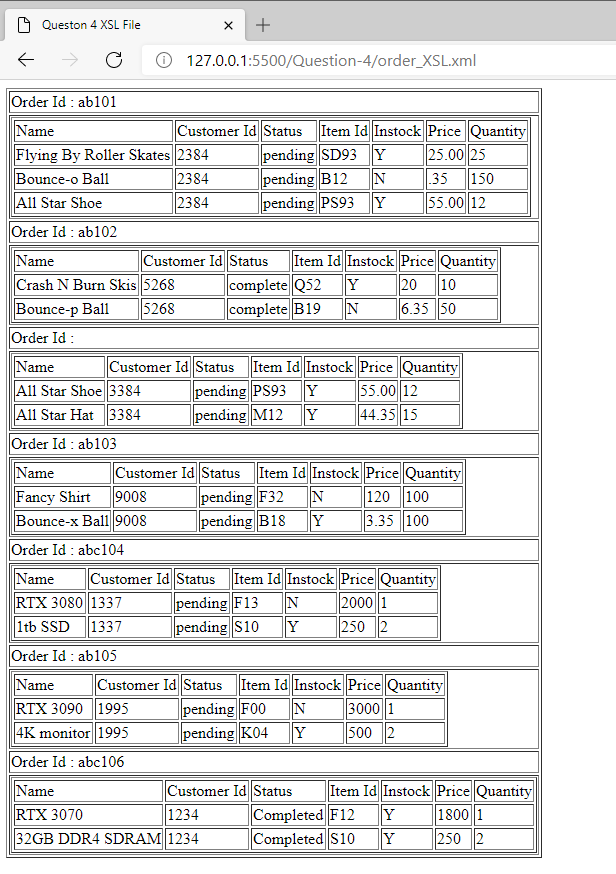
(4)

Both have tree like structure begins with root element and then other sub-elements. Both uses ELEMENT name for the xml element tags and ATTRIBUTE name for the xml attributes. Both show data type.

# Question 4 : Design XSLT

(Describe the major steps for designing the XSLT. Add screenshot of the output)

* Create xsl file and begin to add xsl:template and other sub-elements.
* Add html codes which will be used to display the xml file content.
* Use various xsl codes to extract data from xml and insert into the html tags.
* Add xsl link to xml file.



# Question 5 and 8: XPath and XSLT

(Describe the major steps for designing the XPath and XSLT. How did you test the XPath? How did you use XPath in the XSLT?

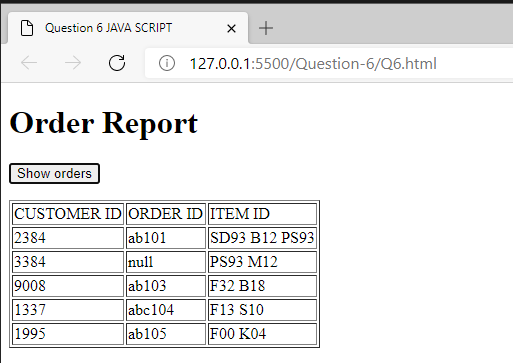
Add screenshot of the XPath testing and the output of XSLT)

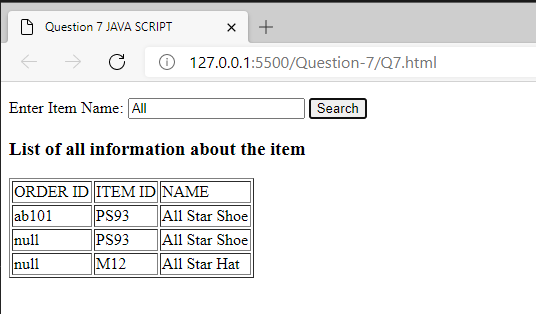
# Question 6 and 7: Use JavaScript to process XML data

(Describe the major steps for designing the JavaScript function(s), how you test this program, add some screenshots of the output)

* Create an external script file and link this file with the html.
* Create codes to connect and extract information from xml file.
* Create a function to write extracted and filtered data into the html file.
* Use loops and if conditionals to search data in the xml file and filter data.
* Use html button to activate function.
* After all, I used live server to test codes.

Here is the screen shoots of output





# Question 9

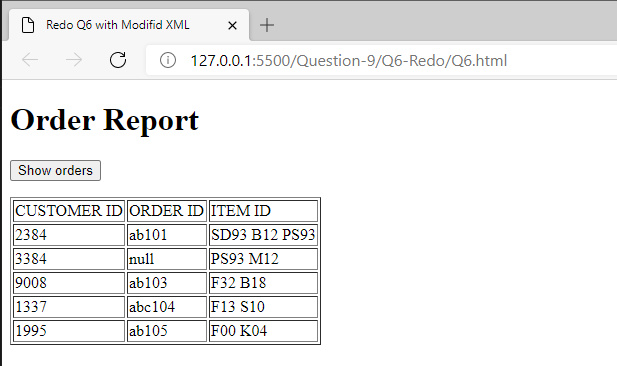
(Describe the major steps for designing the JavaScript function(s), how you test this program, add some screenshots of the output)

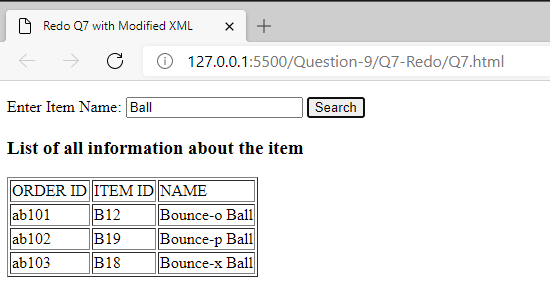
**A.**

**Redo Question 6 and Question 7**

* Create an external script file and link this file with the html.
* Create codes to connect and extract information from xml file.
* Create a function to write extracted and filtered data into the html file.
* Use loops and if conditionals to search data in the xml file and filter data.
* Use html button to activate function.
* After all, I used live server to test codes.

Here is the screen shoots of output





**B.**

# Bonus question

(Describe the major steps for designing the XSLT/JavaScript, how you test this program, add some screenshots of the output )

# Summary

(Describe how did you divide the work, share your feedback about this project like new points that you learn, challenges, …)