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| Faculty of Applied Sciences and Technology |
| **XML Data Processing** |
| ITC5202 - Project |
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| This document explains how to process Customer/Order XML data |

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# Step 1 :

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

# Step 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.

# Step 4 : Design XSLT

Write an XSLT document to transform order.xml into an HTML document that displays all "**Customer's Data**" in a HTML table format.

**CustOrder\_Q4.xsl**

Text

Description automatically generated

**CustOrder\_Q4.xml**





Text

Description automatically generated

Display internal tag values of Address attributes.

Display other tag values inside loop

To get the customer ID attribute

We will loop through all customers here by using this XPath inside for-each statement

# Step 5 : XPath and XSLT

Write an XPATH query to show all orders that have not shipped yet (don't have "ShippedDate") Graphical user interface, application

Description automatically generated

Omit the ShipInfo elements that don’t have the ShippedDate attribute

Design a new XSLT file that displays all "**Orders**" info (CustomerID, EmployeeID, OrderDate and RequiredDate), but displays these items (which you selected with XPATH) in red color.

Text

Description automatically generated





Text

Description automatically generated

If the elements have ShipDate attribute, then display as a normal font

Apply class redText to the selective elements to display them in red font

Check if the ShipInfo tag does not have the ShippedDate attribute

Go to the xpath /Root/Orders/Order tag and loop on each element

# Step 6, and 7: Use JavaScript to process XML data

You are going to redesign Step5 using JavaScript. You need Develop a proper JavaScript that shows all orders' info (CustomerID, EmployeeID, OrderDate and RequiredDate) that have not shipped yet (don't have "ShippedDate")Text

Description automatically generated

If the order/ShipInfo does not have the attribute, then apply the redText class for changing font colour to red.

Check if the order/ShipInfo has an attribute with the name ShippedDate or not. If the attribute is present, then don’t apply the font style

Block 1 : getting the XMLResopnse from XHR object



# Summary

This project is a joint effort of me and my team member Mr. Rohan Vasudev Patel.

We divided the work equally among ourselves.

The first three steps have been solved by Rohan:

Step 1) Try to explore and understand the structure of the given XML data. Is the XML file a well-form document? Is it a valid document? Is there any namespace? .

Step 2) Design the DTD for this document and link it to the given XML file.

Step 3) Design XML Schema for this document and link it to the given XML file.

The next 3 steps have been solved by me:

Step 4) Write an XSLT document to transform order.xml into an HTML document that displays all "**Customer's Data**" in a HTML table format.

Step 5) Write an XPATH query to show all orders that have not shipped yet (don't have "ShippedDate")

Design a new XSLT file that displays all "**Orders**" info (CustomerID, EmployeeID, OrderDate and RequiredDate), but displays these items (which you selected with XPATH) in red color.

Step 6) You are going to redesign Step5 using JavaScript. You need Develop a proper JavaScript that shows all orders' info (CustomerID, EmployeeID, OrderDate and RequiredDate) that have not shipped yet (don't have "ShippedDate")