

Project1 - Part 2: This is part 2 of the Project which you will complete it with your assigned groupmate.

Note:

- *I am expecting a professional teamwork and fair collaboration between team members*
- *You are allowed to use any material from the internet, but those materials should be relevant to our course and you should be able to answer any question about what you submit at the end.*
- *You can do brainstorming with other groups, but any form of sharing work/code is strictly avoided.*

Project Description

You are in the process of designing a web application which process XML data (CustOrder.xml) of a superstore to produce some dynamic reports.

You are asked to design a web application using JavaScript/XML/XSL for the Customer Service department which fulfills the following functionalities:

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 name space? .

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.

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) Process the XML data using XSL/XPath:

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

Before starting Step7~8, You need to add some new supplier/product data to the order.xml file (minimum: 2 customers with 2 orders and 2 items).

Step 7) Using Step7.html, you need to develop a proper JavaScript function which will be invoked when user clicks on the "Search" button. The JavaScript function, reads the CustomerID from webform, and

processes the CustOrder.xml data and displays all Customer info and related orders that their CustomerID is matched with the given CustomerID.

(display these fields: CompanyName, Country, Region, OrderDate, RequiredDate, ShippedDate, ShipAddress)

- Use your creativity to display Customer and Order data properly to look like a report.
- You need to add **partial search** to this program, so, if user enters “L”, the program should displays CustomerID’s has ‘L’ (or starts with ‘L’).

Step 8) Complete the followings:

- Modify the **CustOrder.xml** by removing the <CustomerID> element (as a child of <Order>) and add it as attribute to the <order> element. save it as **order_modified.xml**:
- Based on the new xml data file, redo the Step 5 and 7.
- From your understanding as developer, explain your idea about coding/processing XML element vs attribute. Which one is easier to develop with JS or XSLT, process *CustomerID* as element-data or attribute-data? Explain your answer based on your observation through this project.

Bonus question) How to implement Step 7 using XSLT? (Asking user to enter CustomerID and display related result using XSLT)

Submission:

- 1) Complete the Project Report Template (*attached .doc file*)
- 2) Submit all HTML/JS/XSD/DTD source codes
- 3) Please submit a recorded-video which explains how you implement the project and demonstrate how it works. This will give everyone the opportunity to present their Project-solution. Please record a video (2~10 minutes) with the following contents:
 - a. Introduce yourself
 - b. Show/demonstrate how your assignment works.
 - c. Explain your code (walkthrough), how you design it (a quick/detailed walk-through of the
 - d. programming, and setting/deployment)
 - e. Speak about challenges that you faced during this Assignment.
 - f. Evaluate your team progress out of 10. Have you implemented all requirements of the project?

NOTE: You can record the video using some screen-capture software (like OBS : <https://obsproject.com/>). To submit the video, you can upload the video on the youtube (you may make it unlisted) and submit the link here. You can also directly upload the video to the BB.

Important Note: Add the following declaration at the top of your “JS/XML” files

```
/*
*****
* ITC5202 – Project1
* I declare that this assignment is my own work in accordance with Humber Academic
* Policy.
* No part of this assignment has been copied manually or electronically from any other
* source (including web sites) or distributed to other students.
*
* Name: _____ Student ID: _____ Date: _____
*
*
*****
*/
```

Deadline

Feb 27 at 11:59 PM (20% deduction per day for late submissions). For students with accommodations, please contact me.

Grading

- Group performance in project1-part1 (in class) (10%)
- Group performance in project1-part2 (at home) (70%)
 - 10% marks for this project is considered for the quality of your design/code, according to the guidelines
 - In designing XML documents and developing JavaScript codes, you need to use your design/coding skills in order to fulfil the project functional requirements and also consider the followings:
 - Use your creativity to apply some CSS formatting styles like layout/color/font to the pages
 - Follow ES6 (and higher versions) coding feature in your coding
 - Add comments you your design/coding
 - Assign proper name (for files, methods, variables,...)
- Submission of project_document + video recording (10%)
 - If you don't have enough time to submit both project and video, please submit the project by due date and then submit the video presentation later (not later than June 30)
- Peer Evaluation and project presentation on Tuesday March 8 class (10%)
 - Each group member should be able to answer questions / explain the project