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| Faculty of Applied Sciences and Technology |
| **XML/JSON Data Processing** |
| ITC5202 - Project |
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| **4/11/2022** |

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

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# Question 1: Use JavaScript/Ajax 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)

In this question, we’ve used ajax to load the XML file using an anonymous function and created a function called countryXML. To test the loaded data, we have displayed it in the console log. Using append, we have displayed the XML data in the tabular form using table tag. Apart from that, we’ve used jquery and bootstrap for styling.

Table

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# Question 2,3: Use JavaScript/jQuery to process JSON data

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

**Question2:**

Firstly, we validated the json file. Using getJSON, we loaded the json file in the html program and created a function which checks if the country name is existent in the json data. That being true, using if else loop, we’ve validated and display details of province, city and population and appended the output in the table.

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**Question3:**

Using newapi.org, we generated the APIkey and used on change in an anonymous function passing the link into it. Using ajax, we loaded the json data from the link and created a function to display the details of the country selected and appended it in tabular form.

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# Question 4: XSLT and XPath

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

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

Using freeformatter, we tested data for various Xpath expressions to get the value of required elements. Then we used for each to access the elements inside the root path and displayed the values of those elements using xsl:value-of in tabular form.

**XPath testing:**

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**Output:**

Table

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# Question 5: Use JavaScript/jQuery to process JSON data

When the user enters the desired country name and hits the button, details of that country is fetched from the API. We created $.click in an anonymous function passing the user entered input into it. Using ajax, we loaded the json data from the link API link and created a function to display the details of the country selected and appended it in tabular form. We used the border data from the country details and appended it to the API for fetching neighborhood countries to display border countries.

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**Output:**

Graphical user interface, application, Teams

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# Question 6: Append additional data to the output of Questio 5

Here, I have decided to use the endpoint 🡺https://covid-193.p.rapidapi.com/statistics to fetch the covid related statistics for each country.

I have extracted the fields deaths per million, new deaths, total deaths since the pandemic boke out, tests per million and total tests till date

# Summary

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