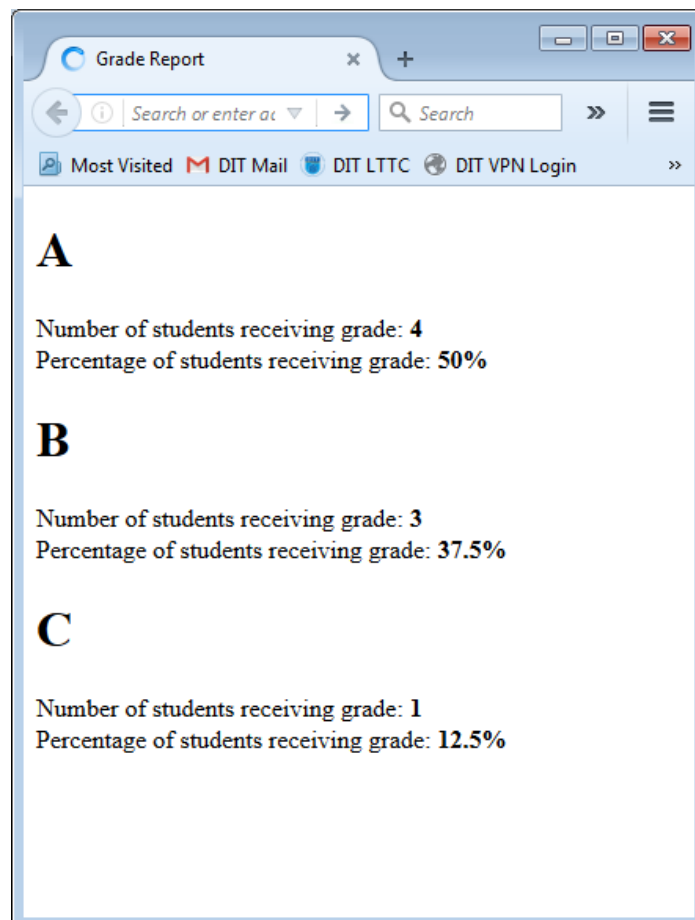# Enterprise Systems & Architecture

Lab 7 (Weeks 5/6): XSL Exercises – More XSL

Note: You can use the next couple of weeks to complete these exercises and to catch up on any other incomplete labsheets.

Exercise 1

- Using the *students.xml* file below, write an XSL stylesheet called *grades.xsl* that produces the following web page when the xml file is loaded by IE.
- The first part of the stylesheet is given below.
- You should use the following XSLT features in your template:
    - A template called *print_grade*
    - xsl:param
    - xsl:variable
    - count()
    - a predicate
    - div

students.xml

```xml
<?xml version="1.0"?>

<class>
<student>
        <first-name>Jane</first-name>
        <last-name>Doe</last-name>
        <grade>A</grade>
</student>
<student>
        <first-name>John</first-name>
        <last-name>Smith</last-name>
        <grade>B</grade>
</student>
<student>
        <first-name>Harry</first-name>
        <last-name>Grandson</last-name>
        <grade>A</grade>
</student>
<student>
        <first-name>Lacy</first-name>
        <last-name>Jones</last-name>
        <grade>B</grade>
</student>
<student>
        <first-name>Ulne</first-name>
        <last-name>Douglas</last-name>
        <grade>C</grade>
</student>
<student>
        <first-name>Ambrose</first-name>
        <last-name>Tyler</last-name>
        <grade>B</grade>
</student>
<student>
        <first-name>Roger</first-name>
        <last-name>Clemens</last-name>
        <grade>A</grade>
</student>
<student>
        <first-name>Monroe</first-name>
        <last-name>Hamburger</last-name>
        <grade>A</grade>
</student>
</class>
```

grades.xsl

```xml
<?xml version="1.0"?>

<xsl:stylesheet version="1.0" xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

<!-- your code goes here -->

<xsl:template match="/">
<html><head><title>Grade Report</title></head><body>

        <xsl:call-template name="print_grade">
                <xsl:with-param name="target_grade" select="'A'"/>
                <xsl:with-param name="list" select="class"/>
        </xsl:call-template>
        <p/>
        <xsl:call-template name="print_grade">
                <xsl:with-param name="target_grade" select="'B'"/>
                <xsl:with-param name="list" select="class"/>
        </xsl:call-template>
        <p />
        <xsl:call-template name="print_grade">
                <xsl:with-param name="target_grade" select="'C'"/>
                <xsl:with-param name="list" select="class"/>
        </xsl:call-template>
        <p />
</body></html>

</xsl:template>
</xsl:stylesheet>
```

Exercise 2

- In the Brightspace lab folder, there is an XML file called *shipment.xml*. There is also an XSL stylesheet called *shipment.xsl*. Add to the XSL stylesheet so that when the XML file is loaded using IE, the following presentation is displayed in the browser…

Shipment Number: 12345

Consignor: DVDsRUs	**Consignee:** Ola Nordmann
Unit 56	Langgt 23
Ballyclockin Buiness Park	4000 Stavanger
Dublin	Norway
Ireland	

Summary:
Total number of items: 3
Total Weight: 300 Grams
Average Weight Per Item Line: 100
Total quantity: 6

Sequence	ID	Title	Note	Quantity	Price	Line Total
1	001	Taxi Driver	Special Edition	1	2.50	2.50
2	002	Harry Potter and The Deathly Hallows Part I		2	15.00	30.00
3	003	Night of the Museum 2		3	12.00	36.00

Exercise 3

Instead of using the browser to transform the xml using the xsl, use the built-in Notepad++ XML transformer and/or the following web application (link below). In both cases you should be able to view the resulting output document of the XSLT processor.

Notepad++: With the xml file open in the editor tab choose *Plugins->XML Tools->XSL Transformation*. It will ask you for the location of the XSLT stylesheet. Click *Transform* and Notepad++ will show the resulting document in a new tab.

Online Web App:
www.utilities-online.info/xsltransformation
Paste your XML and XSL into the text boxes provided and click *Transform XML with XSL*. You will see the resulting output in the text box below the button.