Exercise: Basic XSLT

1 First look at using XSLT
In this exercise, we will use the oXygen editor to transform the XML file you have been working on so far.

1. Open the file called sample-1.xml which you created before and check that it is still a valid TEI XML document.\(^1\)

2. Now edit the file and add, before \(<\text{TEI}\rangle\) the line

```
<?xml-stylesheet type="text/xsl" href="ex1.xsl"?>
```

This is an instruction to the browser to process the file using a stylesheet called \texttt{ex1.xsl}. Remember to save the file! You will be using it in the next few exercises. We could also have oXygen insert this instruction for us:

- Go to the Document menu, then XML Document, then Associate XSLT/CSS Stylesheet, and choose the XSL tab:

![Associate XSLT/CSS Stylesheet](image)

- Locate the stylesheet (\texttt{ex1.xsl}) by browsing in your teidata folder

3. You can now run the transformation by clicking the \(\text{Run XSL transformation}\) button. It will ask if you want to use the processing-instruction:

![Run the default scenario based on the "xml-stylesheet" processing instruction](image)

\(^1\)If you’ve mislaid or corrupted your copy of this file, make a copy of the file \texttt{sample.xml} in your teidata folder instead.
oXygen should display the transformed HTML in your web browser.

Open the file ex1.xsl in your editor and consider how to make the display more readable. Let us make a new \texttt{<h1>} division for every TEI \texttt{<div>}. Go to the end of \texttt{ex1.xsl} and put in this before \texttt{</xsl:stylesheet>}:  

```xml
<xsl:template match="div"
    xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
    xmlns:tei="http://www.tei-c.org/ns/1.0">
  <h1>
    <xsl:value-of select="head"/>
  </h1>
  <xsl:apply-templates/>
</xsl:template>
<xsl:template match="div/head"/>
```

Now save the XSL file, and reload the data file in the browser. Did it work?

You should now be confident that you can control the display of an XML file using the XSLT stylesheet. You can move on to refine the stylesheet.

By default the generated HTML is loaded straight into the default web browser. If you want to run the transformation statically and make an HTML file, you can configure oXygen to do it.

Press the icon [which configures the transform](image). On the resulting dialogue, choose the [processing-instruction scenario](image); on the next dialogue box, choose [Output tab](image).
where you can choose what to call the file, whether to open in browser or editor, and so on.

2 Exercises part 2

Your initial tasks are as follows:

1. Turn TEI paragraphs into HTML paragraphs. You’ll need a new template like this:

```xml
<xsl:template match="p"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
  xmlns:tei="http://www.tei-c.org/ns/1.0">
  <p>
    <xsl:apply-templates/>
  </p>
</xsl:template>
```

2. Make each `<lg>` into an HTML `<blockquote>`

3. Put a line break (`<br/>` in HTML) at the end of every `<l>` element

4. Don’t display the `<teiHeader>` element

5. Replace the hard-wired text ‘Punch’ in `<title>` in the HTML header with the text of the `<title>` in the TEI metadata header.
6. Print all the names (<persName>) in bold (use the HTML <b> element)

7. Some lines of poetry are marked with <l rend="i2"> in the XML, to show that they are indented. Can you start such lines with two non-breaking spaces? Use \&#160; to create that space character.

8. It would be nice to number the lines of poetry, starting from 1 for each <div>