

Transformations XSLT

1 Lists of pilots

We consider the following `personnes.xml` file:

```
<?xml version="1.0"?>
<!DOCTYPE PERSONNES SYSTEM "personnes.dtd">
<?xml-stylesheet type="text/xsl" href="ws1.xsl"?>

<PERSONNES>
  <GROUPE nom="Pilotes" />
  <PERSONNE nat="Australia" gender="female">
    <NOM>Mark Webber</NOM>
    <ADRESSE>911 Somewhere Circle, Canberra, Australia</ADRESSE>
    <TEL>(+612) 12345</TEL>
    <FAX>(+612) 12345</FAX>
    <EMAIL>Mark.Webber@somewhere.com</EMAIL>
  </PERSONNE>
  <PERSONNE nat="Poland">
    <NOM>Robert Kubica</NOM>
    <ADRESSE>121 Zootle Road, Cape Town, South Africa</ADRESSE>
    <TEL>(+2721) 531 9090</TEL>
    <FAX>(+2721) 531 9090</FAX>
    <EMAIL>Robert.Kubica@somewhere.com</EMAIL>
  </PERSONNE>
  <PERSONNE nat="Brasil">
    <NOM>Felipe Massa</NOM>
    <ADRESSE>30 Animal Road, New York, USA</ADRESSE>
    <TEL>(+1) 3000 12345</TEL>
    <FAX>(+1) 3000 12345</FAX>
    <EMAIL>Felipe.Massa@somewhere.com</EMAIL>
  </PERSONNE>
  <PERSONNE nat="UK">
    <NOM>Jenson Button</NOM>
    <ADRESSE>1143 Winners Lane, London, UK</ADRESSE>
    <TEL>(+94) 17 12345</TEL>
    <FAX>(+94) 17 12345</FAX>
    <EMAIL>Jenson.Button@somewhere.com</EMAIL>
  </PERSONNE>
</PERSONNES>
```

1. Propose a file `pers1.xsl` which generates, starting from the file `personnes.xml`, an output of the form:

Mark Webber
911 Somewhere Circle, Canberra, Australia
(++612) 12345
(++612) 12345
Mark.Webber@somewhere.com

Robert Kubica
121 Zootle Road, Cape Town, South Africa
(++2721) 531 9090
(++2721) 531 9090
Robert.Kubica@somewhere.com

Felipe Massa
30 Animal Road, New York, USA
(++1) 3000 12345
(++1) 3000 12345
Felipe.Massa@somewhere.com

Jenson Button
1143 Winners Lane, London, UK
(++94) 17 12345
(++94) 17 12345
Jenson.Button@somewhere.com

2. Propose a file `pers2.xsl` which generates only the names of the persons:

Mark Webber
Robert Kubica
Felipe Massa
Jenson Button

3. Propose a file `pers3.xsl` which generates the names of the persons with their addresses:

Mark Webber:	Mark.Webber@somewhere.com
Robert Kubica:	Robert.Kubica@somewhere.com
Felipe Massa:	Felipe.Massa@somewhere.com
Jenson Button:	Jenson.Button@somewhere.com

4. Propose a file `pers4.xsl` which generates all the information present in the XML file. The generated HTML should look as follows:

```
<HTML><BODY><TABLE BORDER="2">
  <TR>
    <TD>Nom</TD>
    <TD>Adresse</TD>
    <TD>Tel</TD>
    <TD>Fax</TD>
    <TD>Email</TD>
```

```

</TR>
<TR>
  <TD>Mark Webber</TD>
  <TD>911 Somewhere Circle, Canberra, Australia</TD>
  <TD>(++612) 12345</TD>
  <TD>(++612) 12345</TD>
  <TD>Mark.Webber@somewhere.com</TD>
</TR>
<TR>
  <TD>Robert Kubica</TD>
  <TD>121 Zootle Road, Cape Town, South Africa</TD>
  <TD>(++2721) 531 9090</TD>
  <TD>(++2721) 531 9090</TD>
  <TD>Robert.Kubica@somewhere.com</TD>
</TR>
<TR>
  <TD>Felipe Massa</TD>
  <TD>30 Animal Road, New York, USA</TD>
  <TD>(++1) 3000 12345</TD>
  <TD>(++1) 3000 12345</TD>
  <TD>Felipe.Massa@somewhere.com</TD>
</TR>
<TR>
  <TD>Jenson Button</TD>
  <TD>1143 Winners Lane, London, UK</TD>
  <TD>(++94) 17 12345</TD>
  <TD>(++94) 17 12345</TD>
  <TD>Jenson.Button@somewhere.com</TD>
</TR>
</TABLE></BODY></HTML>

```

5. Modify the file proposed previously to print all the information related to persons in blue (you can change the font HTML using, for example, a tag `<font color="blue">`). You should propose a solution which minimises the number of templates and HTML outputs.
6. Propose a file `pers7.xsl` which generates a file HTML of the form:

```

<HTML><BODY>
Le groupe de "Pilotes" : <BR>
  Mark Webber de Australia<BR>
  Robert Kubica de Poland<BR>
  Felipe Massa de Brasil<BR>
  Jenson Button de UK<BR>
</BODY></HTML>

```

2 Article on penguins

We consider the following XML file.

```
<?xml version="1.0"?>
<?xml-stylesheet type="text/xsl" href="ping1.xsl"?>
<article>
<date>28/06/2000 12:30</date>
<title>Rescued penguins swim home</title>
<para><place>Cape Town</place> Some 150 penguins unaffected by the oil spill began
their long swim from Port Elizabeth in the Eastern Cape back to their breeding
habitat at Robben Island near Cape Town on Wednesday. </para>
<para>The penguins, who have all been tagged, were transported in a truck hired by
the <company>South African National Conservation of Coastal Birds
(Sanccob)</company> to Port Elizabeth on Tuesday night. </para>
<para>More than <link ref="www.newsrus.com/oilspill.html">400 tons of fuel oil
escaped from the bulk ore carrier Treasure</link> before divers were able to seal
the holds.</para>
<para>The ship was carrying 130 000 tons of iron ore and 1 300 tons of fuel oil
when she sank off the Cape West coast last Friday. </para>
<para>A spokesperson for <company>Sanccob</company>, Christina Pretorius said
the centre had a capacity to treat 1 000 penguins. </para>
<source>John Rolfe</source>
</article>
```

Propose a file `xslt` which allows to generate a file HTML of the form:

28/06/2000 12:30

Rescued penguins swim home

Cape Town *Some 150 penguins unaffected by the oil spill began their long swim from Port Elizabeth in the Eastern Cape back to their breeding habitat at Robben Island near Cape Town on Wednesday.*

The penguins, who have all been tagged, were transported in a truck hired by the South African National Conservation of Coastal Birds (Sanccob) to Port Elizabeth on Tuesday night.

More than 400 tons of fuel oil escaped from the bulk ore carrier Treasure before divers were able to seal the holds.

The ship was carrying 130 000 tons of iron ore and 1 300 tons of fuel oil when she sank off the Cape West coast last Friday.

A spokesperson for Sanccob, Christina Pretorius said the centre had a capacity to treat 1 000 penguins.

John Rolfe

1. Propose a solution which minimises the number of templates.
2. Modify the file to allow following the link towards the link indicated in the file XML.
3. Modify the file `xslt` to produce only the title, the author and the date of the article. Minimise the number of recursive calls.

3 The jokes

We suppose the following XML document:

```
<collection>
  <blague id="123" categorie="animales" scat="vaches">
    <titre>Deux vaches dans le pré</titre>
    <date>11-12-2007</date>
    <auteur>J. Doe</auteur>
    <intro>Deux vaches sont dans un pré</intro>
    <intro>La première dit: "Meuhhh"</intro>
    <final>La deuxième dit: "J'allais le dire !"</final>
  </blague>

  <blague id="124" categorie="blondes">
    <titre>Accident</titre>
    <date>11-12-2007</date>
    <intro>Deux blondent discutent</intro>
    <intro>La première dit: "Tu sais que 80% des accidents ont lieu à moins d'un
      kilomètre de là où on habite ?"</intro>
    <intro>La deuxième dit: "Ah bon ?"</intro>
    <intro>La première dit: "Qu'est-ce que l'on va faire ?"</intro>
    <final>La deuxième dit: "On va déménager !"</final>
  </blague>

  <blague id="125" categorie="animales" scat="canards">
    <titre>La vache folle</titre>
    <date>11-12-2007</date>
    <auteur>J. Doe</auteur>
    <intro>Deux vaches discutent</intro>
    <intro>La première dit: "Tu as entendu parler de la vache folle ?"</intro>
    <intro>La deuxième dit: "Oui, mais je ne suis pas inquiète!"</intro>
    <intro>La première dit: "Ah bon, pourquoi ?"</intro>
    <final>La deuxième dit: "Je suis un canard!"</final>
  </blague>
</collection>
```

Propose an `xslt` stylesheet which allows us to obtain the following result. The list of identifiers at the beginning of the file allows one to go the the jokes with the corresponding numbers.

[123/](#) [124/](#) [125/](#)

Deux vaches dans pré

([123/](#) animales/ vaches/)

J. Doe (11-12-2007)

- Deux vaches sont dans un pré
 - La première dit: "Meuhhh"
 - La deuxième dit: "J'allais le dire" !
-

Accident

([124/](#) blondes/)

(11-12-2007)

- Deux blondent discutent
 - La première dit: "Tu sais que 80% des accidents ont lieu à moins d'un kilomètre de là où on habite ?"
 - La deuxième dit: "Ah bon ?"
 - La première dit: "Qu'est-ce que l'on va faire ?"
 - La deuxième dit: "On va déménager !"
-

La vache folle

([125/](#) animales/ canards/)

J. Doe (11-12-2007)

- Deux vaches discutent
 - La première dit: "Tu as entendu parler de la vache folle ?"
 - La deuxième dit: "Oui, mais je ne suis pas inquiète!"
 - La première dit: "Ah bon, pourquoi ?"
 - La deuxième dit: "Je suis un canard!"
-

4 Hint for Firefox

The latest versions of Firefox restrict local file loads (like `xsl` sheets) by local pages. You can roll back that patch:

- type or paste **about:config** in the address bar and press Enter/Return. Click the button promising to be careful or accepting the risk.
- In the search box above the list, type or paste **uniq** and pause while the list is filtered.
- Double-click the **privacy.file_unique_origin** preference to switch the value from true to false.