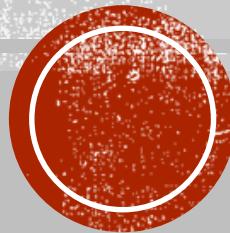


# XSL & CUSTOMIZING LETTERS: TOOLS, TIPS, & TRICKS

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# OVERVIEW

- What you will learn:

- Understand the XML in terms of XSL
- Editing XSL
- Tools to configure letters offline
- How to test letters



- What we will not cover:

- Which letters are triggered and when they are triggered
- How to setup lost loan profiles
- Which jobs need to be scheduled for letters to work



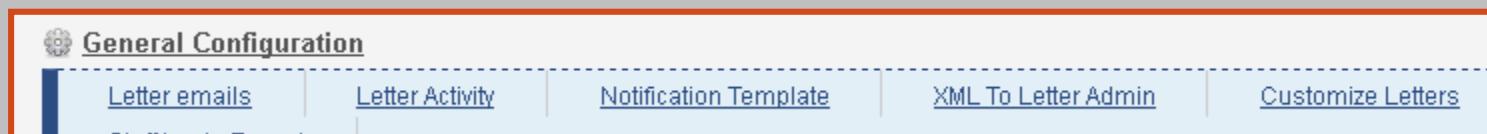
# THE SYSTEM OF LETTERS

- The Alma letters are written in XSL.
  - XSL stands for Extensible Stylesheet Language
  - It is a language that describes how to display XML
- XML – Extensible Markup Language
  - XML is a way to store data
- The XSL files use 2 areas of data
  - XML files
  - Text field settings



# WHERE DO I EDIT THESE LETTERS?

- Administration > General Configuration > Configuration Menu > General Configuration Section
- There are 5 areas under the general configuration section:
  - Letter Activity – this is where you enable/disable various letters
  - XML to Letter Admin – this is where you obtain the XML
  - Customize Letters – this is where you edit the XSL for the letters
  - Letter Emails – this is the area that displays text fields
  - Notification Template – this is where you test the letters



**XML Letter Receiver**

XML receiver Jones, Elizabeth

	<input type="checkbox"/>	◆ Letter Type	◆ Description
1	<input checked="" type="checkbox"/>	header.xsl	header Letter XSL
2	<input checked="" type="checkbox"/>	footer.xsl	Footer Letter XSL
3	<input checked="" type="checkbox"/>	PINNumberGenerationLetter	PIN Number Generation Letter
4	<input checked="" type="checkbox"/>	style.xsl	Style Letter XSL
5	<input checked="" type="checkbox"/>	FulCancelRequestLetter	Ful Cancel Request Letter
6	<input checked="" type="checkbox"/>	FulUserOverdueNoticeLetter	Ful Use Overdue Notice Letter
7	<input checked="" type="checkbox"/>	FulUserLoansCourtesyLetter	Ful User Loans Courtesy Letter
8	<input checked="" type="checkbox"/>	FulPlaceOnHoldShelfLetter	Ful Place On Hold Shelf Letter
9	<input checked="" type="checkbox"/>	senderReceiver.xsl	Sender Receiver Letter XSL
10	<input checked="" type="checkbox"/>	FulLostLoanNotificationLetter	FulLostLoanNotificationLetter
11	<input checked="" type="checkbox"/>	mailReason.xsl	Mail Reason Letter XSL
12	<input checked="" type="checkbox"/>	FulLostLoanNotificationLetter	FulLostLoanNotificationLetter
13	<input checked="" type="checkbox"/>		
14	<input checked="" type="checkbox"/>		

 Sun 5/1/2016 6:02 PM  
elizabeth-jones@ouhsc.edu  
**FulLostLoanLetter**  
To Jones, Elizabeth S (HSC)  
*(i) We removed extra line breaks from this message.*

```
<notification_data>
<fines_fees_list><user_fines_fees><create_date>05/01/2016</create_date>
<entity_action></entity_action>
<fine_comment></fine_comment>
<fine_fee_amount><currency>USD</currency>
<sum>20.00</sum>
<vat>0.00</vat>
</fine_fee_amount>
```

## XML TO LETTER ADMIN

You will need to have a letter administrator role in order to receive the XML files.

Here you will just pick your name from the dropdown and you will be the one to receive the XML via email.

You will only receive the XML one a letter is generated for your staff or patrons.

The letter types that you check off are ones you will receive XML. You may check letters here that are not activated.

To receive the XML, you will need to activate the letter.

# CUSTOMIZE LETTERS

- At this point, it is best to pick one letter to work on, such as the lost loan letter
- You should also have at least a basic idea of what you want that email to look like
- There are several letters that you should customize first that are used by most other letters:
  - Header
  - Footer
  - Sender/Receiver
  - Mail Reason
  - Style
  - Record Title
- Find your letter, and click the Customize button on the right or click Actions and choose edit

Custom	Filename	Description	Updated by	Update Date	
1	<a href="#">./xsl/letters/sms/SmsFulUserOverdueNoticeLetter.xsl</a>	Sms Ful User Overdue Notice Letter	-	-	<a href="#">Customize</a>
2	<a href="#">./xsl/letters/sms/SmsFulUserLoansCourtesyLetter.xsl</a>	Sms Ful User Loans Courtesy Letter	-	-	<a href="#">Customize</a>
3	<a href="#">./xsl/letters/sms/SmsFulUserBorrowingActivityLetter.xsl</a>	Sms Ful User Borrowing Activity Letter	-	-	<a href="#">Customize</a>
4	<a href="#">./xsl/letters/sms/SmsFulPlaceOnHoldShelfLetter.xsl</a>	Sms Ful Place On Hold Shelf Letter	-	-	<a href="#">Customize</a>
5	<a href="#">./xsl/letters/sms/SmsFulOverdueAndLostLoanLetter.xsl</a>	Sms Ful Overdue And Lost Loan Letter	-	-	<a href="#">Customize</a>
6	<a href="#">./xsl/letters/sms/SmsFulLostLoanNotificationLetter.xsl</a>	Sms Ful Lost Loan Notification Letter	-	-	<a href="#">Customize</a>

**Filename** ./xsl/letters/call\_template/footer.xsl  
**File Key** footer.xsl  
**Description** Footer Letter XSL  
**Updated by** EJONES7  
**Update Date** -

**Content**

```
<?xml version="1.0" encoding="utf-8"?>  
  
<xsl:stylesheet version="1.0"  
xmlns:xsl="http://www.w3.org/1999/XSL/Transform">  
  
<xsl:template name="salutation">  
</xsl:template>  
<xsl:template name="lastFooter">  
    <table>  
        <xsl:attribute name="style">  
            <xsl:call-template name="footerTableStyleCss" /> <!-- style.xsl -->  
        </xsl:attribute>  
        <tr>  
            <xsl:for-each select="notification_data/organization_unit">  
  
                <xsl:attribute name="style">  
                    <xsl:call-template name="listStyleCss" /> <!-- style.xsl -->  
                </xsl:attribute>  
                <td align="center"><xsl:value-of select="name"/></td>
```

## DOWNLOAD THE XSL FOR CUSTOMIZING THE LETTER

It is good to save the default XSL.

To easily select all the text, click in the content box and hit the CTRL + A key to select everything.

Once you have selected everything you can copy it into a text file that you save with the xsl extension.

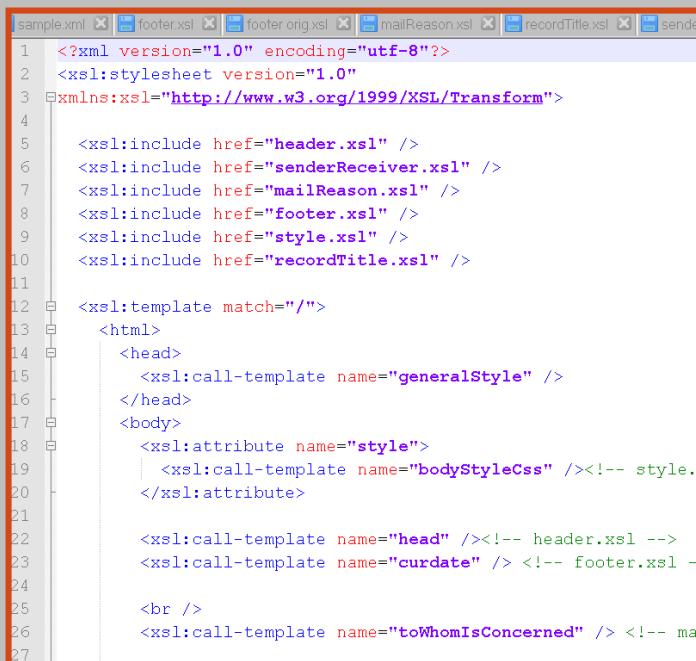
I normally save two copies:

1. Footer orig.xsl
2. Footer.xsl

The second file is my work file.

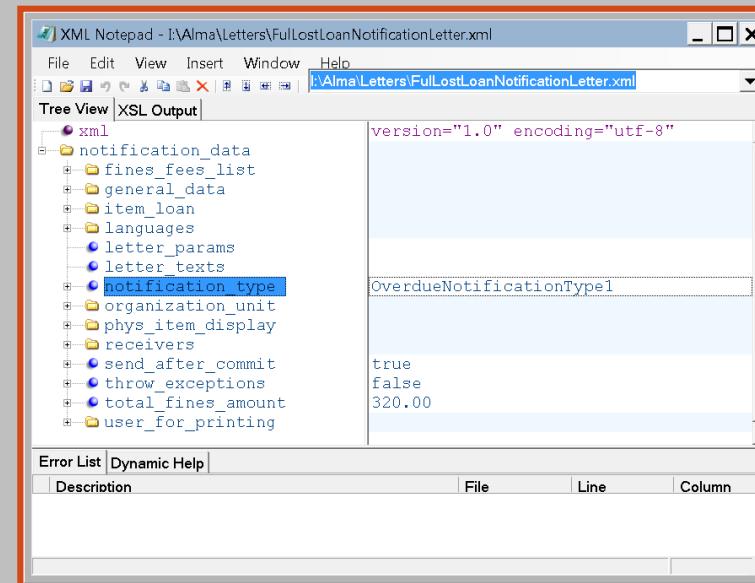
# SOFTWARE NEEDED TO TEST OFFLINE

- Notepad ++
  - <https://notepad-plus-plus.org/>
- XML Notepad
  - <https://xmlnotepad.codeplex.com/>



A screenshot of the Notepad++ text editor. The window title is 'sample.xml'. The code displayed is an XSLT template:

```
1 <?xml version="1.0" encoding="utf-8"?>
2 <xsl:stylesheet version="1.0"
3 xmlns:xsl="http://www.w3.org/1999/XSL/Transform">
4
5   <xsl:include href="header.xsl" />
6   <xsl:include href="senderReceiver.xsl" />
7   <xsl:include href="mailReason.xsl" />
8   <xsl:include href="footer.xsl" />
9   <xsl:include href="style.xsl" />
10  <xsl:include href="recordTitle.xsl" />
11
12  <xsl:template match="/">
13    <html>
14      <head>
15        <xsl:call-template name="generalStyle" />
16      </head>
17      <body>
18        <xsl:attribute name="style">
19          | <xsl:call-template name="bodyStyleCss" /><!-- style..>
20        </xsl:attribute>
21
22        <xsl:call-template name="head" /><!-- header.xsl -->
23        <xsl:call-template name="curdate" /> <!-- footer.xsl -->
24
25        <br />
26        <xsl:call-template name="toWhomIsConcerned" /> <!-- ma...
```



# SOWFWARE CONT...

- Winmerge (<http://winmerge.org/?lang=en>)

```
<?xml version="1.0" encoding="utf-8"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

  <xsl:include href="header.xsl" />
  <xsl:include href="senderReceiver.xsl" />
  <xsl:include href="footer.xsl" />
  <xsl:include href="style.xsl" />

  <xsl:template match="/">
    <html>
      <head>
        <xsl:call-template name="generalStyle" />
      </head>

      <body>
        <xsl:attribute name="style">
          <xsl:call-template name="bodyStyleCss" />
        </xsl:attribute>

        <xsl:call-template name="head" /> <!--
header.xsl --> <xsl:call-template name="senderReceiver" />
<!-- SenderReceiver.xsl -->

        <br />
      </body>
    </html>
  </xsl:template>
</xsl:stylesheet>
```

```
<?xml version="1.0" encoding="utf-8"?>
<xsl:stylesheet version="1.0"
  xmlns:xsl="http://www.w3.org/1999/XSL/Transform">

  <xsl:include href="header.xsl" />
  <xsl:include href="senderReceiver.xsl" />
  <xsl:include href="mailReason.xsl" />
  <xsl:include href="footer.xsl" />
  <xsl:include href="style.xsl" />
  <xsl:include href="recordTitle.xsl" />

  <xsl:template match="/">
    <html>
      <head>
        <xsl:call-template name="generalStyle" />
      </head>
      <body>
        <xsl:attribute name="style">
          <xsl:call-template name="bodyStyleCss" /><!--
style.xsl -->
        </xsl:attribute>

        <xsl:call-template name="head" /><!-- header.xsl -->
        <xsl:call-template name="curdate" /> <!-- footer.xsl -->
        <br />
        <xsl:call-template name="toWhomIsConcerned" /> <!--
mailReason.xsl -->
      </body>
    </html>
  </xsl:template>
</xsl:stylesheet>
```

# WHAT DOES THE LETTER LOOK LIKE?

- The first step is to get a view of what the original letter looks like and XML Notepad will do this.
- Not much text that does not come from the XML
- One of the things we wanted was for the patron's name to look different and to not include the address.
- We also wanted the date to appear at the top.

Tree View XSL Output

XSLT Location: I:\Alma\Letters\FullLostLoanNotificationLetter orig.xsl

OUHSC Robert M Bird Library  
Overdue Items

Jones, Elizabeth  
1521 Central Parkway  
Norman 73071  
OK

@@inform\_you\_item\_below@@ @@borrowed\_by\_you@@ @@decalred\_as\_lost@@  
@@lost\_item@@ :Dental management of the medically compromised patient / James W  
@@description@@ :  
@@by@@ :  
@@library@@ :Robert M Bird Library  
@@loan\_date@@ :12/22/2015  
@@due\_date@@ :01/25/2016  
@@barcode@@ :36020101148621

# LETTER EMAILS

- Here is where you fill in customized text without any coding.
- If you code all your letters to use these fields then anyone can just come in and edit text here.
- Notice the LetterName of Overdue Items – we have called both our overdue notice and lost loan notices Overdue Items – this is what appears at the top of the letter.
- The Subject is what appears in the subject of the email. This is labeled different for us to indicate that it is not just another overdue item reminder.

1 Analytics Letter	Analytics Letter	exl_impl	✓	Actions
2 Borrowed By Letter	Due Items	exl_impl	✓	Actions
3 Due Date Email	Due Date Email	exl_impl	✓	Actions

additional_info_1_type5	EMPTY_STRING
additional_info_1_type1	EMPTY_STRING
additional_info_1	We would like to remind you that you have overdue library items listed below that should be returned as soon as possible. Overdue items cause a block to be placed on your library and Illiad accounts, and may also result in charges appearing on your bursar account, keep you from enrolling, receiving grades, and/or receiving your diploma. Failure to return the overdue items will result in replacement and processing charges for each item.
additional_info_1_type3	EMPTY_STRING
additional_info_1_type4	EMPTY_STRING
additional_info_1_type5	EMPTY_STRING
additional_info_2	EMPTY_STRING
additional_info_2_type1	EMPTY_STRING
additional_info_2_type2	EMPTY_STRING
additional_info_2_type3	EMPTY_STRING
additional_info_2_type4	EMPTY_STRING
additional_info_2_type5	EMPTY_STRING
additional_info_1_type2	EMPTY_STRING
fee_amount	Fee Amount
fee_type	Fee Type
library	Library
loan_date	Loan date
letterName	Overdue Items
subject	Overdue Items
lost_item	Lost Item
note	Note
notification_type	Notification Type
sincerely	This is an automated email message. For more information or questions please contact your library listed below.

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# CHECK IN

We have our XML files

We have our XSL files

We know how to view what the XSL will look like offline

You should know at this point what you want your letters to look like

# LAYOUT OF XSL LETTERS

- Top lines of all letters will be includes
- XSL Include vs HTML Include
  - HTML inserts all the code, text info at that point
  - XSL just makes that file's code available
  - XSL makes the code available in chunks
  - These chunks are called templates
- How can we tell if the data is coming from the letter XSL file or one of these included files?
  - Call-template script are pulling info from include files
  - Items that start with the @ symbol are pulling from the text fields for that letter
  - All other code is coming from the file itself

```
4  xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
5
6  <xsl:include href="header.xsl" />
7  <xsl:include href="senderReceiver.xsl" />
8  <xsl:include href="footer.xsl" />
9  <xsl:include href="style.xsl" />
0
```

```
<h>@@inform_you_item_below@@ </h>
<h>@@borrowed_by_you@@ @@decalred_as_lost@@</h>
```

```
<xsl:call-template name="head" /> <!-- header.xsl -->
<xsl:call-template name="senderReceiver" /> <!-- SenderReceiver.xsl -->
```

# HEADER.XSL

- Library Name
- Letter Name
- Current Date

**OUHSC Robert M Bird Library**  
**Overdue Items**

- The XSL file is broken up into Templates
- The Library Name template is named head
- Three possible names for our library name

# TEMPLATE

```
<xsl:template name="head">

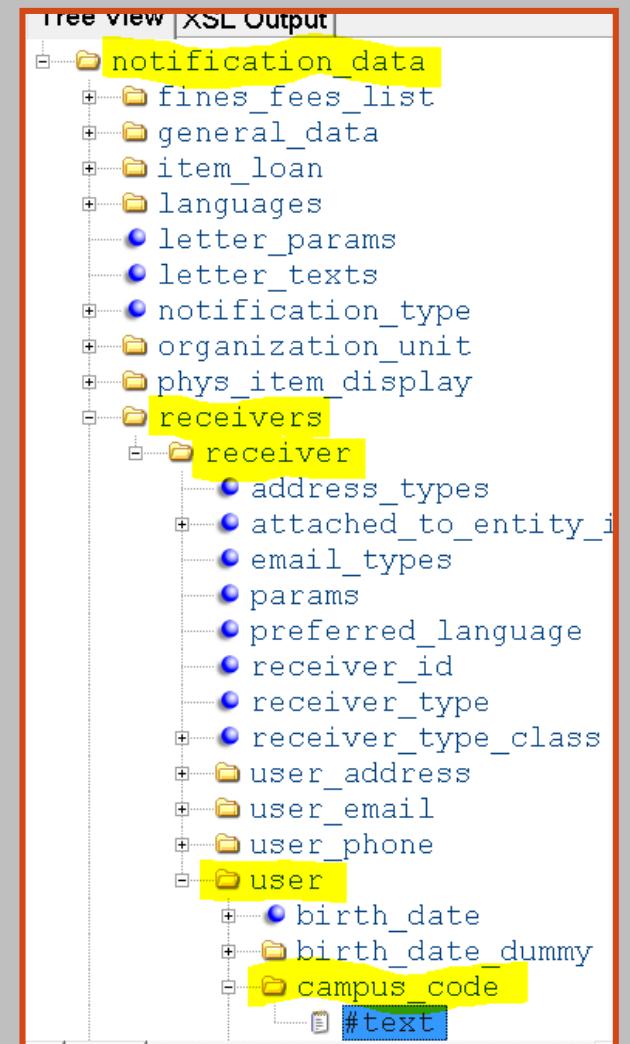
    <div id="mailHeader">
        <div id="logoContainer" class="alignLeft">

<xsl:for-each select="notification_data/receivers/receiver/user/campus_code">
    <xsl:choose>
        <!--<xsl:when test=". = 'OUHSC'"-->
        <xsl:when test=". = 'OUHSC'">
            <h3>OUHSC Robert M Bird Library</h3>
        </xsl:when>
        <xsl:when test=". = 'OUTULSA'">
            <h3>OU Schusterman Library</h3>
        </xsl:when>
        <xsl:otherwise>
            <h3>OU Schusterman (Tulsa) and Bird (OKC) Libraries</h3>
        </xsl:otherwise>
    </xsl:choose>
</xsl:for-each>

    </div>
</div>

<xsl:call-template name="head" /> <!-- header.xsl -->

<!-- END OF LOGO INSERT -->
```



# TEMPLATE CONT...

```
<xsl:template name="head">

    <div id="mailHeader">
        <div id="logoContainer" class="alignLeft">

            <xsl:for-each select="notification_data/receivers/receiver/user/campus_code">
                <xsl:choose>
                    <!--<xsl:when test=". = 'OUHSC'">-->
                    <xsl:when test=". = 'OUHSC'">
                        <h3>OUHSC Robert M Bird Library</h3>
                    </xsl:when>
                    <xsl:when test=". = 'OUTULSA'">
                        <h3>OU Schusterman Library</h3>
                    </xsl:when>
                    <xsl:otherwise>
                        <h3>OU Schusterman (Tulsa) and Bird (OKC) Libraries</h3>
                    </xsl:otherwise>
                </xsl:choose>
            </xsl:for-each>
        </div>
    </div>
<!-- END OF LOGO INSERT -->
```

```
<!-- END OF LOGO INSERT -->

<xsl:for-each select="notification_data/general_data">

    <h3><xsl:value-of select="letter_name"/></h3>

</xsl:for-each>

</xsl:template>

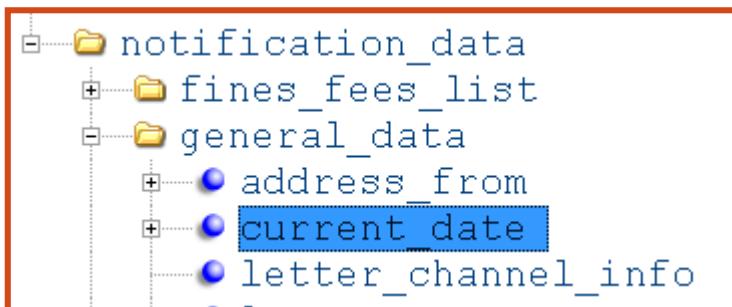
<xsl:template name="curdate">

    <xsl:for-each select="notification_data/general_data">

        <h3> <xsl:value-of select="current_date"/> </h3>

    </xsl:for-each>

</xsl:template>
```



# FULLLOSTLOANNOTIFICATIONLETTER.XSL

- mailReason.xsl has a template that displays the a salutation and the patrons name (Dear Elizabeth Jones,)

```
<html>
  <head>
    <xsl:call-template name="generalStyle" />
  </head>

  <body>
    <xsl:attribute name="style">
      <xsl:call-template name="bodyStyleCss" /> <!-- header.xsl -->
    </xsl:attribute>

    <xsl:call-template name="head" /><!-- header.xsl -->
    <xsl:call-template name="curdate" /> <!-- header.xsl -->

    <br />
    <xsl:call-template name="toWhomIsConcerned" /> <!-- mailReason.xsl -->

    <xsl:call-template name="head" /> <!-- header.xsl -->
    <xsl:call-template name="senderReceiver" /> <!-- Sender -->

    <br />

    <table cellspacing="0" cellpadding="5" border="0">
      <tr>
        <td>
          <h>@@inform_you_item_below@@ </h>
          <h>@@borrowed_by_you@@ @@decalred_as_lost@@</h>
        </td>
      </tr>
    </table>
  </body>
</html>
```

OUHSC Robert M Bird Library  
Overdue Items

Jones, Elizabeth  
1521 Central Parkway  
Norman 73072  
OK

@@inform\_you\_item\_below@@ @@

OUHSC Robert M Bird Library  
Overdue Items  
02/15/2016

@@dear@@ Elizabeth Jones,  
@@additional\_info\_1@@

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# NEXT STEPS

1. Update your XSL in Alma in the Customize Letters area
2. Test

# NOTIFICATION TEMPLATE

- First test offline with XML Notepad
- Then test online with Notification Template
  - First click the upload button to upload the XML
  - Then click Run XSL and you will receive an email showing you what the patron would see

Notification Template

Xml to upload:  

Letter type: -

Send by email:

Email:

Language:

# THE LETTER

E-mail Screenshot

OUHSC Robert M Bird Library

Overdue Items

02/15/2016

@@dear@@ Elizabeth Jones,

@@additional\_info\_1@@

XML Notepad  
Output

OUHSC Robert M Bird Library  
Library Lost Items Charges  
05/01/2016

Dear Elizabeth Jones,

This is to inform you that the following library items you checked out have been declared lost and the replacement and processing charges have been applied to your library account.

```

<?xml version="1.0"
encoding="utf-8"?>
<xsl:stylesheet version="1.0"
xmlns:xsl="http://www.w3.org/1
999/XSL/Transform">

<xsl:include href="header.xsl"
/>
<xsl:include
href="senderReceiver.xsl" />
<xsl:include
href="mailReason.xsl" />
<xsl:include href="footer.xsl" />
<xsl:include href="style.xsl" />
<xsl:include
href="recordTitle.xsl" />

<xsl:template match="/">
<html>
  <head>
    <xsl:call-template
name="generalStyle" />
  </head>
  <body>

```

<p> This is header.xsl  
 <br/><br/>
 head template:<br/>
 <xsl:call-template
 name="head" /><!-- header.xsl -->  
 <br/><br/>
 curdate template:<br/>
 <xsl:call-template
 name="curdate" /><!--
 header.xsl -->  
 <br/><br/>
 This is  
 sendReceiver.xsl<br/><br/>
 senderReciever
 template:<br/>
 <xsl:call-template
 name="senderReceiver" /><!--
 sendReciever.xsl -->  
 <br/><br/>
 This is  
 mailReason.xsl<br/><br/>
 toWhomIsConcerned
 template:<br/>
 <xsl:call-template

<xsl:call-template
 name="salutation" /><!--
 footer.xsl -->  
 <br/><br/>
 contactUs template:
 <br/>
 <xsl:call-template
 name="contactUs" /><!--
 footer.xsl -->  
 <br/><br/>
 myAccount template:
 <br/>
 <xsl:call-template
 name="myAccount" /><!--
 footer.xsl -->  
 <br/><br/>
 This is  
 recordTitle.xsl<br/><br/>
 recordTitle template:
 <br/>
 <xsl:call-template
 name="recordTitle" /><!--
 recordTitle.xsl -->  
 <br/><br/>
 </p>

# INCLUDES TEST FILE

This all header.xsl

head template:

**OUHSC Robert M Bird Library**

**Overdue Items**

curdate template:

**02/15/2016**

This is sendReceiver.xsl

senderReciever template:

**Jones, Elizabeth**

1521 Central Parkway

Norman 73072

OK

This is mailReason.xsl

toWhomIsConcerned template:

**@dear@@ Elizabeth Jones,**

# QUESTIONS?????

