```
<?xml version='1.0'?>
<!-- /*********************************************************************/ -->
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<!-- /*                                                                   */ -->
<!-- /* The following code is presented to you solely for the purpose of  */ -->
<!-- /* enhancing your understanding of the IMS MFS Web Enablement        */ -->
<!-- /* Technology Preview.                                               */ -->
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<!-- /* distributed, copied, altered, or incorporated into other software.*/ -->
<!-- /*********************************************************************/ -->
<!-- /*                                                                   */ -->
<!--  This style sheet is customized for demo purposes to generate 3270      -->
<!--  interface HTML pages for MFS-based IMS applications.                   -->
<!--  It is targeted for browsers supporting cascading stylesheet and        -->
<!--  style attributes, i.e. IE 6+ and Mozilla 1.7.  Attempting to display   -->
<!--  the html output rendered with this style sheet on browsers not         -->
<!--  supporting cascading style sheet and style attributes will result in   -->
<!--  misplaced text and input fields.                                       -->

<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform"
                xmlns:axslt="http://xml.apache.org/xslt"
                xmlns:xmi="http://www.omg.org/XMI"
                xmlns:MFS="MFS.xmi"
                version="1.0">

  <!-- Users can modify color, font, position, and input field definitions -->
  <!-- color definitions -->
  <xsl:variable name="blue">blue</xsl:variable>
  <xsl:variable name="red">red</xsl:variable>
  <xsl:variable name="green">lime</xsl:variable>
  <xsl:variable name="pink">fuchsia</xsl:variable>
  <xsl:variable name="turquoise">aqua</xsl:variable>
  <xsl:variable name="yellow">yellow</xsl:variable>
  <xsl:variable name="default">aqua</xsl:variable>
  <xsl:variable name="neutral">white</xsl:variable>
  <xsl:variable name="input">rgb(60,60,60)</xsl:variable>
  <xsl:variable name="background">black</xsl:variable>

  <!-- font definitions -->
  <xsl:variable name="font-family">'Courier New'</xsl:variable>
  <xsl:variable name="font-size">12pt</xsl:variable>
  <xsl:variable name="font-weight">bold</xsl:variable>

  <!-- position definitions -->
  <xsl:variable name="row-multiplier">21</xsl:variable>
  <xsl:variable name="column-multiplier">10</xsl:variable>

  <!-- input field definitions -->
```

```
  <xsl:variable name="border">.5in</xsl:variable>

  <!-- cursor definitions -->
  <xsl:variable name="cursorRow">0</xsl:variable>
  <xsl:variable name="cursorColumn">0</xsl:variable>

  <!-- start of html doc -->
  <xsl:output method="html"/>

  <!-- beginning of xmi document -->
  <xsl:template match="/">
    <html>
      <head>
        <!-- Style declarations -->
        <!-- Users can modify this section for different font colors, background
colors, -->
        <!-- font-family, font-size, font-weight, or button styles
-->
       <style type="text/css" media="screen">
            <!-- Default style for body, table, and input elements -->
          <xsl:text>body, table, textwrap</xsl:text>
          <xsl:text>  { color: </xsl:text><xsl:value-of select="$default"/>
          <xsl:text>; background: </xsl:text><xsl:value-of
select="$background"/>
          <xsl:text>; font-family: </xsl:text><xsl:value-of select="$font-
family"/>
          <xsl:text>; font-size: </xsl:text><xsl:value-of select="$font-size"/>
          <xsl:text>; font-weight: </xsl:text><xsl:value-of select="$font-
weight"/>
          <xsl:text>; text-align: left</xsl:text>
          <xsl:text> } </xsl:text>
          <xsl:text>input</xsl:text>
          <xsl:text>  { color: </xsl:text><xsl:value-of select="$default"/>
          <xsl:text>; background: </xsl:text><xsl:value-of select="$input"/>
          <xsl:text>; font-family: </xsl:text><xsl:value-of select="$font-
family"/>
          <xsl:text>; font-size: </xsl:text><xsl:value-of select="$font-size"/>
          <xsl:text>; font-weight: </xsl:text><xsl:value-of select="$font-
weight"/>
          <xsl:text> } </xsl:text>
          <xsl:text>textarea</xsl:text>
          <xsl:text>  { color: </xsl:text><xsl:value-of select="$default"/>
          <xsl:text>; background: </xsl:text><xsl:value-of select="$input"/>
          <xsl:text>; font-family: </xsl:text><xsl:value-of select="$font-
family"/>
          <xsl:text>; font-size: </xsl:text><xsl:value-of select="$font-size"/>
          <xsl:text>; font-weight: </xsl:text><xsl:value-of select="$font-
weight"/>
          <xsl:text> } </xsl:text>
          <xsl:text>.buttonStyle1</xsl:text>
            <xsl:text>  {     color: </xsl:text><xsl:value-of
select="$neutral"/>
          <xsl:text>; background: </xsl:text><xsl:value-of
select="$background"/>
          <xsl:text>; font-family: </xsl:text><xsl:value-of select="$font-
family"/>
          <xsl:text>; font-size: </xsl:text><xsl:value-of select="$font-size"/>
```

```
          <xsl:text>; font-weight: </xsl:text><xsl:value-of select="$font-
weight"/>
          <xsl:text>; width: 135px </xsl:text>
          <xsl:text> } </xsl:text>
          <xsl:text>.buttonStyle2</xsl:text>
          <xsl:text>  { color: </xsl:text><xsl:value-of select="$neutral"/>
          <xsl:text>; background: </xsl:text><xsl:value-of
select="$background"/>
          <xsl:text>; font-family: </xsl:text><xsl:value-of select="$font-
family"/>
          <xsl:text>; font-size: </xsl:text><xsl:value-of select="$font-size"/>
          <xsl:text>; font-weight: </xsl:text><xsl:value-of select="$font-
weight"/>
          <xsl:text>; width: 100px </xsl:text>
          <xsl:text> } </xsl:text>
          <xsl:text>.buttonStyle3</xsl:text>
          <xsl:text>  { color: </xsl:text><xsl:value-of select="$neutral"/>
          <xsl:text>; background: </xsl:text><xsl:value-of
select="$background"/>
          <xsl:text>; font-family: </xsl:text><xsl:value-of select="$font-
family"/>
          <xsl:text>; font-size: </xsl:text><xsl:value-of select="$font-size"/>
          <xsl:text>; font-weight: </xsl:text><xsl:value-of select="$font-
weight"/>
          <xsl:text>; width: 50px </xsl:text>
          <xsl:text> } </xsl:text>

        </style>
    <!-- Do NOT modify existing JavaScript functions -->
      <SCRIPT Language="JavaScript">
        <![CDATA[
            function setFocus(field) {
                  var layersSupport = (document.layers!=null);
                  var fField = -1;
                  if (!layersSupport) {
                        // for IE 5 and NS 6
                        for (var j = 0; j < document.forms.length; j++) {
                              var form = document.forms[j];
                              for (var i=0; i < form.length; i++) {
                                    if (fField == -1) {
                                          //if field is empty, focus on the
first input element, else focus on the specified input field
                                          if (((field.length < 1) &&
(form.elements[i].type == "text")) || (form.elements[i].name == field)) {
                                                fField = i;
                                                form.elements[i].focus();
                                                break;
                                          }
                                    }
                              }
                        }
                  }
            }

        function goToURL()
        {
           myWindow = open("","newwin","height=600,width=920,resizable=1");
```

```
            myWindow.location = "http://www-306.ibm.com/software/data/ims/";
         }

         function submitEnter(myfield,e)
         {
            var keycode;
            if (window.event) keycode = window.event.keyCode;
            else if (e) keycode = e.which;
            else return true;

          // submits the form when presses 'Enter'
            if (keycode == 13){
               for (var i=0; i < document.forms.length; i++){
                if (document.forms[i].name=="Process") {
                         //processSubmit(document.forms[i]);
                         for (var j=0; j < document.forms[i].length; j++){
                              if
(document.forms[i].elements[j].name=="submitButton"){
                                 document.forms[i].elements[j].click();
                                   break;
                              }
                         }
                 }
               }
                return false;
            } else
               return true;
         }

         function clearForm()
           {
                   var layersSupport = (document.layers!=null);
                   var fLayer = -1;
                   var fField = -1;
                   var fCnt = -1;
                   if (!layersSupport) {
                         // for IE and NS 6
                         for (var j = 0; j < document.forms.length; j++) {
                               var form = document.forms[j];
                               for (var i=0; i < form.length; i++) {
                                     //clear out text fields
                                     if (form.elements[i].type == "text" ||
form.elements[i].type == "textarea") {
                                                 if (fField == -1) {
                                                       fField = i;
                                                       fCnt = j;
                                                 }
                                                 form.elements[i].value = "";
                                     }
                               }
                         }
                         if (fField >= 0 && fCnt >= 0) {
                             //put focus on the first text field
                             document.forms[fCnt].elements[fField].focus();
                         }
                   }
             }
```

```
        // Reject numeric inputs
          function numeric(e)
          {
                  if (navigator.appName == "Microsoft Internet Explorer")
                        Key = window.event.keyCode;
                  else if (navigator.appName == "Netscape")
                        Key = e.which;
                  else if (navigator.appName == "Mozilla")
                        Key = e.keyCode;

                  if (Key < 48 || Key > 57) {
                        alert("Please enter only numeric value");
                        return false;
                  }
          }

          // Process the submit form
          function processSubmit(frm)
          {
            var elementsLength = frm.length
            for (var i=0; i < elementsLength; i++)
                if (frm[i].type=="hidden") // clear submit form
                    frm[i].value = ""
                    findForms(frm, window.document)
         }

           // Find fields
           function findForms(fSubmit, doc)
           {
            var formsCnt = doc.forms.length, fSource
            var elementsLength, eSource
            // Enumerate forms and find forms in same group
            for (var i=0; i < formsCnt; i++) {
                    fSource = doc.forms[i]
                if ((fSource.name=="Info") && (fSubmit!=fSource)){
                    elementsLength = fSource.length
                          // Copy fields
                          for (var j=0; j < elementsLength; j++) {
                              eSource = fSource[j]
                              // Make sure field exists in submit form
                              if (fSubmit[eSource.name]!=null &&
eSource.type!="hidden")
                                  fSubmit[eSource.name].value = eSource.value
                    }
                    }
                }
            // In NS 4 recurse throughs sub-documents
            var layersSupport = (document.layers!=null) //NS4
            if (layersSupport) {
                    var layersLength = d.layers.length
                    for (var l=0; l < layersLength; l++) {
                    findForms(fSubmit, d.layers[l].document)
                }
          }
        }
```

```
        function disableBackButton()
        {
           history.forward();
        }

        ]]>
      </SCRIPT>
      </head>
      <!-- Invoke device template on output MFSMessage -->
      <xsl:element name="body">
        <!-- Check the formatType of MFSFormat before processing -->
        <xsl:variable name="formatType"><xsl:value-of
select="//MFS:MFSFormat/devices[1]/divisions/@type"/></xsl:variable>
      <xsl:if test="$formatType='out' or $formatType='inout'">
          <xsl:apply-templates select="//MFS:MFSFormat/devices[1]"/>
      </xsl:if>
      </xsl:element>
    </html>
  </xsl:template>

  <!-- device template: generates HTML body contents -->
  <xsl:template match="devices">
    <!-- Invoke cursor template for cursor position -->
    <xsl:apply-templates select="divisions/devicePages/physicalPages/cursor"/>
    <!-- Invoke deviceFields template for generating labels and input fields -->
    <xsl:apply-templates
select="divisions/devicePages/physicalPages/deviceFields"/>

     <!-- Create Function Key buttons in a form-->
     <xsl:element name="table">
       <xsl:attribute name="style">position: absolute; top: 30px; left:
20px</xsl:attribute>
       <xsl:element name="form">
        <xsl:attribute name="Name">PFKeys</xsl:attribute>
        <xsl:attribute name="ONSUBMIT">processSubmit(this);
submit</xsl:attribute>
        <xsl:attribute name="Action"></xsl:attribute>
        <xsl:attribute name="method">get</xsl:attribute>

        <!-- Create hidden field for each input data device field -->
        <xsl:for-each
select="//MFS:MFSFormat/devices[1]/divisions/devicePages/physicalPages/deviceFie
lds">
           <xsl:if test="not(@password='true') and
not(attributes/@protected='true')">
            <xsl:element name="input">
               <xsl:attribute name="type">hidden</xsl:attribute>
               <xsl:attribute name="name"><xsl:value-of
select="@label"/></xsl:attribute>
            </xsl:element>
           </xsl:if>
         </xsl:for-each>
         <!-- Function Key Buttons -->
         <xsl:if test="functionKeyList">
            <xsl:element name="tr">
            <!-- display button if there is a functionKey in a functionKeyList-
->
```

```
            <xsl:for-each select="functionKeyList/functionKeys">
            <xsl:variable name="number"><xsl:number/></xsl:variable>
            <xsl:if test="$number &lt; 18 or $number = '18'">
            <xsl:element name="td">
            <xsl:element name="input">
                <xsl:attribute name="type">submit</xsl:attribute>
                <xsl:attribute name="value">PF<xsl:number/></xsl:attribute>
                <xsl:attribute name="class">buttonStyle3</xsl:attribute>
                <xsl:attribute name="name">PF<xsl:number/></xsl:attribute>
            </xsl:element>
              </xsl:element>
            </xsl:if>
            </xsl:for-each>
            </xsl:element>
            <xsl:element name="tr">
            <xsl:for-each select="functionKeyList/functionKeys">
            <xsl:variable name="number"><xsl:number/></xsl:variable>
            <xsl:if test="$number &gt; 18">
            <xsl:element name="td">
            <xsl:element name="input">
            <xsl:attribute name="type">submit</xsl:attribute>
            <xsl:attribute name="value">PF<xsl:number/></xsl:attribute>
            <xsl:attribute name="class">buttonStyle3</xsl:attribute>
            <xsl:attribute name="name">PF<xsl:number/></xsl:attribute>
            </xsl:element>
            </xsl:element>
            </xsl:if>
            </xsl:for-each>
            </xsl:element>
          </xsl:if>
        </xsl:element>
      </xsl:element>
      <!-- Create Submit, Clear, Reset, Next, and Previous buttons in a form -->
      <xsl:element name="table">
        <xsl:attribute name="style">position: absolute; top: 1px; left:
20px</xsl:attribute>
          <xsl:element name="form">
            <!-- Invoke processSubmit() to fill in device field data -->
         <xsl:attribute name="Name">Process</xsl:attribute>
         <xsl:attribute name="ONSUBMIT">processSubmit(this);
submit</xsl:attribute>
         <xsl:attribute name="Action"></xsl:attribute>
         <xsl:attribute name="method">get</xsl:attribute>
       <xsl:attribute name="onKeyPress">return
submitEnter(this,event)</xsl:attribute>

         <!-- Create hidden field for each input data device field -->
         <xsl:for-each
select="//MFS:MFSFormat/devices[1]/divisions/devicePages/physicalPages/deviceFie
lds">
            <xsl:if test="not(@password='true') and
not(attributes/@protected='true')">
             <xsl:element name="input">
                <xsl:attribute name="type">hidden</xsl:attribute>
                <xsl:attribute name="name"><xsl:value-of
select="@label"/></xsl:attribute>
         </xsl:element>
```

```
          </xsl:if>
         </xsl:for-each>
         <xsl:element name="tr">
          <xsl:element name = "td">
          <!-- Submit button -->
          <input type="submit" name="submitButton" class="buttonStyle2"
value="Submit"/>
          </xsl:element>
          <xsl:element name="td">
          <!-- Clear button - Invoke clearForm() to clear data on a form -->
          <input type="button" name="clearButton" value="Clear Fields"
class="buttonStyle1" onClick="clearForm()"/>
          </xsl:element>
          <xsl:element name="td">
          <!-- Next button -->
          <input type="submit" name="PA1Button" value="Next Page"
class="buttonStyle2"/>
          </xsl:element>
          <xsl:element name="td">
          <!-- Unformat button -->
          <input type="submit" name="resetButton" value="Reset"
class="buttonStyle2"/>
            </xsl:element>
          <xsl:element name="td">
          <!-- Logout button -->
          <input type="submit" name="logoutButton" value="Logout"
class="buttonStyle2"/>
            </xsl:element>
          <xsl:element name="td">
          <!-- Help button - Invoke goToURL() to go to the MFS Web Enablement
User's Guide -->
          <input type="button" name="helpButton" value="Help"
class="buttonStyle2" onClick="goToURL()"/>
          </xsl:element>
         </xsl:element>
       </xsl:element>
     </xsl:element>
  </xsl:template>

  <!-- cursor template: find the specified field -->
  <xsl:template match="cursor">
    <xsl:attribute name="onload">
      <xsl:text>setFocus('</xsl:text>
      <!-- Based on the row and column specified, find the name of the matching
field -->
      <!-- If not found, focus will be set on the first input field -->
      <xsl:variable name="cursorRow"><xsl:value-of
select="position/@row"/></xsl:variable>
      <xsl:variable name="cursorColumn"><xsl:value-of
select="position/@column"/></xsl:variable>
      <xsl:for-each select="../deviceFields">
      <xsl:if test="position/@row = $cursorRow and position/@column =
$cursorColumn ">
          <xsl:value-of select="@label" />
        </xsl:if>
      </xsl:for-each>
      <xsl:text>')</xsl:text>
```

```
      <xsl:text>;</xsl:text>
      <xsl:text>disableBackButton()</xsl:text>
    </xsl:attribute>
  </xsl:template>

  <!-- deviceFields template: generates labels and input fields -->
  <!-- Logic is as follows: enclose each label and input field in a table to
ensure absolute positioning -->
  <!--                      and color assignments.  Reverse highlighting will
result in an hidden label  -->
  <!--                      with the same foreground and background color.
-->
  <xsl:template match="deviceFields">
    <!-- If password, don't create the input field -->
    <xsl:choose>
      <xsl:when test="@password='true'">
        <!-- No op -->
      </xsl:when>
      <xsl:otherwise>
          <xsl:element name="table">
          <xsl:attribute name="style">
            <!-- Specify absolute positioning -->
            <xsl:if test="position">
              <xsl:text>position: absolute</xsl:text>
              <xsl:text>; top: </xsl:text><xsl:value-of select="(position/@row *
$row-multiplier) + 50"/><xsl:text>px</xsl:text>
              <xsl:text>; left: </xsl:text><xsl:value-of
select="position/@column * $column-multiplier"/><xsl:text>px</xsl:text>
            </xsl:if>
            <!-- Specify color -->
            <xsl:if test="attributes/@protected='true'">
              <xsl:text>; color: </xsl:text>
              <!-- Assign default color -->
              <xsl:if test="not(attributes) and not(extendedAttributes)">
                <xsl:value-of select="$default"/>
              </xsl:if>
              <!-- attributes template: assigns color -->
              <xsl:apply-templates select="attributes"/>
              <!-- extendedAttributes template: assigns color and highlighting
features -->
              <xsl:apply-templates select="extendedAttributes"/>
            </xsl:if>
          </xsl:attribute>
          <xsl:element name="tr">
          <xsl:element name="td">
          <xsl:if test="@label='OUTL'">
              <xsl:text>Please enter a command or a transaction:</xsl:text>
          </xsl:if>
          </xsl:element>
          </xsl:element>
          <xsl:element name="tr">
          <xsl:element name="td">
          <xsl:choose>
          <!-- Create input text fields -->
            <!--   when no literal value specified and attribute not protected -
->
          <xsl:when test="not(attributes/@protected='true')">
```

```
            <!--  Embedd each input field in a non-active form -->
            <xsl:element name="form">
              <xsl:attribute name="Name">Info</xsl:attribute>
              <xsl:attribute name="ONSUBMIT">return false</xsl:attribute>
            <xsl:attribute name="onKeyPress">return
submitEnter(this,event)</xsl:attribute>
              <!--  Specify type, value, class, size, maxlength, and style
attributes -->
            <!--  if length is greater than 80 generate textarea field otherwise
generate input field -->
            <xsl:variable name="cols">80</xsl:variable>
            <xsl:variable name="rows">
                <xsl:choose>
                <xsl:when test="@length &gt; 80"><xsl:value-of
select="round(@length div 80)"/></xsl:when>
                </xsl:choose>
            </xsl:variable>
            <xsl:choose>
                <xsl:when test="@length &gt; 80">
                <xsl:element name="textarea">
                <xsl:attribute name="rows"><xsl:value-of
select="$rows"/></xsl:attribute>
                <xsl:attribute name="cols"><xsl:value-of
select="$cols"/></xsl:attribute>
                <xsl:attribute name="name"><xsl:value-of
select="@label"/></xsl:attribute>
                    <xsl:choose>
                    <xsl:when test="attributes/@intensity='nondisplayable'">
                    <xsl:attribute name="type">hidden</xsl:attribute>
                    </xsl:when>
                    <xsl:otherwise>
                    <xsl:attribute name="style">
                      <xsl:text>color: </xsl:text>
                      <xsl:if test="attributes">
                        <!-- attributes template: assigns color -->
                        <xsl:apply-templates select="attributes"/>
                      </xsl:if>
                      <xsl:if test="extendedAttributes">
                        <!-- extendedAttributes template: assigns color and
highlighting features -->
                        <xsl:apply-templates select="extendedAttributes"/>
                      </xsl:if>

                    </xsl:attribute>
                    <!-- Check for numeric only fields -->
                    <xsl:if test = "attributes/@numeric='true'">
                    <xsl:attribute name="onKeyPress"><xsl:text>return
numeric(event)</xsl:text></xsl:attribute>
                    </xsl:if>
                    </xsl:otherwise>
                    </xsl:choose>
                </xsl:element>
            </xsl:when>
            <xsl:otherwise>
                <xsl:element name="input">
                <xsl:attribute name="name"><xsl:value-of
select="@label"/></xsl:attribute>
```

```
                <xsl:choose>
                  <xsl:when test="attributes/@intensity='nondisplayable'">
                    <xsl:attribute name="type">hidden</xsl:attribute>
                  </xsl:when>
                    <xsl:otherwise>
                    <xsl:attribute name="type">text</xsl:attribute>
                    <xsl:attribute name="value"><xsl:value-of
select="@value"/></xsl:attribute>
                    <xsl:attribute name="style">
                      <xsl:text>color: </xsl:text>
                      <xsl:if test="attributes">
                        <!-- attributes template: assigns color -->
                        <xsl:apply-templates select="attributes"/>
                      </xsl:if>
                      <xsl:if test="extendedAttributes">
                        <!-- extendedAttributes template: assigns color and
highlighting features -->
                        <xsl:apply-templates select="extendedAttributes"/>
                      </xsl:if>
                      <xsl:text>; border: </xsl:text><xsl:value-of
select="$border"/>
                    </xsl:attribute>
                    <xsl:attribute name="size"><xsl:value-of
select="@length"/></xsl:attribute>
                    <xsl:attribute name="maxlength"><xsl:value-of
select="@length"/></xsl:attribute>
                <!-- Check for numeric only fields -->
                <xsl:if test = "attributes/@numeric='true'">
                  <xsl:attribute name="onKeyPress"><xsl:text>return
numeric(event)</xsl:text></xsl:attribute>
                </xsl:if>
             </xsl:otherwise>
             </xsl:choose>
             </xsl:element>
             </xsl:otherwise>
             </xsl:choose>
               </xsl:element>
             </xsl:when>

               <!-- Create text label -->
             <xsl:otherwise>
             <!--  Font tag will overrule color assignment -->
             <xsl:element name="font">
               <xsl:attribute name="color">
               <!-- Assign default color -->
               <xsl:if test="not(attributes) and not(extendedAttributes)">
                     <xsl:value-of select="$default"/>
                 </xsl:if>
               <!-- attributes template: assigns color -->
               <xsl:apply-templates select="attributes"/>
               <!-- extendedAttributes template: assigns color and highlighting
features -->
               <xsl:apply-templates select="extendedAttributes">
                 <xsl:with-param name="tag">font</xsl:with-param>
                 </xsl:apply-templates>
               </xsl:attribute>
```

```
                <!-- Specify value of the label, explicitly convert space to
displayable space character -->
              <xsl:choose>
              <xsl:when test="@length &lt;= 80">
                 <xsl:value-of select="translate(@value,' ',' ')"/>
              </xsl:when>
              <xsl:otherwise>
                  <xsl:value-of select="translate(@value,'','')"/>
              </xsl:otherwise>
              </xsl:choose>
              </xsl:element>
            </xsl:otherwise>
          </xsl:choose>
          </xsl:element>
          </xsl:element>
        </xsl:element>
      </xsl:otherwise>
    </xsl:choose>
   </xsl:template>

  <!-- attribute template: specify color -->
  <xsl:template match="attributes">
    <!-- Specify color for label text fields and input text fields based on
intensity and protected attributes -->
    <xsl:choose>
      <xsl:when test="@intensity='nondisplayable'">
        <xsl:value-of select="$background"/>
      </xsl:when>
    <xsl:otherwise>
       <xsl:if test="not(../extendedAttributes/@color)">
          <xsl:choose>
          <xsl:when test="not(@intensity='high') and not(@protected='true')">
              <xsl:value-of select="$green"/>
          </xsl:when>
          <xsl:when test="@intensity='high' and not(@protected='true')">
              <xsl:value-of select="$red"/>
          </xsl:when>
          <xsl:when test="not(@intensity='high') and @protected='true'">
              <xsl:value-of select="$turquoise"/>
          </xsl:when>
          <xsl:when test="@intensity='high' and @protected='true'">
              <xsl:value-of select="$neutral"/>
          </xsl:when>
          </xsl:choose>
        </xsl:if>
      </xsl:otherwise>
    </xsl:choose>
  </xsl:template>

  <!-- extendedAttributes template: specify color and highlighting assignment,
overrides attribute colors -->
  <xsl:template match="extendedAttributes">
    <!--  Based on the parameter passed in, determine whether to specify
highlighting assignment or not -->
    <!--  When param='style', both color and highlighting assignment will be
produced;                  -->
```

```
    <!--  When param='font', only color assignment will be produced.
-->
    <xsl:param name="tag">style</xsl:param>
    <xsl:if test="not(../attributes/@intensity='nondisplayable')">
      <!-- Specify highlighting reverse background color -->
      <xsl:if test="@highlighting='reverse'">
        <xsl:if test="$tag='style'">
        <xsl:choose>
            <!-- Reverse background color for label and input are different -->
          <xsl:when test="../attributes/@protected='true'">
          <!-- For label text, assign background color -->
              <xsl:value-of select="$background"/>
          </xsl:when>
        <xsl:otherwise>
            <!-- For input fields, assign input color -->
           <xsl:value-of select="$input"/>
        </xsl:otherwise>
        </xsl:choose>
          <xsl:text>; background-color: </xsl:text>
      </xsl:if>
        <xsl:if test="$tag='font'">
           <xsl:text>black</xsl:text>
        </xsl:if>
      </xsl:if>
      <!-- Specify color assignment for label text and input text fields-->
      <xsl:if test="not(@highlighting='reverse' and $tag='font') or
$tag='border'">
        <xsl:choose>
          <xsl:when test="@color='blue'">
            <xsl:value-of select="$blue"/>
          </xsl:when>
          <xsl:when test="@color='red'">
            <xsl:value-of select="$red"/>
          </xsl:when>
          <xsl:when test="@color='green'">
            <xsl:value-of select="$green"/>
          </xsl:when>
          <xsl:when test="@color='pink'">
            <xsl:value-of select="$pink"/>
          </xsl:when>
          <xsl:when test="@color='turquoise'">
            <xsl:value-of select="$turquoise"/>
          </xsl:when>
          <xsl:when test="@color='yellow'">
            <xsl:value-of select="$yellow"/>
          </xsl:when>
          <xsl:when test="@color='default'">
            <xsl:value-of select="$default"/>
          </xsl:when>
          <xsl:when test="@color='neutral'">
            <xsl:value-of select="$neutral"/>
          </xsl:when>
        </xsl:choose>
      </xsl:if>
      <!-- Specify highlighting underline and border assignment -->
      <xsl:if test="$tag='style'">
        <xsl:if test="@highlighting">
```

```
          <xsl:choose>
            <xsl:when test="@highlighting='underline'">
            <xsl:text>; text-decoration:underline</xsl:text>
            </xsl:when>
            <xsl:when test="@highlighting='blink'">
            <xsl:text>; text-decoration:blink</xsl:text>
            </xsl:when>
            </xsl:choose>
          <!-- Specify border assignment -->
          <xsl:if test="outlining">
            <!-- Get the border color -->
            <!-- Recursively call extendedAttributes with parameter tag=border
to get border-color assignment -->
               <xsl:text>; border-color:</xsl:text>
               <xsl:apply-templates select=".">
              <xsl:with-param name="tag">border</xsl:with-param>
          </xsl:apply-templates>
          <!-- Assign border: box, right, left, top, or bottom -->
        <xsl:choose>
             <xsl:when test="outlining/@right='true' or outlining/@left='true'
or outlining/@over='true' or outlining/@under='true'">
                <xsl:text>; border-style: solid; border-right-width:
</xsl:text>
                  <xsl:if test="outlining/@right='true'">
                      <xsl:text>medium</xsl:text>
                  </xsl:if>
               <xsl:if test="not(outlining/@right='true')">
                   <xsl:text>0</xsl:text>
               </xsl:if>
               <xsl:text>; border-left-width: </xsl:text>
               <xsl:if test="outlining/@left='true'">
                   <xsl:text>medium</xsl:text>
               </xsl:if>
               <xsl:if test="not(outlining/@left='true')">
                   <xsl:text>0</xsl:text>
               </xsl:if>
               <xsl:text>; border-top-width: </xsl:text>
               <xsl:if test="outlining/@over='true'">
                   <xsl:text>medium</xsl:text>
               </xsl:if>
               <xsl:if test="not(outlining/@over='true')">
                   <xsl:text>0</xsl:text>
               </xsl:if>
               <xsl:text>; border-bottom-width: </xsl:text>
               <xsl:if test="outlining/@under='true'">
                   <xsl:text>medium</xsl:text>
               </xsl:if>
               <xsl:if test="not(outlining/@under='true')">
                   <xsl:text>0</xsl:text>
               </xsl:if>
            </xsl:when>
          </xsl:choose>
      </xsl:if>
      </xsl:if>
    </xsl:if>
    </xsl:if>
  </xsl:template>
```

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