

**Ćwiczenie 1: Podstawy XSLT - sprawozdanie**

**Imię, nazwisko, nr indeksu:**

W tabeli należy umieścić zrzuty ekranu zgodnie z zaleceniami zawartymi w instrukcji ćwiczenia

Screeny znajdują się poniżej, aby przeglądanie ich oraz ocenianie było znacznie łatwiejsze.

Z wyrazami szacunku,

# HTML5 Canvas WebGL

## Punkt 4

The screenshot displays a web browser window on the left and the Visual Studio Code editor on the right. The browser window shows a page titled "Hypertext hypermedia" with a "Lecture" section containing the text "Information about the lecture." and "Additional information about HTML and XML". The Visual Studio Code editor shows the source files for this application. The top editor pane displays the XML file "HiH.xml", which defines a course structure with an author and a laboratory. The bottom editor pane displays the XSLT file "HiH.xslt", which transforms the XML into the HTML output seen in the browser. The XSLT code includes a template for the author and a template for the laboratory, both of which are highlighted with red boxes. The status bar at the bottom of the editor indicates the current position is at line 23, column 49, and the file encoding is UTF-8 with BOM.

```
<?xml version="1.0" encoding="utf-8"?>
<?xml-stylesheet type="text/xsl" href="HiH.xslt"?>
<course>
  <author>
    [Red Box]
  </author>
  <classes kind="lecture" >
    <component id="1">
      <topic>Hypertext and hypermedia</topic>
      <theme>Hypertext & hypermedia</theme>
      <theme>HTML CSS</theme>
      <theme>XML</theme>
      <theme>XML Schema</theme>
      <theme>DTD</theme>
      <theme>XSLT</theme>
      <score>30</score>
    </component>
  </classes>
  <classes kind="laboratory" obligatory="yes">
    <component id="1">
      <topic>HTML + CSS</topic>
    </component>
  </classes>
</course>
```

```
<!-- end content -->
</div>
<!-- end wrapper -->
<footer>
  <xsl:apply-templates select="course/author"/> <!-- reference to a template that allows for displaying information ab
</footer>
</body>
</html>
</xsl:template>

<xsl:template match="author">
  Copyright 2019, <xsl:value-of select="name"/> <xsl:text> </xsl:text> <xsl:value-of select="surname" />
</xsl:template>

<xsl:template match="classes">
  <h3 id="lab">Laboratory</h3>
  <p>
    Information about the laboratory.
  </p>
  <ol>
  </ol>
```

# HTML5 Canvas WebGL

## Punkt 6

The image shows a web browser window on the left and a Visual Studio Code editor on the right. The browser displays the result of an XSLT transformation, showing a page titled "Hypertext hypermedia" with a navigation menu and a main content area. The VS Code editor shows the XSLT stylesheet and the XML input file. Red boxes highlight specific parts of the code and the rendered output.

**Browser Window (Left):**

- Address bar: `C:\Users\FIPOD\Desktop\HIH3\HIH.xml`
- Page Title: Hypertext hypermedia
- Navigation Menu: [Lecture](#) | [Laboratory](#) | [Project](#) | [Links](#)
- Main Content: 

## Lecture

Information about the lecture.

Additional information about HTML and XML

**Visual Studio Code Editor (Right):**

**File: HiH.xml**

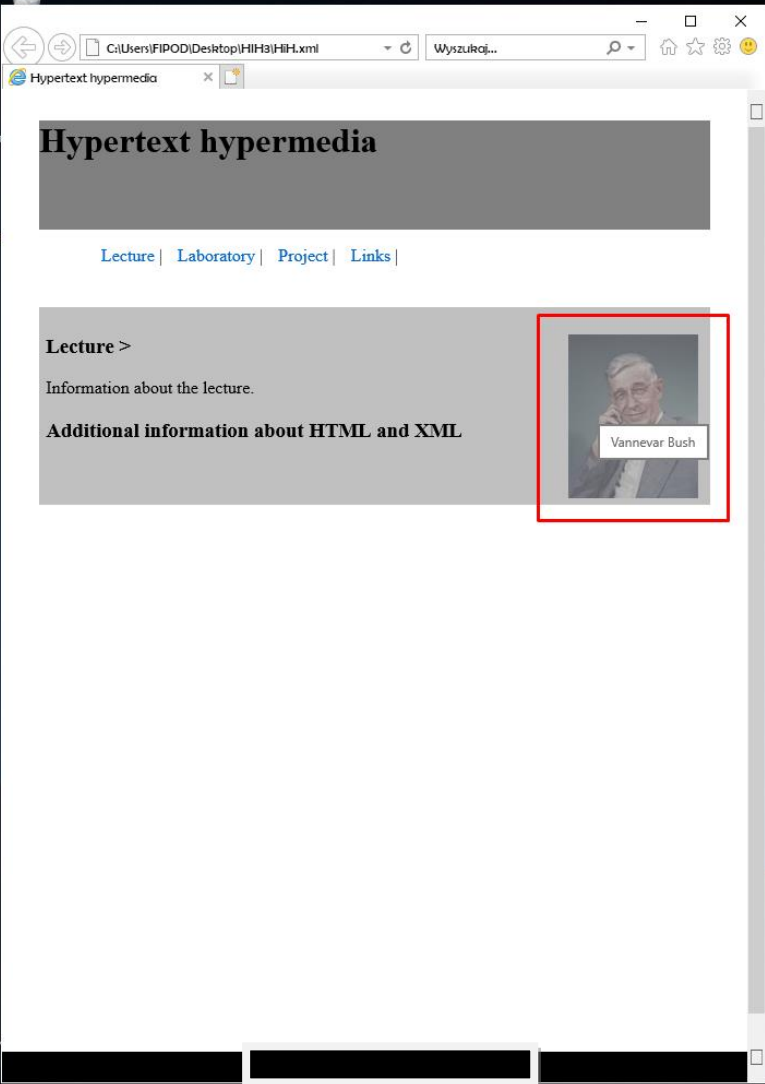
```
12 <title>Hypertext hypermedia</title>
13 <meta name="viewport" content="width=device-width, initial-scale=1.0" />
14 <link rel="stylesheet" href="index.css" />
15 </head>
16 <body>
17   <div id="wrapper">
18     <header>
19       <h1>Hypertext hypermedia</h1>
20     </header>
21
22     <!-- menu for moving within a page -->
23     <xsl:call-template name="nav" />
24
25     <div id="content">
26       <!-- a place for information about lecture, laboratory, project and links -->
27       <h3 id="lecture">Lecture
28       <!-- reference to a template that allows to display a picture -->
29
30     </h3>
31     <p>
32       Information about the lecture.
33     </p>
```

**File: HiH.xslt**

```
63 </p>
64 <ol>
65
66 </ol>
67 </xsl:template>
68
69
70 <xsl:template name="nav">
71   <nav>
72     <ul>
73       <li><a href="#lecture">Lecture</a></li>
74       <li><a href="#lab">Laboratory</a></li>
75       <li><a href="#project">Project</a></li>
76       <li><a href="#links">Links</a></li>
77     </ul>
78   </nav>
79 </xsl:template>
80
81 <!--
82   <h3 id="lab">Laboratory</h3>
83   <p>
84     Information about the laboratory.
```

# HTML5 Canvas WebGL

## Punkt 8

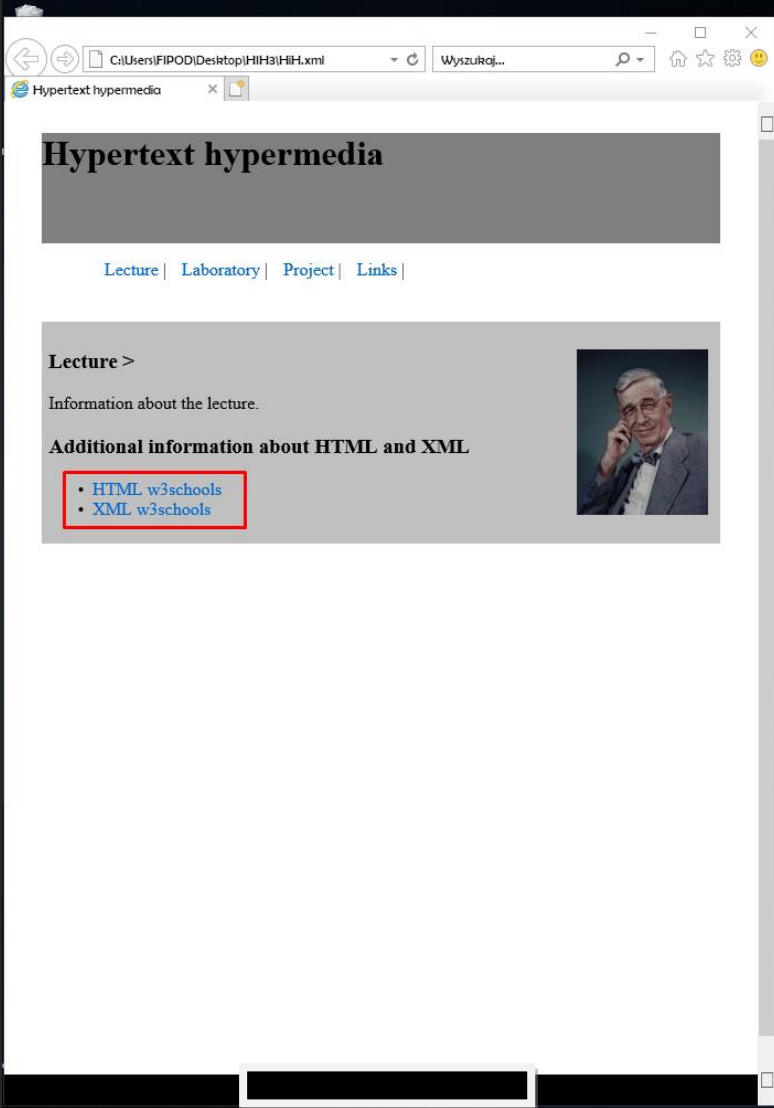


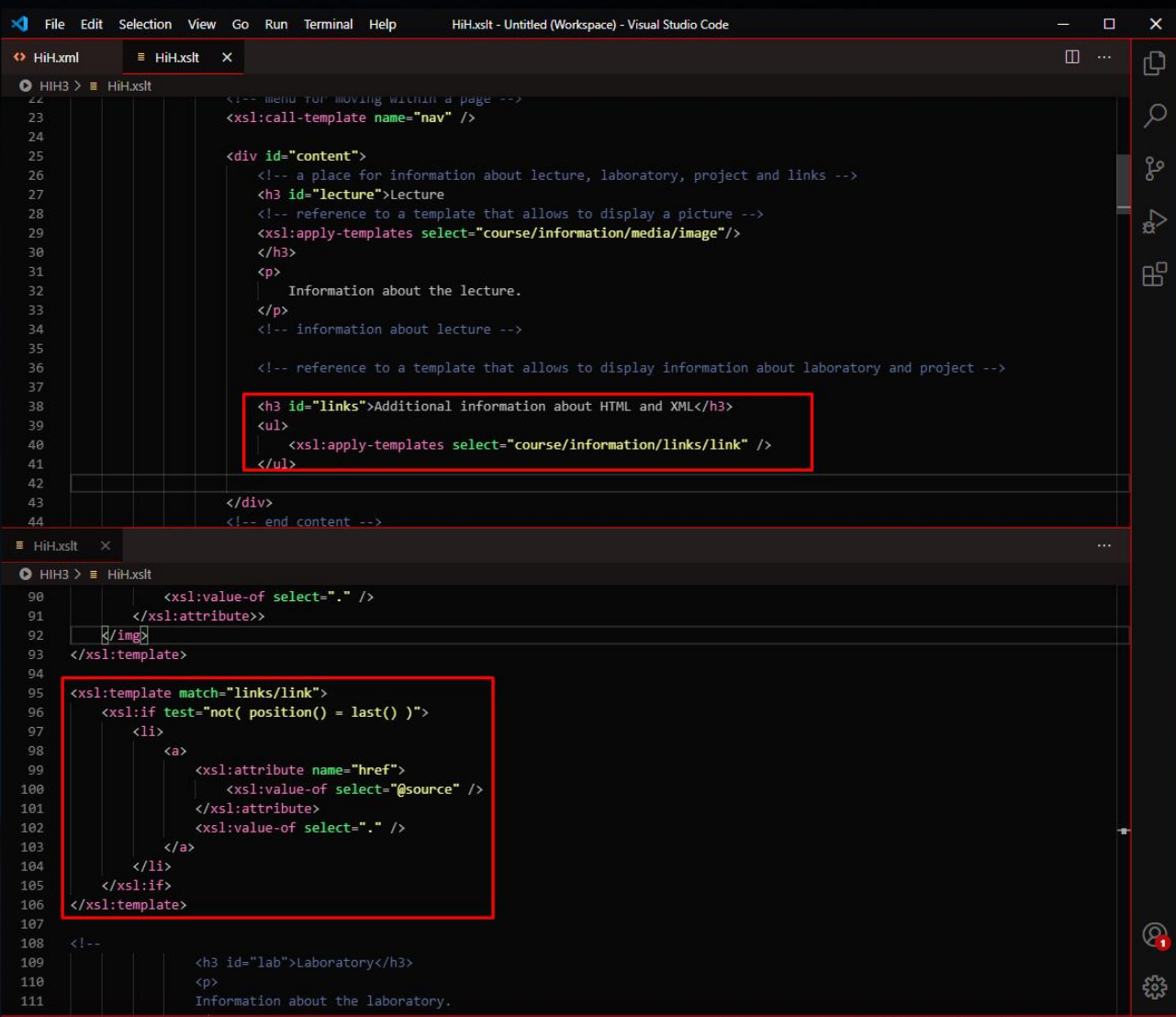
```
File Edit Selection View Go Run Terminal Help HiH.xslt - Untitled (Workspace) - Visual Studio Code
HiH.xslt
20
21
22
23 <!-- menu for moving within a page -->
24 <xsl:call-template name="nav" />
25
26 <div id="content">
27   <!-- a place for information about lecture, laboratory, project and links -->
28   <h3 id="lecture">Lecture
29     <!-- reference to a template that allows to display a picture -->
30     <xsl:apply-templates select="course/information/media/image"/>
31   </h3>
32   <p>
33     Information about the lecture.
34   </p>
35   <!-- information about lecture -->
36
37   <!-- reference to a template that allows to display information about laboratory and project -->
38   <h3 id="links">Additional information about HTML and XML</h3>
39   <ul>
40     <!-- reference to a template that allows to display links -->
41   </ul>
42
43
44
45
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63
64
65
66
67
68
69
70
71
72
73
74 <li> <a href="#lab">Laboratory</a> </li>
75 <li> <a href="#project">Project</a> </li>
76 <li> <a href="#links">Links</a> </li>
77 </ul>
78 </nav>
79 </xsl:template>
80
81 <xsl:template match="media/image">
82   <img>
83     <xsl:attribute name="src">
84       <xsl:value-of select="@source" />
85     </xsl:attribute>
86     <xsl:attribute name="class">
87       right
88     </xsl:attribute>
89     <xsl:attribute name="title">
90       <xsl:value-of select="." />
91     </xsl:attribute>
92   </img>
93 </xsl:template>
94 <!--
95 <h3 id="lab">Laboratory</h3>
```

Ln 80, Col 1 Tab Size: 4 UTF-8 with BOM CRLF XSL Port: 5500

Wpisz tu wyszukiwane słowa Pobrane screeny HH\_XSL.pdf i jeszcze... HiH.xslt - Untitled (...) Hypertext hyperme...

16:24 23.11.2020





Wpisz tu wyszukiwane słowa

Windows Launch (codes)

Ln 42, Col 1 Tab Size: 4 UTF-8 with BOM CRLF XSL Port: 5500



The screenshot displays a web browser window on the left and a Visual Studio Code editor on the right, illustrating the output and source code of an XSLT transformation.

**Web Browser Window:**

- Address bar: `C:\Users\FIPOD\Desktop\HiH3\HiH.xml`
- Page Title: Hypertext hypermedia
- Navigation links: [Lecture](#) | [Laboratory](#) | [Project](#) | [Links](#)
- Section: **Lecture >**
- Text: Information about the lecture.
- Image: A portrait of a man in a suit and bow tie.
- List (highlighted with a red box):
  1. DTD
  2. HTML CSS
  3. Hypertext & hypermedia
  4. XML
  5. XML Schema
  6. XSLT
- Section: **Additional information about HTML and XML**
- List:
  - [HTML w3schools](#)
  - [XML w3schools](#)

**Visual Studio Code Editor:**

The editor shows the XSLT source code for `HiH.xslt`. The code is divided into two sections, with the top section highlighted by a red box.

**Top Section (Lines 20-41):**

```
</header>
<!-- menu for moving within a page -->
<xsl:call-template name="nav" />

<div id="content">
  <!-- a place for information about lecture, laboratory, project and links -->
  <h3 id="lecture">Lecture
  <!-- reference to a template that allows to display a picture -->
  <xsl:apply-templates select="course/information/media/image"/>
  </h3>
  <p>
    Information about the lecture.
  </p>
  <!-- information about lecture -->
  <xsl:apply-templates select="course/classes[@kind='lecture']/component" />
  <!-- reference to a template that allows to display information about laboratory and project -->

  <h3 id="links">Additional information about HTML and XML</h3>
  <ul>
    <xsl:apply-templates select="course/information/links/link" />
  </ul>
</div>
```

**Bottom Section (Lines 101-123):**

```
<xsl:value-of select="@source" />
</xsl:attribute>
<xsl:value-of select="." />
</a>
</li>
</xsl:if>
</xsl:template>


<xsl:template match="classes[@kind='lecture']/component">
  <xsl:for-each select="theme">
    <xsl:sort select="." order="ascending" />
    <xsl:value-of select="position()" />
    <xsl:text>. </xsl:text>
    <xsl:value-of select="." />
    <br />
  </xsl:for-each>
</xsl:template>

<!--
  <h3 id="lab">Laboratory</h3>
  <p>
    Information about the laboratory.
  </p>
-->
```

The status bar at the bottom indicates the current position: `Ln 103, Col 44`, `Tab Size: 4`, `UTF-8 with BOM`, `CRLF`, `XSL`, `Port: 5500`.

The screenshot displays a web browser window on the left and a Visual Studio Code editor on the right, illustrating the output and source code of an XSLT transformation.

**Web Browser Window:**

- Address bar: `C:\Users\FIPOD\Desktop\HiH3\HiH.xml`
- Page Title: Hypertext hypermedia
- Navigation links: [Lecture](#) | [Laboratory](#) | [Project](#) | [Links](#)
- Lecture >**  
Information about the lecture.  
  
1. DTD  
2. HTML CSS  
3. Hypertext & hypermedia  
4. XML  
5. XML Schema  
6. XSLT
- Laboratory**  
Information about the laboratory.  
1. HTML + CSS
  - structure of the page
  - links
  - forms
  - css
- 2. XML + XML Schema
  - correctly formed XML file
  - creating a hierarchy
  - declaring elements, attributes
  - defining types
  - validating XML file
- 3. XSLT
  - XML -> HTML transformation
  - XML -> XML transformation

**Visual Studio Code Editor:**

The editor shows the XSLT source code for `HiH.xslt`. The top pane displays the transformation result, and the bottom pane shows the XSLT code.

**XSLT Code (Top Pane):**

```
<!-- information about the lecture -->
<xsl:apply-templates select="course/classes[@kind='lecture']/component" />

<!-- reference to a template that allows to display information about laboratory and project -->
<h3>
  Laboratory
</h3>
<p>
  Information about the laboratory.
</p>
<xsl:apply-templates select="course/classes[@kind='laboratory']/component" />
```

**XSLT Code (Bottom Pane):**

```
<xsl:template match="component">
  <xsl:choose>
    <xsl:when test="@id='1'">
      1. <xsl:value-of select="topic" />
      <xsl:apply-templates select="theme" />
    </xsl:when>
    <xsl:when test="@id='2'">
      2. <xsl:value-of select="topic" />
      <xsl:apply-templates select="theme" />
    </xsl:when>
    <xsl:otherwise>
      3. <xsl:value-of select="topic" />
      <xsl:apply-templates select="theme" />
    </xsl:otherwise>
  </xsl:choose>
</xsl:template>

<xsl:template match="component/theme">
  <ul>
    <li>
      <xsl:value-of select="theme" />
      <xsl:value-of select="." />
    </li>
  </ul>
</xsl:template>
```

The screenshot displays a web browser window on the left and a Visual Studio Code editor on the right, illustrating an XSLT transformation project.

**Browser Window (Left):**

- Address bar: `CaUsers\FIPODI\Desktop\HIH3\HIH.xml`
- Page Title: `Hypertext hypermedia`
- Table of Contents:
  1. DTD
  2. HTML CSS
  3. Hypertext & hypermedia
  4. XML
  5. XML Schema
  6. XSLT
- Laboratory**

Information about the laboratory.

  - 1. HTML + CSS
    - structure of the page
    - links
    - forms
    - css
  - 2. XML + XML Schema
    - correctly formed XML file
    - creating a hierarchy
    - declaring elements, attributes
    - defining types
    - validating XML file
  - 3. XSLT
    - XML -> HTML transformation
    - XML -> XML transformation
- Project**

Information about the project.

Title of the project	Score
HTML, XML, XSLT	20
XML, XML Schema, DTD	20

Additional information about HTML and XML

**Visual Studio Code (Right):**

- File Explorer: `HIH3 > HIH.xslt`
- Editor: `HIH.xslt - Untitled (Workspace) - Visual Studio Code`
- Code Snippets:
 

```

38 <h3 id="lab">
39     Laboratory
40 </h3>
41 <p>
42     Information about the laboratory.
43 </p>
44 <xsl:apply-templates select="course/classes[@kind='laboratory']/component" />
45 <xsl:apply-templates select="course/classes[@kind='project']" />
46
47 <h3 id="links">Additional information about HTML and XML</h3>
48 <ul>
49     <xsl:apply-templates select="course/information/links/link" />
50 </ul>
      
```
- Code Snippets (Expanded):
 

```

145 <xsl:template match="component/theme">
146     <ul>
147         <li>
148             <xsl:value-of select="theme" />
149             <xsl:value-of select="." />
150         </li>
151     </ul>
152 </xsl:template>
153
154 <xsl:template match="classes[@kind='project']">
155     <h3 id="project">Project</h3>
156     <p>
157         Information about the project.
158     </p>
159     <table style="width:50%; border: 5px solid red">
160         <tr>
161             <th>Title of the project</th>
162             <th>Score</th>
163         </tr>
164         <xsl:apply-templates select="component" />
165     </table>
166 </xsl:template>
167 <xsl:template match="classes[@kind='project']/component">
168     <tr>
169         <td><xsl:value-of select="topic" /></td>
170         <td><xsl:value-of select="score" /></td>
171     </tr>
172 </xsl:template>
173 </xsl:stylesheet>
174
      
```



# HTML5 Canvas WebGL

## Punkt 18

The screenshot displays a web browser window on the left and the Visual Studio Code editor on the right. The browser shows a search results page for 'Wyszukaj...' with a link to 's://www.w3schools.com/html/https://www.w3schools.com/xml/default.aspxhttps://enauzanie.pg.edu.pl/moodle/'. The Visual Studio Code editor has two open files: 'HiH2.xslt' and 'HiH.xml'. The 'HiH2.xslt' file contains XSLT code for transforming XML data. A red box highlights the 'author' template, which creates a 'student' element with 'name' and 'surname' attributes. The 'HiH.xml' file contains the input XML, with a red box highlighting the 'href' attribute in the 'xml:stylesheet' declaration. A white box highlights the 'author' element in the XML output. The status bar at the bottom shows 'Ln 9, Col 27', 'Tab Size: 4', 'UTF-8 with BOM', 'CRLF', 'XML', 'Port: 5500', and the system clock '17:05 23.11.2020'.

```
<?xml version="1.0" encoding="UTF-8"?>
<xsl:stylesheet xmlns:xsl="http://www.w3.org/1999/XSL/Transform" version="1.0">
  <xsl:output method="xml" />
  <xsl:template match="/">
    <xsl:element name="webpages">
      <xsl:apply-templates select="//link"/>
    </xsl:element>
  </xsl:template>
  <xsl:template match="link">
    <xsl:element name="address">
      <xsl:value-of select="@source" />
    </xsl:element>
  </xsl:template>
  <xsl:template match="author">
    <xsl:element name="student">
      <xsl:attribute name="name">
        <xsl:value-of select="name" />
      </xsl:attribute>
      <xsl:attribute name="surname">
        <xsl:value-of select="surname" />
      </xsl:attribute>
    </xsl:element>
  </xsl:template>
</xsl:stylesheet>
```

```
<?xml version="1.0" encoding="utf-8"?>
<?xml-stylesheet type="text/xsl" href="HiH2.xslt"?>
<course>
  <author>
    [redacted]
  </author>
  <classes kind="lecture">
    <component id="1">
      <topic>Hypertext and hypermedia</topic>
      <theme>Hypertext & hypermedia</theme>
      <theme>HTML CSS</theme>
      <theme>XML</theme>
      <theme>XML Schema</theme>
      <theme>DTD</theme>
      <theme>XSLT</theme>
      <score>30</score>
    </component>
```

