

# Appendix B: Introduction to HTML and CSS

This appendix uses the ModelibraWicketCss project from the Modelibra repository at JavaForge to explain the basics of HTML [HTML] and CSS (Cascading Style Sheets) [CSS] in a step by step manner. The project has multiple spirals that are located in the `spirals` directory of the Eclipse project. The first spiral is represented by the `page00.html` file. In Eclipse, you can open the same file twice (select the file, pop up the menu and use the *Open With* menu item), once with the *Web Browser* choice and again with the *Text Editor* selection.

## page00.html: Text

### Web Browser

I am an associate professor in the Business School at the Laval University (Université Laval), Quebec, Canada. I received a B.Sc. in informatics from the University of Sarajevo in 1976, an M.Sc. in computer science from the University of Maryland in 1982, and a Ph.D. in management information systems from the University of Minnesota in 1986. My main research interests are in the spiral development of dynamic web applications using Open Source Software (OSS), Java, databases, CSS, XML, design patterns and frameworks. My teaching interests are in presenting spirals of my research using pedagogical patterns.

**Figure A.00.** Text

### Text Editor

```
<html>

<head>
    <title>Page 00</title>
</head>

<body>

I am an associate professor in the Business School at the Laval University (Université Laval), Quebec,
Canada. I received a B.Sc. in informatics from the University of Sarajevo in 1976, an M.Sc. in computer
science from the University of Maryland in 1982, and a Ph.D. in management information systems from the
University of Minnesota in 1986. My main research interests are in the spiral development of dynamic web
applications using Open Source Software (OSS), Java, databases, CSS, XML, design patterns and frameworks.
My teaching interests are in presenting spirals of my research using pedagogical patterns.

</body>

</html>
```

### Explanation

An HTML declaration of a web page begins with the `<html>` tag and ends with the `</html>` tag. An

HTML element, here named `html`, consists of the begin tag and the end tag. This tag matching is important if we want to promote the HTML code into the XHTML [XHTML] code. Also, in XHTML element names are written in lower case letters.

The `head` element serves the purpose of informing a web browser about properties of the web page. The `body` element represents the page content that will appear in the web browser.

## page01.html: Paragraphs

### Web Browser

I am an associate professor in the Business School at the Laval University (Université Laval), Quebec, Canada. I received a B.Sc. in informatics from the University of Sarajevo in 1976, an M.Sc. in computer science from the University of Maryland in 1982, and a Ph.D. in management information systems from the University of Minnesota in 1986. My main research interests are in the spiral development of dynamic web applications using Open Source Software (OSS), Java, databases, CSS, XML, design patterns and frameworks. My teaching interests are in presenting spirals of my research using pedagogical patterns. I am also a full ("redovni") professor at the Department of Computer Science, Faculty of Electrical Engineering, University of Sarajevo, Bosnia and Herzegovina. This is my return to the roots where it all started.

**Figure A.01.** Two paragraphs as one

### Text Editor

```
<html>

<head>
    <title>Page 01</title>
</head>

<body>
```

I am an associate professor in the Business School at the Laval University (Université Laval), Quebec, Canada. I received a B.Sc. in informatics from the University of Sarajevo in 1976, an M.Sc. in computer science from the University of Maryland in 1982, and a Ph.D. in management information systems from the University of Minnesota in 1986. My main research interests are in the spiral development of dynamic web applications using Open Source Software (OSS), Java, databases, CSS, XML, design patterns and frameworks. My teaching interests are in presenting spirals of my research using pedagogical patterns.

I am also a full ("redovni") professor at the Department of Computer Science, Faculty of Electrical Engineering, University of Sarajevo, Bosnia and Herzegovina. This is my return to the roots where it all started.

```
</body>
```

```
</html>
```

## Explanation

Although the HTML code has two paragraphs they are collapsed into one paragraph when they are displayed. In order to format the text, we need to use the formatting tags.

## page02.html: Two paragraphs

### Web Browser

I am an associate professor in the Business School at the Laval University (Université Laval), Quebec, Canada. I received a B.Sc. in informatics from the University of Sarajevo in 1976, an M.Sc. in computer science from the University of Maryland in 1982, and a Ph.D. in management information systems from the University of Minnesota in 1986. My main research interests are in the spiral development of dynamic web applications using Open Source Software (OSS), Java, databases, CSS, XML, design patterns and frameworks. My teaching interests are in presenting spirals of my research using pedagogical patterns.

I am also a full ("redovni") professor at the Department of Computer Science, Faculty of Electrical Engineering, University of Sarajevo, Bosnia and Herzegovina. This is my return to the roots where it all started.

**Figure A.02.** Two paragraphs

### Text Editor

```
<html>

<head>
    <title>Page 02</title>
</head>

<body>

<p>
I am an associate professor in the Business School at the Laval University (Université Laval), Quebec,
Canada. I received a B.Sc. in informatics from the University of Sarajevo in 1976, an M.Sc. in computer
science from the University of Maryland in 1982, and a Ph.D. in management information systems from the
University of Minnesota in 1986. My main research interests are in the spiral development of dynamic web
applications using Open Source Software (OSS), Java, databases, CSS, XML, design patterns and frameworks.
My teaching interests are in presenting spirals of my research using pedagogical patterns.
</p>
<p>
I am also a full ("redovni") professor at the Department of Computer Science, Faculty of Electrical
Engineering, University of Sarajevo, Bosnia and Herzegovina. This is my return to the roots where it all
started.
</p>

</body>

</html>
```

## Explanation

The `p` HTML element is used to border a paragraph.

## page03.html: Page sections

### Web Browser



**Figure A.03.** Three main sections

### Text Editor

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">

<html>

<head>
    <title>Page 03</title>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
    <link rel="stylesheet" type="text/css" media="screen" href="../css/app.css" />
    <link rel="stylesheet" type="text/css" media="screen" href="../css/layout.css" />
    <link rel="stylesheet" type="text/css" media="screen"
        href="../css/layout2c.css" />
    <link rel="stylesheet" type="text/css" media="screen" href="../css/page.css" />
    <link rel="stylesheet" type="text/css" media="screen"
        href="../css/section.css" />
</head>
```

```

<body>

<div class="north">
    <span class="app-title">Dzenan Ridjanovic</span>
</div>

<div class="content">
    <div class="section-title">
        Section Title
    </div>
    <div>
        <p>
            I am an associate professor in the Business School at the Laval University, Quebec,
            Canada. I received a B.Sc. in informatics from the University of Sarajevo in 1976, an M.Sc. in computer
            science from the University of Maryland in 1982, and a Ph.D. in management information systems from the
            University of Minnesota in 1986. My main research interests are in the spiral development of dynamic web
            applications using Open Source Software (OSS), Java, databases, CSS, XML, design patterns and frameworks.
            My teaching interests are in presenting spirals of my research using pedagogical patterns.
        </p>
        <p>
            I am also a full ("redovni") professor at the Department of Computer Science,
            Faculty of Electrical Engineering, University of Sarajevo, Bosnia and Herzegovina. This is my return to
            the roots where it all started.
        </p>
    </div>
</div>

<div class="south">
    &copy;DR
</div>

</body>

</html>

```

## CSS

```

/* app.css */

.app-title {
    font-family: arial, sans-serif;
    font-size: 36px;
    font-weight: bold;
    letter-spacing: 6px;
    color: #336799;
    padding: 12px 12px 6px 18px;
    background: #d7e9f7;
}

/* layout.css */

.north {
    color: #708491;
    padding: 6px;
    background: #d7e9f7;
}

```

```

    }

    .south {
        clear: both;
        font-family: arial, sans-serif;
        font-size: 10px;
        font-weight: bold;
        color: #ffffff0;
        background: #4b91d1;
        padding: 10px;
    }

/* layout2c.css */

    .content {
        float: left;
        width: 72%;
    }

/* page.css */

    body {
        font-family: verdana, arial, helvetica, sans-serif;
        font-size: 12px;
        background: #d7e9f7;

        width:900px;
        margin-left: auto;
        margin-right: auto;
        padding:10px;
    }

    p {
        line-height: 1.5em;
        text-align: justify;
        margin-left: 2px;
        margin-right: 2px;
    }

```

## Explanation

The HTML code for the web page starts with the mandatory declaration for an XML document [XML]. Since XHTML is a class of XML documents, it is recommended to start a web page with that declaration. The second declaration is for the strict XHTML definition of the web page [DOCTYPE].

After the title element in the head element, the meta tag is used [Meta]. The meta information is used here to tell a web browser what "character set" to use.

The link elements reference CSS files where declarations are made how the page will look like. Only the CSS files used in this page are shown. Also, not all content from these files is presented in the CSS section above. Only declarations used in this web page are shown.

The CSS statement is made up of a selector and a list of property name & value pairs separated by a semi-

colon. The selector is either an HTML element name or a user defined class selector. The CSS property name and value are separated by a colon, and the list of pairs is surrounded by curly braces.

The body of the page is divided into sections. Each section is defined by the `div` element. If a `div` tag has the `class` attribute (nothing to do with the Java class concept), a value of the `class` attribute refers to the class selector in one of the linked CSS files, which determines how the content of this `div` element will be presented. A value of the `class` attribute must be in quotes to follow one of the XHTML syntax requirements. The web page is divided into the “north”, “content” and “south” sections. The “content” section has a title section and a text section, which does not have any attributes, with two paragraphs.

The `div` element includes a paragraph break. In addition, attributes of the `div` tag describe the style of the section embedded in the begin and end `div` tags. The style of the “north” section of the page is defined by the `north` class selector in the `layout.css` file. A user defined selector starts with a dot.

```
.north {
    color: #708491;
    padding: 6px;
    background: #d7e9f7;
}
```

There are three CSS properties in the `north` class selector: `color`, `padding` and `background`. The title of the page is located within the `span` tags. The style of the title is determined by the `class` attribute of the `span` element with the “app-title” value. The class selector with the same name can be found in the `app.css` file.

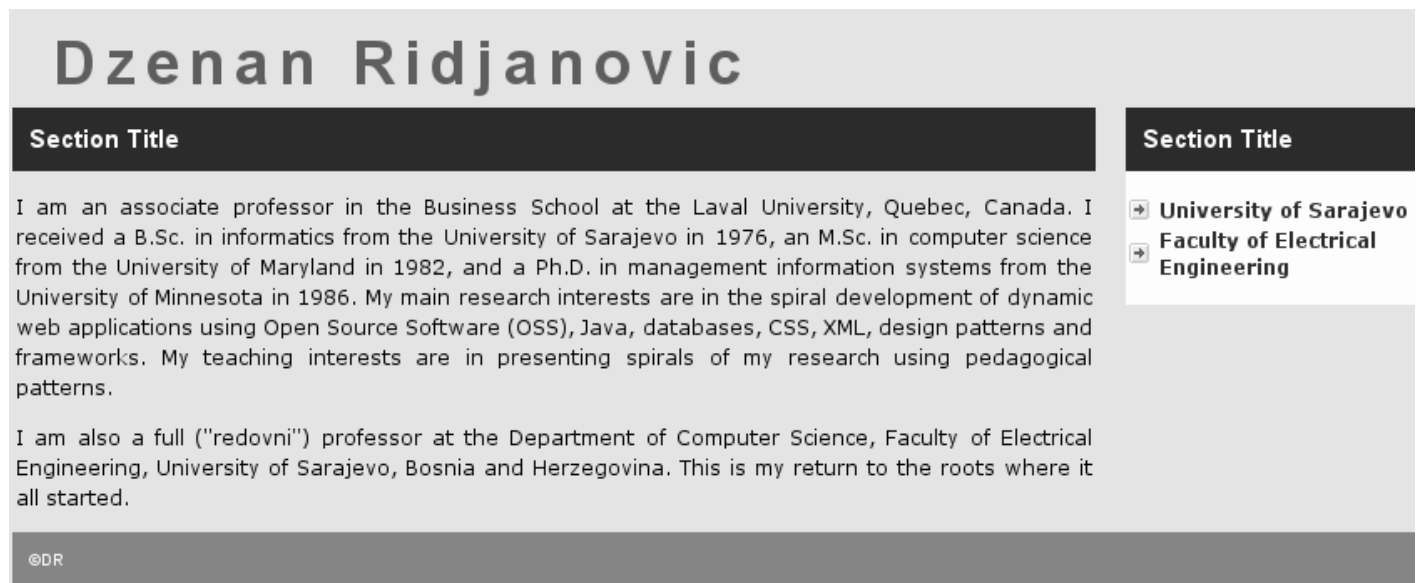
```
.app-title {
    font-family: arial, sans-serif;
    font-size: 36px;
    font-weight: bold;
    letter-spacing: 6px;
    color: #336799;
    padding: 12px 12px 6px 18px;
    background: #d7e9f7;
}
```

The primary difference between the `span` and `div` elements is that the `span` element does not do any formatting of its own. The `div` element includes a paragraph break, while the `span` element defines a style of its content by its attributes.

If there is no a dot in front of the selector, the selector defines a style for the HTML element. For example, a paragraph style is determined by the `p` selector in the `page.css` file.

```
p {
    line-height: 1.5em;
    text-align: justify;
    margin-left: 2px;
    margin-right: 2px;
}
```

## page04.html: Page layout



**Figure A.04.** Two columns page

## Text Editor

```
<head>
  <title>Page 04</title>
  <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/app.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/layout.css" />
  <link rel="stylesheet" type="text/css" media="screen"
    href="../css/layout2c.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/link.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/list.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/page.css" />
  <link rel="stylesheet" type="text/css" media="screen"
    href="../css/section.css" />
</head>

<body>

<div class="north">
  <span class="app-title">Dzenan Ridjanovic</span>
</div>

<div class="content">
  <div class="section-title">
    Section Title
  </div>
  <div>
    <p>
      I am an associate professor in the Business School at the Laval
    ...
    </p>
    <p>
      I am also a full ("redovni") professor at the Department of Computer
    ...
    </p>
```



```

        </div>
</div>

<div class="sidebar">
    <div class="section-title">
        Section Title
    </div>

    <div class="link">
        <ul>
            <li>
                <a href="http://www.unsa.ba/">
                    University of Sarajevo
                </a>
            </li>
            <li>
                <a href="http://www.etf.unsa.ba/">
                    Faculty of Electrical Engineering
                </a>
            </li>
        </ul>
    </div>
</div>

<div class="south">
    &copy;DR
</div>

</body>

```

## CSS

```

/* layout2c.css */

.content {
    float: left;
    width: 72%;
}

.sidebar {
    float: right;
    width: 26%;
    background: #ffffff0;
}

/* list.css */

ul {
    list-style: none;
    padding: 2px;
    text-align: left;
}

li {
    padding-top: 1px;
}

```

```

        padding-bottom: 1px;
        padding-left: 18px;
    }

    .link li {
        background: url(img/arrow-right.gif) no-repeat 0 50%;
        padding-top: 1px;
        padding-bottom: 1px;
        padding-left: 18px;
    }
}

/* link.css */

a:link {
    text-decoration: none;
    font-weight: bold;
    color: #003366;
}

a:visited {
    text-decoration: none;
    font-weight: bold;
    color: #c50000;
}

a:hover {
    text-decoration: none;
    color: #ffffff;
    background: #336799;
}

a:active {
    text-decoration: none;
    color: #ff9911;
}

```

## Explanation

The middle part of the web page is divided in two columns. On the left there is the “content” section and on the right the “sidebar” section. It is the `float` property that determines the position of the section with its container. If there is no enough space on a line for the floating element, it will move down to the next line. The `width` property defines the size of the two columns of the page. The width is a % of the container's width.

The side bar has two web links (the `a` element) that are line items (the `li` element) of the unordered list (the `ul` element). It is the `class` attribute with the “link” value that determines the right arrow image in front of the web link. The `link` class selector is located in the `list.css` file. The styles of both the `ul` and `li` elements are defined as HTML element selectors in the same file.

The `a` element is defined in the `link.css` file by the so called pseudo classes. A web link that is unvisited, visited, when you mouse over it (hovered), or active (selected) has a different style.

# page05.html: Image, menu

## Web Browser

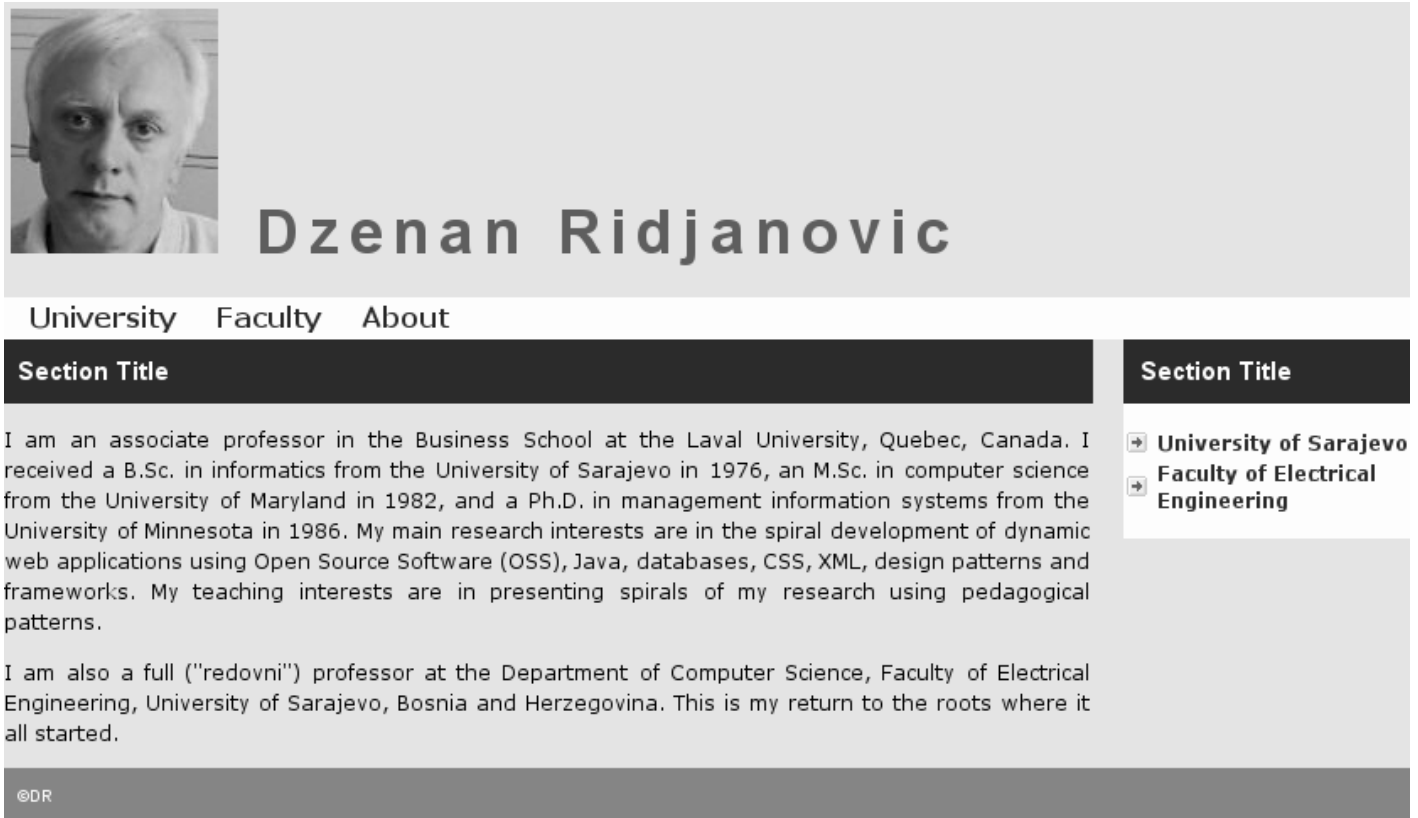


Figure A.05. Image and menu

## Text Editor

```
<head>
  <title>Page 05</title>
  <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/app.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/layout.css" />
  <link rel="stylesheet" type="text/css" media="screen"
    href="../css/layout2c.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/link.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/list.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/menu.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/page.css" />
  <link rel="stylesheet" type="text/css" media="screen"
    href="../css/section.css" />
</head>

<body>

<div class="north">
  
  <span class="app-title">Dzenan Ridjanovic</span>
</div>
```

```

<div class="menu">
  <ul>
    <li>
      <a href="http://www.ulaval.ca/">
        University
      </a>
      <a href="http://www.fsa.ulaval.ca/">
        Faculty
      </a>
      <a href="http://drdb.fsa.ulaval.ca/dr/doc/drcv.pdf">
        About
      </a>
    </li>
  </ul>
</div>

<div class="content">
  <div class="section-title">
    Section Title
  </div>
  <div>
    ...
  </div>
</div>

<div class="sidebar">
  <div class="section-title">
    Section Title
  </div>

  <div class="link">
    ...
  </div>
</div>

<div class="south">
  &copy;DR
</div>

</body>

```

## CSS

```
/* menu.css */
```

```

.menu {
  margin: 0px;
  padding: 0px 0px 9px 3px;
  background: #ffffff0;
}

.menu li {
  margin: 0px;
  padding: 0px;
}

```

```

        display: inline;
        list-style-type: none;
    }

    .menu a {
        float: left;
        line-height: 14px;
        font-weight: bold;
        font-size: 16px;
        padding: 2px 12px 6px 12px;
        text-decoration: none;
        color: #003366;
    }

    .menu a:visited {
        color: #c50000;
    }

    .menu a:hover {
        color: #ffffff;
        background: #336799;
    }

```

## Explanation

There is an image in the “north” section of the page. The image is the `dr.jpg` file that comes from the `img` directory of the Eclipse project, different from the `img` subdirectory of the `css` directory. The `img` subdirectory of the `css` directory is used only for images referenced in CSS selectors.

The “menu” class attribute references the `menu` class selector in the `menu.css` file. This class selector defines the styles of the `li` list element and the `a` link element including the `visited` and `hover` states. These styles are valid only if the corresponding HTML elements are used in a block (for example a `div` element) that has the `class` attribute with the “menu” value.

## page06.html: Box, target

### Web Browser



# Dzenan Ridjanovic

[University](#) [Faculty](#) [About](#)

## Section Title

I am an associate professor in the Business School at the Laval University, Quebec, Canada. I received a B.Sc. in informatics from the University of Sarajevo in 1976, an M.Sc. in computer science from the University of Maryland in 1982, and a Ph.D. in management information systems from the University of Minnesota in 1986. My main research interests are in the spiral development of dynamic web applications using Open Source Software (OSS), Java, databases, CSS, XML, design patterns and frameworks. My teaching interests are in presenting spirals of my research using pedagogical patterns.

I am also a full ("redovni") professor at the Department of Computer Science, Faculty of Electrical Engineering, University of Sarajevo, Bosnia and Herzegovina. This is my return to the roots where it all started.

## Box Subtitle

Text.

- Item 1
- Item 2

©DR | XHTML | CSS | 508

## Section Title

- University of Sarajevo
- Faculty of Electrical Engineering

**Figure A.06. Box section and target list**

## Text Editor

```
<head>
  <title>Page 06</title>
  <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/app.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/box.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/layout.css" />
  <link rel="stylesheet" type="text/css" media="screen"
    href="../css/layout2c.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/link.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/list.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/menu.css" />
  <link rel="stylesheet" type="text/css" media="screen" href="../css/page.css" />
  <link rel="stylesheet" type="text/css" media="screen"
    href="../css/section.css" />
</head>

<body>

<div class="north">
...
```

```

</div>

<div class="menu">
...
</div>

<div class="content">
    <div class="section-title">
        Section Title
    </div>
    <div>
...
    </div>

    <div class="box-subtitle">
        Box Subtitle
    </div>
    <p>
        Text.
    </p>
    <div class="target">
        <ul>
            <li>
                Item 1
            </li>
            <li>
                Item 2
            </li>
        </ul>
    </div>
</div>

<div class="sidebar">
...
</div>

<div class="south">
    &copy;DR |
    <a href="http://validator.w3.org/" title="Validate a page">XHTML</a> |
    <a href="http://jigsaw.w3.org/css-validator/" title="Validate CSS">CSS</a> |
    <a href="http://bobby.watchfire.com/">508</a>
</div>

</body>

```

## CSS

```
/* box.css */
```

```

.box-title {
    font-family: arial, sans-serif;
    font-size: 14px;
    font-weight: bold;
    color: #ffffff0;
    padding: 8px;
}

```

```

        background: #336799;
    }

    .box-subtitle {
        font-family: arial, sans-serif;
        font-size: 13px;
        font-weight: bold;
        color: #000000;
        padding: 6px;
        background: #4b91d1;
    }

/* list.css */

ul {
    list-style: none;
    padding: 2px;
    text-align: left;
}

li {
    padding-top: 1px;
    padding-bottom: 1px;
    padding-left: 18px;
}

.link li {
    background: url(img/arrow-right.gif) no-repeat 0 50%;
    padding-top: 1px;
    padding-bottom: 1px;
    padding-left: 18px;
}

.target li {
    background: url(img/target.gif) no-repeat 0 50%;
    padding-top: 1px;
    padding-bottom: 1px;
    padding-left: 18px;
}

```

## Explanation

There is a new subsection in the “content” section. The title style of the subsection is defined by the “box-subtitle” class attribute. The attribute refers to the `box-subtitle` class selector in the `box.css` file. You may replace the “box-subtitle” attribute by the “box-title” attribute to see a difference in style.

The list of items, which appears after the paragraph text in the box section, is styled with the “target” class attribute. This attribute refers to the `target` class selector in the `list.css` file. In addition to the `li` selector, there is the `target` class selector that brings the `target.gif` image in front of the list item. The image is located in the `img` subdirectory of the `css` directory of the project.

**There are three new links in the “south” section of the page. They may be used to validate if the page supports well XHTML, CSS, quality, accessibility and privacy standards.**



# page07.html: Message, definition

## Web Browser

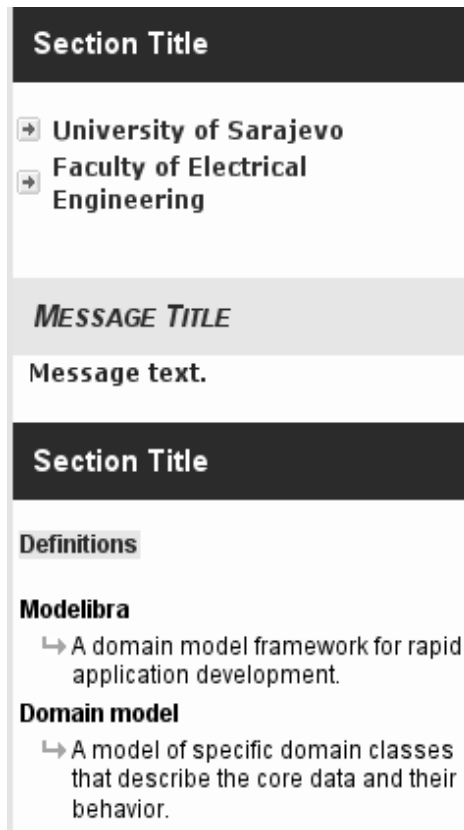


Figure A.07. Sidebar with the message section and the definition section

## Text Editor

```
<div class="sidebar">
  <div class="section-title">
    Section Title
  </div>

  <div class="link">
...
  </div>

  <br/>
  <div class="msg-title">
    Message Title
  </div>
  <div class="msg-text">
    Message text.
  </div>
  <br/>

  <div class="section-title">
    Section Title
```

```

</div>
<div>
    <p>
        <span class="marker">Definitions</span>
    </p>
</div>
<div class="def">
    <dl>
        <dt>
            Modelibra
        </dt>
        <dd>
            A domain model framework for rapid application development.
        </dd>
        <dt>
            Domain model
        </dt>
        <dd>
            A model of specific domain classes that describe the core data
            and their behavior.
        </dd>
    </dl>
</div>
<br/>
</div>

```

## CSS

```

/* msg.css */

.msg-title {
    font-family: arial, sans-serif;
    font-size: 15px;
    font-weight: bold;
    font-style: italic;
    font-variant: small-caps;
    color: #003366;
    padding: 10px;
    background: #ffe4b5;
}

.msg-text {
    color: #a30000;
    background: #ffff00;
    font-weight: bold;
    text-align: left;
    line-height: 1.4em;
    padding: 0px 4px 0px 8px;
}

/* marker.css */

.marker {
    font-family: arial, sans-serif;

```

```

        font-size: 12px;
        font-weight: bold;
        color: #003366;
        background: #ffe4b5;
        padding-left: 1px;
        padding-right: 1px;
        margin-left: 1px;
        margin-right: 1px;
    }

/* def.css */

    dl {
        list-style: none;
        padding: 0px;
        font-family: arial, sans-serif;
        text-align: left;
    }

    dt {
        font-weight: bold;
        padding: 4px;
    }

    dd {
        line-height: 1.2em;
        margin-left: 15px;
        padding-left: 15px;
    }

    .def dd {
        background: #fffff0 url(img/arrow-down-right.gif) no-repeat 0 2px;
    }

```

## Explanation

The sidebar has two new sections: the message section and the section with definitions. The message title is styled with the “msg-title” class attribute. The message text appears as defined by the “msg-text” class attribute. Both attributes are defined in the `msg.css` file by their corresponding class selectors.

A definition list contains definition terms and definition descriptions. The definition description is styled with the “def” class attribute. The class attribute references the `def` class selector in the `def.css` file. There are two declarations for the definition description: the `dd` selector and the `def` class selector. The `dd` selector defines the definition description globally, while the `def` class selector defines the definition description locally, when the `dd` element is used in the `div` element that has the `def` class attribute.

A marker is used just in front of the definition list to indicate that the definition list will follow. The “marker” class attribute of the `span` element refers to the `marker` class selector in the `marker.css` file.

**page08.html: Table, quote**

Web Browser

Table Title		
Column 1 Title	Column 2 Title	Column 3 Title
Cell 1, 1	Cell 1, 2	Cell 1, 3
Cell 2, 1	Cell 2, 2	Cell 2, 3

Figure A.08.a. Table

Section Title

Quote

"One lesson I learned as a graduate student is the best way to finish the dissertation is to do something every day that gets you closer to being done."

—Ronald T. Azuma

Figure A.08.b. Quote

Text Editor

```
<div class="content">
...
  <table>
    <caption>Table Title</caption>
    <tr>
      <th>Column 1 Title</th>
      <th>Column 2 Title</th>
      <th>Column 3 Title</th>
    </tr>
    <tr>
      <td>Cell 1, 1</td>
      <td>Cell 1, 2</td>
      <td>Cell 1, 3</td>
    </tr>
    <tr>
      <td>Cell 2, 1</td>
      <td>Cell 2, 2</td>
      <td>Cell 2, 3</td>
    </tr>
  </table>
</div>
```

```

<div class="sidebar">
...
    <div class="section-title">
        Section Title
    </div>
    <p class="center">
        <span class="button">Quote</span>
    </p>
    <blockquote>
        <div class="quote">
            "One lesson I learned as a graduate student is the best way to
            finish the dissertation is to do something every day that gets
            you closer to being done."
        </div>
        <div class="author">&mdash;Ronald T. Azuma</div>
    </blockquote>
...
</div>

```

## CSS

```
/* table.css */
```

```

table {
    border-top: 1px solid #999;
    border-left: 1px solid #999;
    border-collapse: collapse;
    margin-left: auto;
    margin-right: auto;
}

caption {
    font-family: arial, sans-serif;
    font-size: 14px;
    font-weight: bold;
    color: #003366;
    padding: 6px;
    margin-left: auto;
    margin-right: auto;
}

th, td {
    padding: 4px;
    border-right: 1px solid #999;
    border-bottom: 1px solid #999;
}

th {
    font-family: Verdana, sans-serif;
    font-weight: bold;
    color: #ffffff;
    background: #336799;
}

td {

```

```

        background: #ffe4b5;
    }

/* cite.css */

    cite {
        font-style: italic;
        font-weight: bold;
        color: #ff9911;
        background: #fffff0;
    }

    blockquote {
        text-align: center;
        margin: 0;
        padding: 0;
        font-family: georgia, serif;
        font-size: 150%;
        letter-spacing: -1px;
        line-height: 1em;
        color: #555555;
        background: #fffff0;
    }

    .quote {
        margin: 0;
        padding: 20px 20px 10px 20px;
    }

    .author {
        margin: 0;
        padding: 0 0 10px 0;
        color: #999999;
        font-size: 60%;
    }

/* link.css */

...

    .button {
        padding: 1px;
        background: #ffcc99;
        border-right: 1px solid #999;
        border-bottom: 1px solid #999;
        border-style: outset;
        border-color: #d7b9c9;
        font-weight: bold;
        text-align: center;
    }

    .button img {
        border: 0;
    }

/* section.css */

```

...

```
.center {  
    text-align: center;  
}
```

## Explanation

The content section has a table with a title, two rows and three columns. Table HTML elements are `table`, `caption` (title), `tr` (table row), `th` (table header) and `td` (table data or cell). In the `table.css` file there are selectors for table elements. Since there are no class selectors for a table, there are no class attributes in a table HTML definition.

The `cite.css` file is a mixture of selectors for HTML elements (`cite` and `blockquote`; only the `blockquote` selector is used) and class selectors for element attributes (`quote` and `author`).

The “button” class attribute is used to make a quote title look like a button. The button selector is located in the `link.css` file. Also, the title is centered by using the “center” class attribute that references the center class selector from the `section.css` file.

## page09.html: Slide

### Web Browser

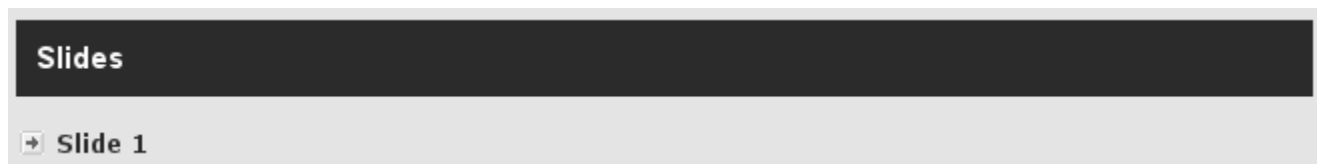


Figure A.09.a. Slide link in page09.html

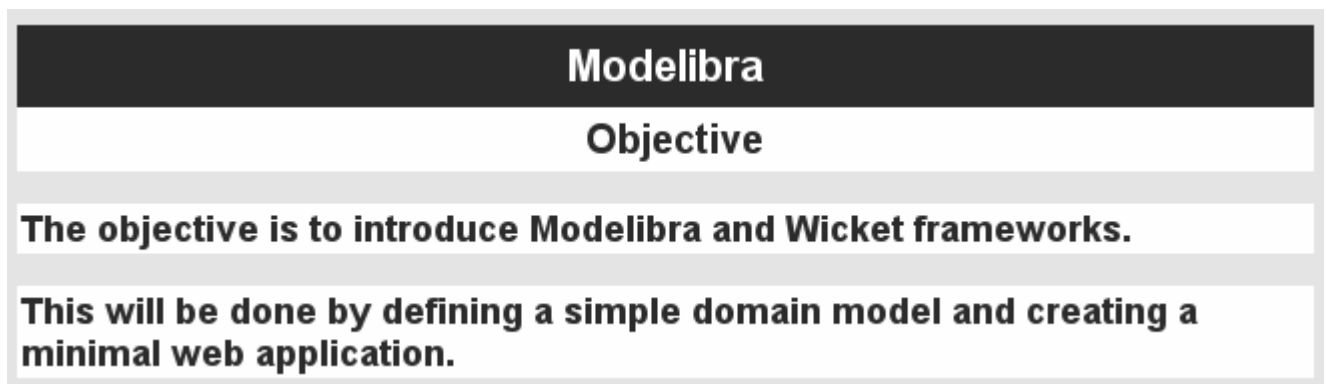


Figure A.09.b. Slide in slide01.html

### Text Editor

...

```
<div class="section-title">
```

```

        Slides
    </div>
    <div class="link">
        <ul>
            <li>
                <a href="slide/slide01.html">
                    Slide 1
                </a>
            </li>
        </ul>
    </div>
    ...

```

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">

<html>

<head>
    <title>Slide 01</title>
    <meta http-equiv="Content-Type" content="text/html; charset=iso-8859-1" />
    <link rel="stylesheet" type="text/css" media="screen"
        href="../../css/layout2c.css" />
    <link rel="stylesheet" type="text/css" media="screen"
        href="../../css/page.css" />
    <link rel="stylesheet" type="text/css" media="screen"
        href="../../css/slide.css" />
</head>

<body>

<div class="content">
    <div class="slide-title">
        Modelibra
    </div>
    <div class="slide-subtitle">
        Objective
    </div>

    <br/>
    <div class="slide-point">
        The objective is to introduce Modelibra and Wicket frameworks.
    </div>

    <br/>
    <div class="slide-point">
        This will be done by defining a simple domain model and creating a minimal
        web application.
    </div>
</div>

</body>

</html>

```



## CSS

```
/* slide.css */

.slide-title {
    font-family: arial, sans-serif;
    font-size: 22px;
    font-weight: bold;
    text-align: center;
    color: #ffffff;
    padding: 8px;
    background: #003366;
}

.slide-subtitle {
    font-family: arial, sans-serif;
    font-size: 20px;
    font-weight: bold;
    text-align: center;
    color: #003366;
    padding: 4px;
    padding-left: 14px;
    background: white;
}

.slide-point {
    font-family: arial, sans-serif;
    font-size: 18px;
    font-weight: bold;
    color: #003366;
    padding: 2px;
    background: white;
}
```

## Explanation

At the end of the “content” section in `page09.html` there is a slide section with a link to the `slide01.html` page. The slide is presented according to CSS declarations in the `slide.css` file. There are three class selectors for a slide title, a slide subtitle and a slide point. The “content” section of the `slide01.html` page has four subsections: for the slide title, the slide subtitle and two points. The corresponding class attributes are used to style the title, the subtitle and the points.

## Other Spirals

There are more spirals in the `ModelibraWicketCss` project. You can study them on your own. The last spiral shows a web page with various features found in professionally looking web sites. You are encouraged to play with the content of CSS files to find a look that you like the most and that you may decide to use in your web pages. Feel free to add new CSS files and improve the existing ones. I would appreciate if you could send me your new look in a zipped Eclipse project. The best of those I intend to add to the `Modelibra` repository.

The CSS design used in Modelibra has been mostly influenced by the work of Dan Cederholm [SimpleBits]. Other HTML and CSS sites that I have found useful are: [Guide], [Standards], [Style],

## Web Links

[CSS] Cascading Style Sheets

<http://www.w3schools.com/css/default.asp>

[DOCTYPE] Fix Your Site With the Right DOCTYPE!

<http://www.alistapart.com/stories/doctype/>

[Guide] Guide for the Unglued

<http://www.thenoodleincident.com/tutorials/css/index.html>

[HTML] HTML

<http://www.w3schools.com/html/>

[List] A List Apart

<http://www.alistapart.com/>

[Meta] How To Use HTML Meta Tags

<http://searchenginewatch.com/showPage.html?page=2167931>

[SimpleBits] SimpleBits

<http://www.simplebits.com/>

[Standards] Web Standards Project

<http://www.webstandards.org/>

[Style] HTML with Style

<http://www.webreference.com/html/>

[XHTML] XHTML Tutorial

<http://www.w3schools.com/xhtml/>

[XML] XML Tutorial

<http://www.w3schools.com/xml/default.asp>

[Zen] Zen Garden

<http://www.csszengarden.com/>