

Chapter 4 - Introduction to XHTML: Part 1

1

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2

```
1 <?xml version = "1.0"?>
2 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
3   "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
4
5 <!-- Fig. 4.1: main.html -->
6 <!-- Our first Web page -->
7
8 <html xmlns = "http://www.w3.org/1999/xhtml">
9   <head>
10    <title>Internet and WWW How to Program - Welcome</title>
11  </head>
12
13  <body>
14    <p>Welcome to XHTML!</p>
15  </body>
16 </html>
```

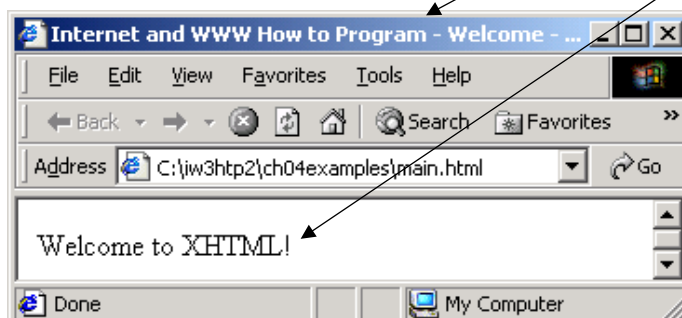


Outline

Main.html

The text between the **title** tags appears as the title of the web page.

Elements between the **body** tags of the html document appear in the body of the web page



Program Output

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4.5 W3C XHTML Validation Service

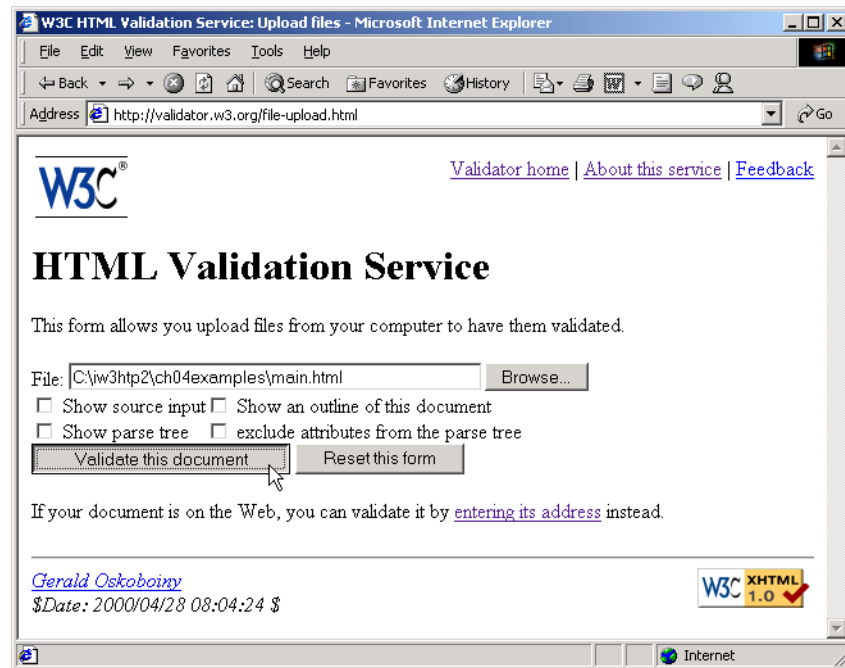


Fig. 4.2 Validating an XHTML document. (Courtesy of World Wide Web Consortium (W3C).)



4.5 W3C XHTML Validation Service

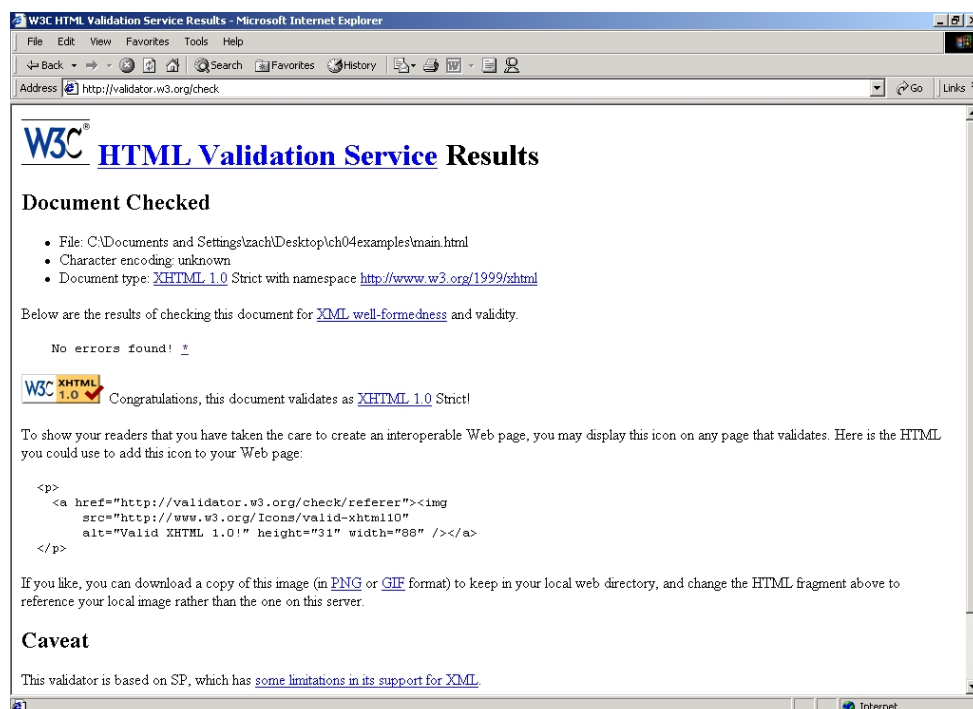


Fig. 4.3 XHTML validation results. (Courtesy of World Wide Web Consortium (W3C).)





Header.html

```

1  <?xml version = "1.0"?>
2  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
3    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
4
5  <!-- Fig. 4.4: header.html -->
6  <!-- XHTML headers -->
7
8  <html xmlns = "http://www.w3.org/1999/xhtml">
9    <head>
10     <title>Internet and WWW How to Program - Headers</title>
11    </head>
12
13    <body>
14
15     <h1>Level 1 Header</h1>
16     <h2>Level 2 header</h2>
17     <h3>Level 3 header</h3>
18     <h4>Level 4 header</h4>
19     <h5>Level 5 header</h5>
20     <h6>Level 6 header</h6>
21
22    </body>
23  </html>

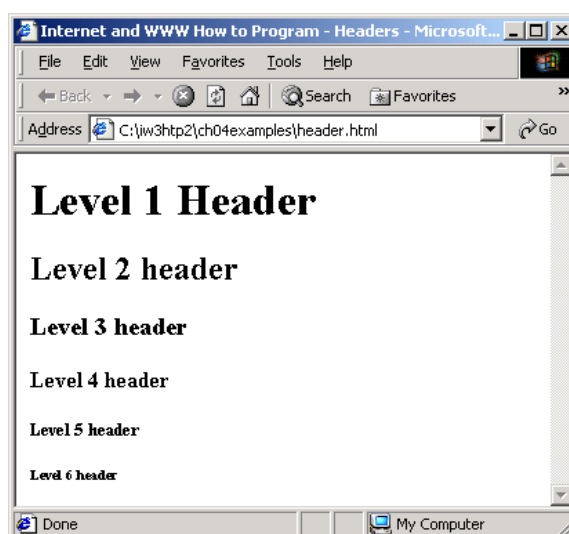
```

The font size of the text between tags decreases as the header level increases.

Every XHTML document is required to have opening and closing **html** tags.



Program Output



Select a header based on the amount of emphasis you would like to give that text.



Links.html

```

1  <?xml version = "1.0"?>
2  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
3    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
4
5  <!-- Fig. 4.5: links.html      -->
6  <!-- Introduction to hyperlinks -->
7
8  <html xmlns = "http://www.w3.org/1999/xhtml">
9    <head>
10     <title>Internet and WWW How to Program - Links</title>
11    </head>
12
13    <body>
14
15     <h1>Here are my favorite sites</h1>
16
17     <p><strong>Click on a name to go to that page.</strong></p>
18
19     <p><a href = "http://www.deitel.com">Deitel</a></p>
20
21     <p><a href = "http://www.prenhall.com">Prentice Hall</a></p>
22
23     <p><a href = "http://www.yahoo.com">Yahoo!</a></p>
24
25     <p><a href = "http://www.usatoday.com">USA Today</a></p>
26
27    </body>
28  </html>

```

Text between **strong** tags will appear bold.

Linking is accomplished in XHTML with the anchor (**a**) element.

The text between the **a** tags is the anchor for the link.

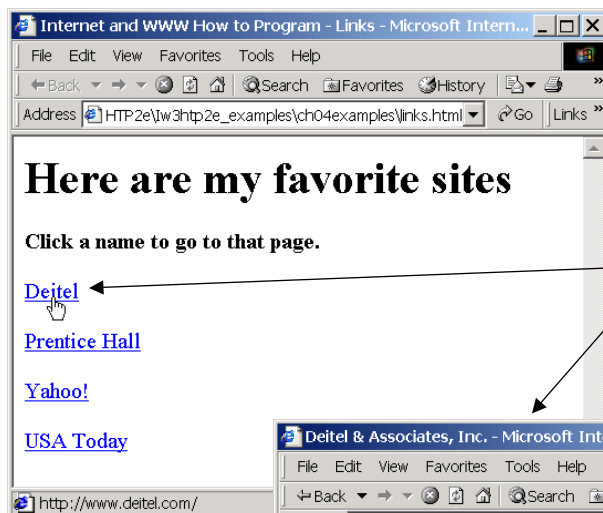
The anchor links to the page that's value is given by the **href** attribute.

Elements placed between paragraph tags will be set apart from other elements on the page with a vertical line before and after it.

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Program Output



Clicking on the "Deitel" link will open up the Deitel homepage in a new browser window.



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```

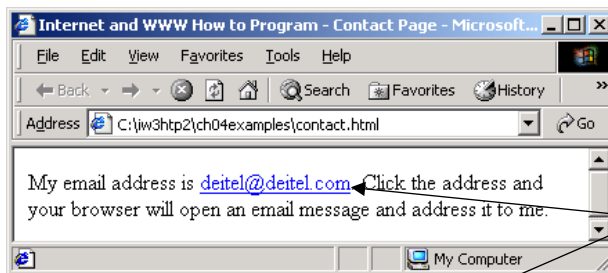
1  <?xml version = "1.0"?>
2  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
3    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
4
5  <!-- Fig. 4.6: contact.html -->
6  <!-- Adding email hyperlinks -->
7
8  <html xmlns = "http://www.w3.org/1999/xhtml">
9    <head>
10     <title>Internet and WWW How to Program - Contact Page
11    </title>
12  </head>
13
14  <body>
15
16     <p>My email address is
17     <a href = "mailto:deitel@deitel.com"> deitel@deitel.com
18     </a>. Click the address and your browser will open an
19     email message and address it to me.</p>
20
21  </body>
22 </html>

```

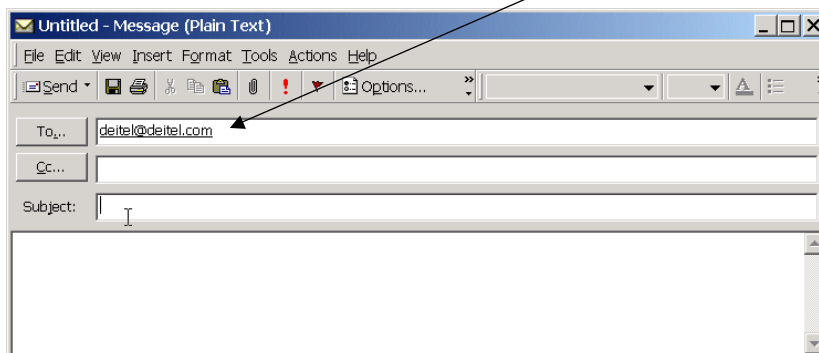
To create an email link include
“mailto:” before the email
address in the href attribute.



Program Output



When a user clicks on an email link,
an email message addressed to the
value of the link will open up.





```

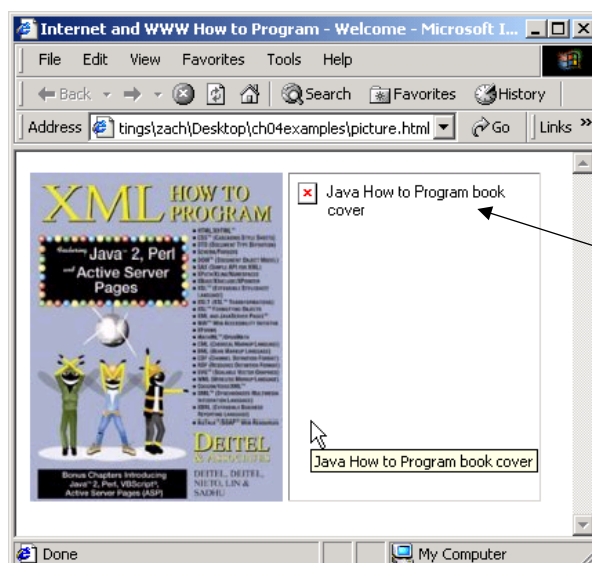
1  <?xml version = "1.0"?>
2  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
3    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
4
5  <!-- Fig. 4.7: picture.html -->
6  <!-- Adding images with XHTML -->
7
8  <html xmlns = "http://www.w3.org/1999/xhtml">
9    <head>
10     <title>Internet and WWW How to Program - Welcome</title>
11    </head>
12
13    <body>
14
15     <p><img src = "xmlhttp.jpg" height = "238" width = "183"
16       alt = "XML How to Program book cover" />
17     <img src = "jhttp.jpg" height = "238" width = "183"
18       alt = "Java How to Program book cover" /></p>
19    </body>
20  </html>

```

The value of the **src** attribute of the image element is the location of the image file.

The value of the **alt** attribute gives a description of the image. This description is displayed if the image cannot be displayed.

The **height** and **width** attributes of the image element give the height and width of the image.



The second image could not be displayed properly, so the value of its **alt** attribute is displayed instead.



```

1  <?xml version = "1.0"?>
2  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
3    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
4
5  <!-- Fig. 4.8: nav.html          -->
6  <!-- Using images as link anchors -->
7
8  <html xmlns = "http://www.w3.org/1999/xhtml">
9    <head>
10     <title>Internet and WWW How to Program - Navigation Bar
11    </title>
12    </head>
13
14    <body>
15
16     <p>
17       <a href = "links.html">
18         <img src = "buttons/links.jpg" width = "65"
19           height = "50" alt = "Links Page" /></a><br />
20
21       <a href = "list.html">
22         <img src = "buttons/list.jpg" width = "65"
23           height = "50" alt = "List Example Page" /></a><br />
24
25       <a href = "contact.html">
26         <img src = "buttons/contact.jpg" width = "65"
27           height = "50" alt = "Contact Page" /></a><br />
28
29       <a href = "header.html">
30         <img src = "buttons/header.jpg" width = "65"
31           height = "50" alt = "Header Page" /></a><br />
32
33       <a href = "table.html">
34         <img src = "buttons/table.jpg" width = "65"
35           height = "50" alt = "Table Page" /></a><br />

```

Placing an image element between anchor tags, creates an image that is an anchor for a link.

A line break will render an empty line on a web page.

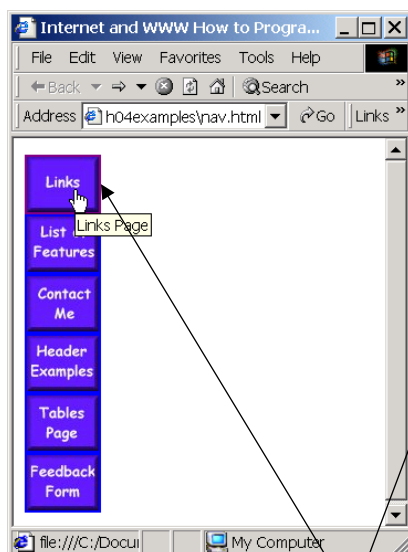
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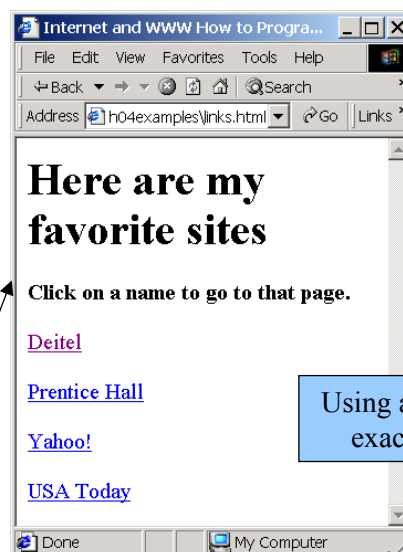
```

36
37     <a href = "form.html">
38       <img src = "buttons/form.jpg" width = "65"
39       height = "50" alt = "Feedback Form" /></a><br />
40   </p>
41
42   </body>
43 </html>

```



Clicking on the image entitled "links" brings the user to the page on the right.



Using an image as an anchor works exactly the same as using text.

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Program Output



```

1  <?xml version = "1.0"?>
2  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
3    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
4
5  <!-- Fig. 4.9: contact2.html      -->
6  <!-- Inserting special characters -->
7
8  <html xmlns = "http://www.w3.org/1999/xhtml">
9    <head>
10     <title>Internet and WWW How to Program - Contact Page
11    </title>
12    </head>
13
14    <body>
15
16     <!-- Special characters are entered -->
17     <!-- using the form &code;      -->
18     <p>My email address is
19     <a href = "mailto:deitel@deitel.com">deitel@deite
20     </a>. Click on the address and your browser will
21     automatically open an email message and address i
22     address.</p>
23
24     <hr /> <!-- Inserts a horizontal rule -->
25
26     <p>All information on this site is <strong>&copy;</strong>
27     Deitel <strong>&amp;</strong> Associates, Inc. 2002.</p>
28
29     <!-- Text can be struck out with a set of      -->
30     <!-- <del>...</del> tags, it can be set in subscript -->
31     <!-- with <sub>...</sub>, and it can be set into      -->
32     <!-- superscript with <sup>...</sup>                -->
33     <p><del>You may download 3.14 x 10<sup>2</sup></del>
34     characters worth of information from this site.</del>
35     Only <sub>one</sub> download per hour is permitted.</p>

```

The horizontal rule element renders a horizontal line on the web page.

Special characters are denoted with an ampersand (&) and an abbreviation for that character. In this case, the special characters are ampersand and copyright.

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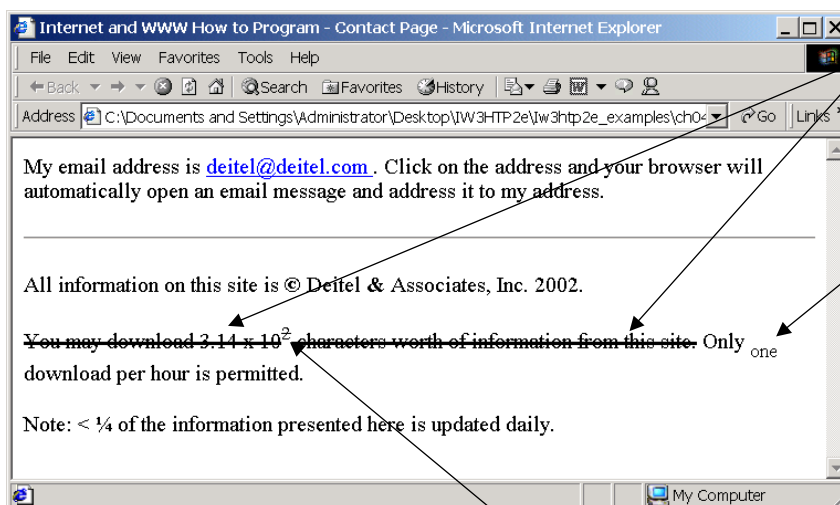


```

36
37     <p>Note: <strong>&lt; &frac14;</strong> of the information
38     presented here is updated daily.</p>
39
40   </body>
41 </html>

```

Program Output



Text placed between **del** tags is struck out..

Text placed between the **sub** tags is subscripted.

Text placed between the **sup** tags is superscripted.

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Links2.html

```

1  <?xml version = "1.0"?>
2  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Strict//EN"
3    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-strict.dtd">
4
5  <!-- Fig. 4.10: links2.html -->
6  <!-- Unordered list containing hyperlinks -->
7
8  <html xmlns = "http://www.w3.org/1999/xhtml">
9    <head>
10     <title>Internet and WWW How to Program - Links</title>
11    </head>
12
13    <body>
14
15     <h1>Here are my favorite sites</h1>
16
17     <p><strong>Click on a name to go to that page.</strong></p>
18
19     <ul>
20       <li><a href = "http://www.deitel.com">Deitel</a></li>
21
22       <li><a href = "http://www.prenhall.com">Prentice Hall
23         </a></li>
24
25       <li><a href = "http://www.yahoo.com">Yahoo!</a></li>
26
27       <li><a href = "http://www.usatoday.com">USA Today</a>
28         </li>
29     </ul>
30
31   </body>
32 </html>

```

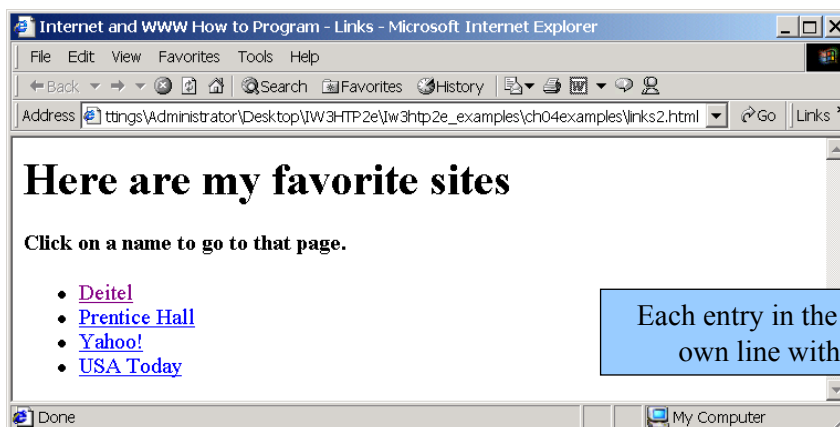
The entries in an unordered list must be included between the `` and `` tags.

An entry in the list must be placed between the `` and `` tags.

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Program Output



Each entry in the list is rendered on its own line with a bullet before it.

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```
1  <?xml version = "1.0"?>
2  <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN"
3    "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
4
5  <!-- Fig. 4.11: list.html -->
6  <!-- Advanced Lists: nested and ordered -->
7
8  <html xmlns = "http://www.w3.org/1999/xhtml">
9    <head>
10     <title>Internet and WWW How to Program - Lists</title>
11    </head>
12
13    <body>
14
15     <h1>The Best Features of the Internet</h1>
16
17     <ul>
18       <li>You can meet new people from countries around
19         the world.</li>
20       <li>You have access to new media as it becomes public:
21
22         <!-- This starts a nested list, which uses a -->
23         <!-- modified bullet. The list ends when you -->
24         <!-- close the <ul> tag -->
25         <ul>
26           <li>New games</li>
27           <li>New applications
28
29             <!-- Another nested list -->
30             <ol type = "I">
31               <li>For business</li>
32               <li>For pleasure</li>
33             </ol> <!-- Ends the double nested list -->
34           </li>
35
```

By inserting a list as an entry in another list, lists can be nested.

Entries for an ordered list must be placed between the and tags.

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```
36     <li>Around the clock news</li>
37     <li>Search engines</li>
38     <li>Shopping</li>
39     <li>Programming
40
41     <ol type = "a">
42       <li>XML</li>
43       <li>Java</li>
44       <li>XHTML</li>
45       <li>Scripts</li>
46       <li>New languages</li>
47     </ol>
48
49     </li>
50
51     </ul> <!-- Ends the first level nested list -->
52   </li>
53
54   <li>Links</li>
55   <li>Keeping in touch with old friends</li>
56   <li>It is the technology of the future!</li>
57
58 </ul> <!-- Ends the primary unordered list -->
59
60 <h1>My 3 Favorite <em>CEOs</em></h1>
61
62 <!-- ol elements without a type attribute -->
63 <!-- have a numeric sequence type (i.e., 1, 2, ...) -->
64 <ol>
65   <li>Harvey Deitel</li>
66   <li>Bill Gates</li>
67   <li>Michael Dell</li>
68 </ol>
```

The **type** attribute of the ordered list element allows you to select a sequence type to order the list.

Text placed between the **em** tags will be italicized.

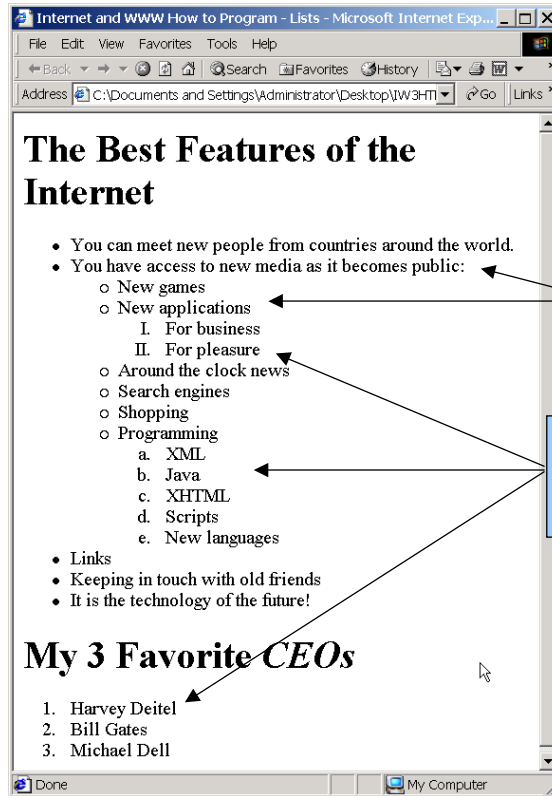
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```
69
70     </body>
71 </html>
```



List.html

Program Output



Nested lists are indented underneath the main list.

Some sequence types available to order lists are roman numerals, letters and numbers.