

# Introduction to HTML

MSc. Trần Thị Bích Hạnh



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TRƯỜNG ĐẠI HỌC KHOA HỌC TỰ NHIÊN



# Quiz

HTML

- join.quizizz.com
- Game Code:
- Name: Student ID

- Introduction to HTML
- Syntax
- HTML Elements
  - Heading, paragraph, line break, horizontal line
  - Ordered list / Unordered list
  - Image
  - Anchor
  - Table



- **HTML**
  - HyperText Markup Language
  - Describes the structure of Web pages using markup
- A web page contains:
  - ***HTML – Structure:*** text, image, sound...
  - ***CSS – Styles:*** layout, color, background...
  - ***Javascript – Functionality, Effect***



# HTML Documents

```
<!DOCTYPE html>
```

Defines this document  
to be HTML5

```
<html>
```

```
<head>
```

```
    <title>Page Title </title>
```

meta info about  
the document

```
</head>
```

```
<body>
```

```
    <h1>My First Heading</h1>
```

the root  
element of an  
HTML page

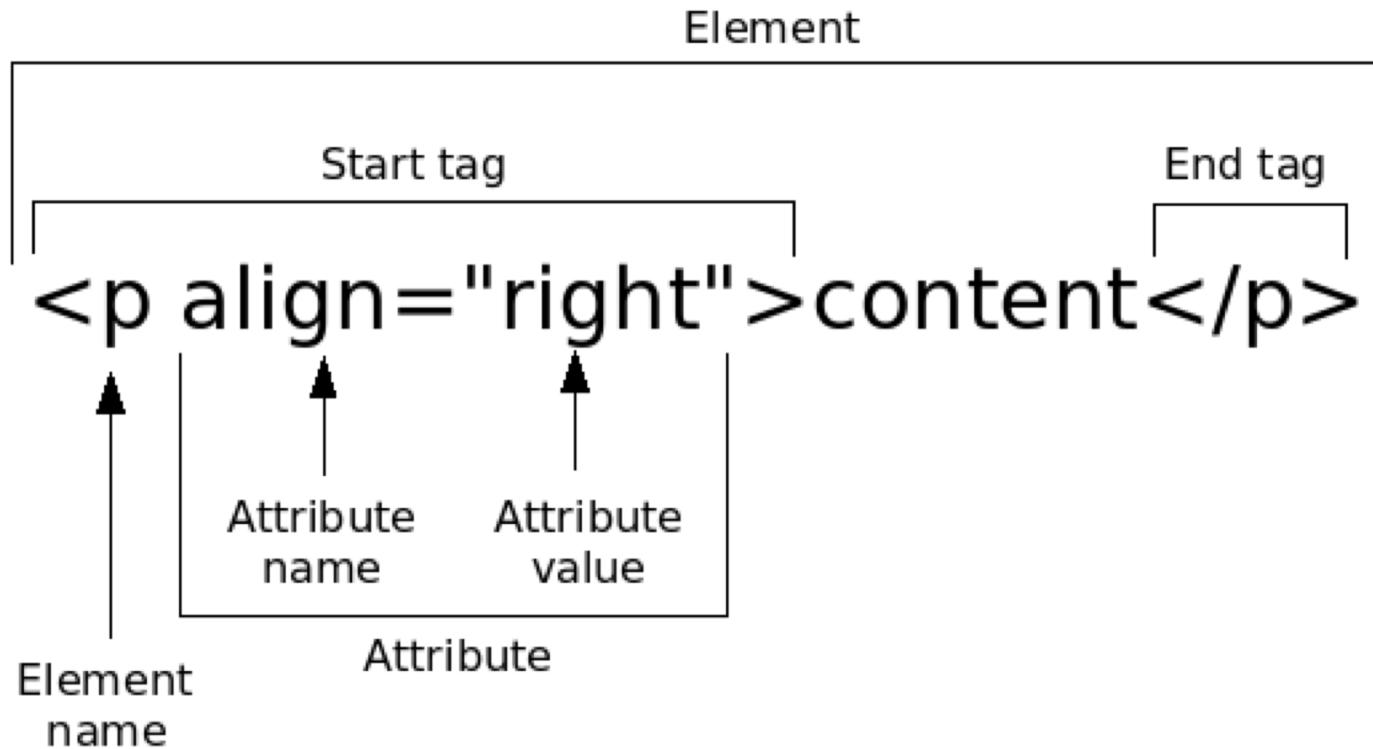
```
    <p>My first paragraph.</p>
```

the visible  
page content

```
</body>
```

```
</html>
```

# Syntax



**HTML elements can be nested  
(elements can contain elements).**



# Markup Validation

HTML

[Invalid] Markup Validation of <http://www.microsoft.com/en/us/default.aspx> – W3C Markup Validator

http://validator.w3.org/check?verbose=1

Disable Cookies CSS Forms Images Information Miscellaneous Outline Resize Tools

**W3C® Markup Validation Service**  
Check the markup (HTML, XHTML, ...) of Web documents

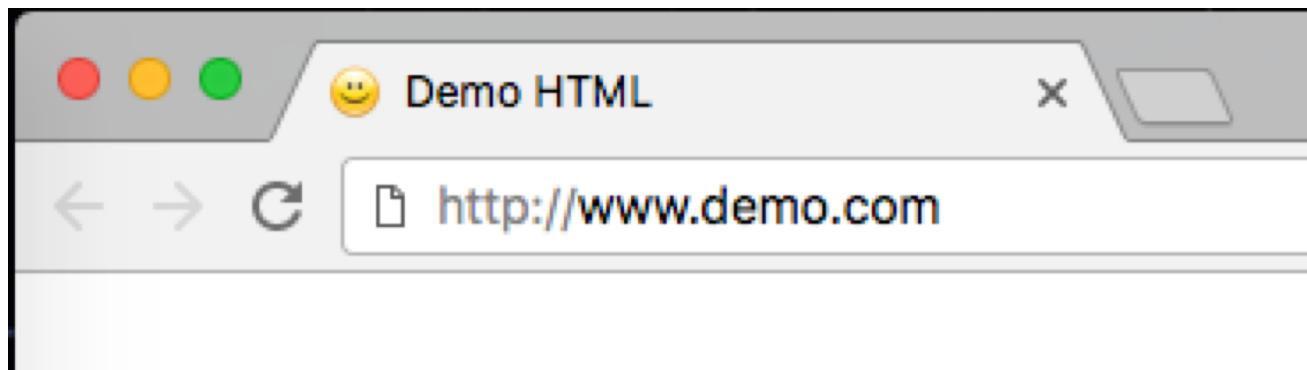
Jump To: Potential Issues Validation Output

**Errors found while checking this document as XHTML 1.0 Transitional!**

<b>Result:</b>	176 Errors, 36 warning(s)
<b>Address :</b>	<input type="text" value="http://www.microsoft.com/en/us/default.aspx"/>
<b>Modified:</b>	(undefined)
<b>Server:</b>	Microsoft-IIS/7.5
<b>Size:</b>	93194
<b>Content-Type:</b>	text/html
<b>Encoding :</b>	utf-8
<b>Doctype :</b>	XHTML 1.0 Transitional
<b>Root Element:</b>	html
<b>Root Namespace:</b>	<a href="http://www.w3.org/1999/xhtml">http://www.w3.org/1999/xhtml</a>

# Head Element

```
<head>
  <meta charset="UTF-8">
  <title>Demo HTML</title>
  <link rel="shortcut icon" type="image/icon" href="images/favicon.ico">
  <link rel="stylesheet" type="text/css" href="styles.css">
</head>
```



## □ Block Elements

- Heading: `<h1>`, `<h2>`, `<h3>`, `<h4>`, `<h5>`, `<h6>`
- Paragraph: `<p>`
- List Item: `<li>`
- Horizontal Rule: `<hr/>`

## □ Inline Elements

- Formatting: `<em>`, `<i>`, `<b>`, `<font>`
- Hyperlink: `<a>`
- Line Break: `<br />`



# Special Entities

## □ How to show following characters?

- <, >, &, “
- @ © ®
- ...



# Special Entities

Result	Description	Entity Name	Entity Number
"	quotation mark	&quot;	&#34;
&	ampersand	&amp;	&#38;
<	less-than	&lt;	&#60;
>	greater-than	&gt;	&#62;
Khoản trăng	non-breaking space	&ampnbsp	&#160;

`<fit@hcmus> "FIT@HCMUS"`

`&lt;fit@hcmus&gt;&nbsp;&nbsp;&nbsp;&nbsp; &quot;FIT@HCMUS&quot;`

[http://www.w3schools.com/html/html\\_entities.asp](http://www.w3schools.com/html/html_entities.asp)

# List Elements

List Types	Element	List item
Ordered list	<ol>	<li>
Unordered list	<ul>	<li>

```
<ol>
    <li>apples</li>
    <li>bananas</li>
    <li>lemons</li>
</ol>
```

1. apples
2. bananas
3. lemons

```
<ul type="disc">
    <li>apples</li>
    <li>bananas</li>
    <li>lemons</li>
</ul>
```

- apples
- bananas
- lemons

# Images <img />

## □ ****

- **src**: specifies the URL of the image
- **alt** : provides an alternate text for an image

Correct URL



Incorrect URL

Chrome



Firefox



``

## □ Syntax:

```
<a href="URL" target='.....'> Linked content </a>
```

## □ target attribute

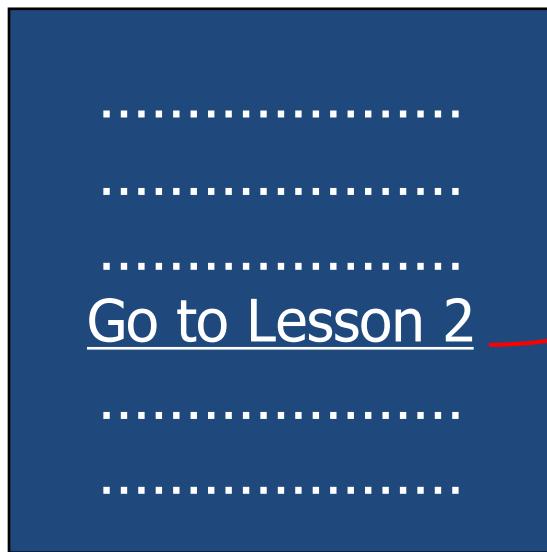
- \_blank: opens the linked document in a new window or tab
- \_parent: opens the linked document in the parent frame
- \_self: opens the linked document in the same window/tab as it was clicked (as default)
- \_top: opens the linked document in the full body of the window
- framename: opens the linked document in the named frame

```
<html>
  <body>
    <a href="http://www.yahoo.com">www.yahoo.com</a>
  </body>
</html>
```



# External Link

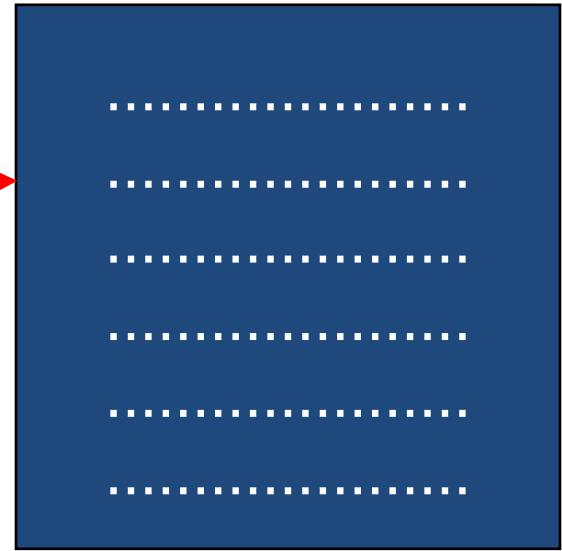
```
<a href="lesson2.htm">Go to Lesson  
2</a>
```



Current document

lesson1.htm

Click

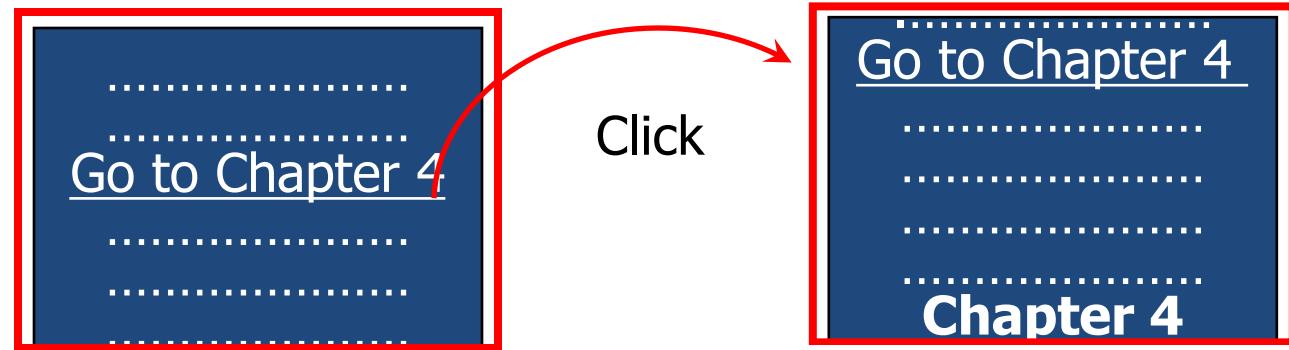


Linked document

lesson2.htm

# Internal Link

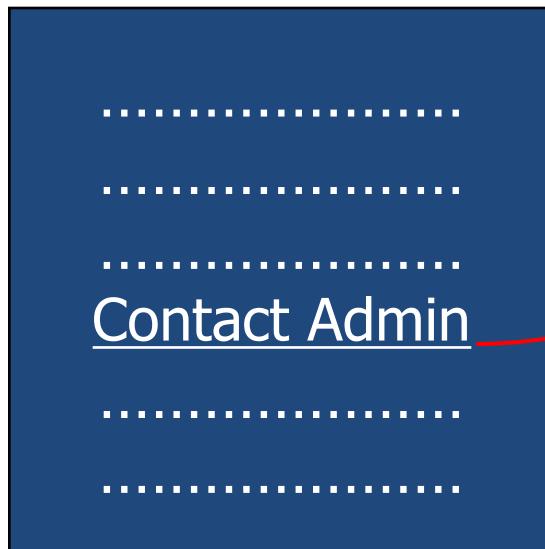
```
<a href="#c4">Go to Chapter 4 </a>  
<h2 id="c4">Chapter 4</h2>
```



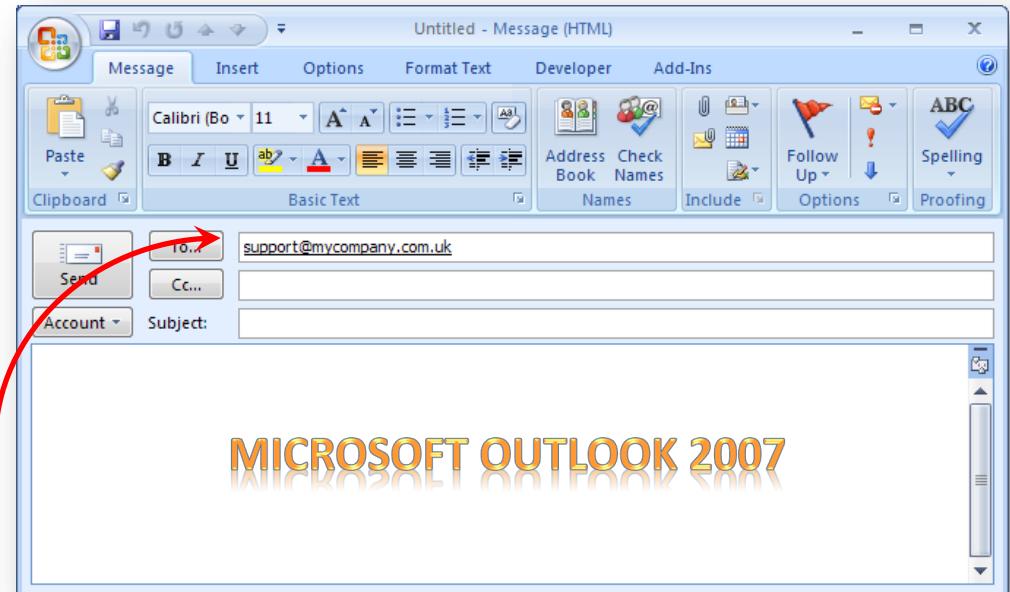


# Email Link

HTML



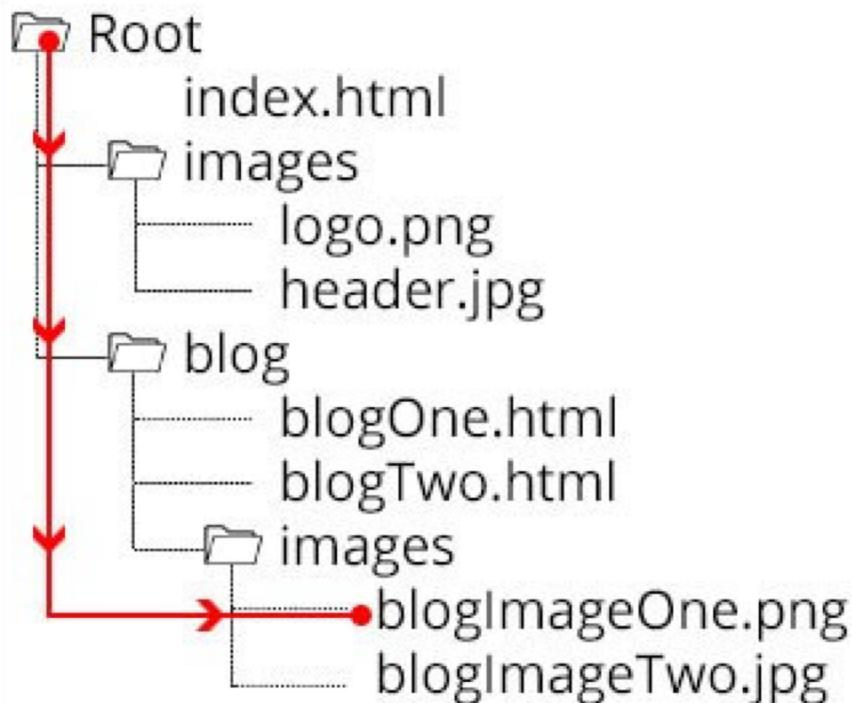
Click



```
<a href="mailto:emailAddress">Contact Admin</a>
```

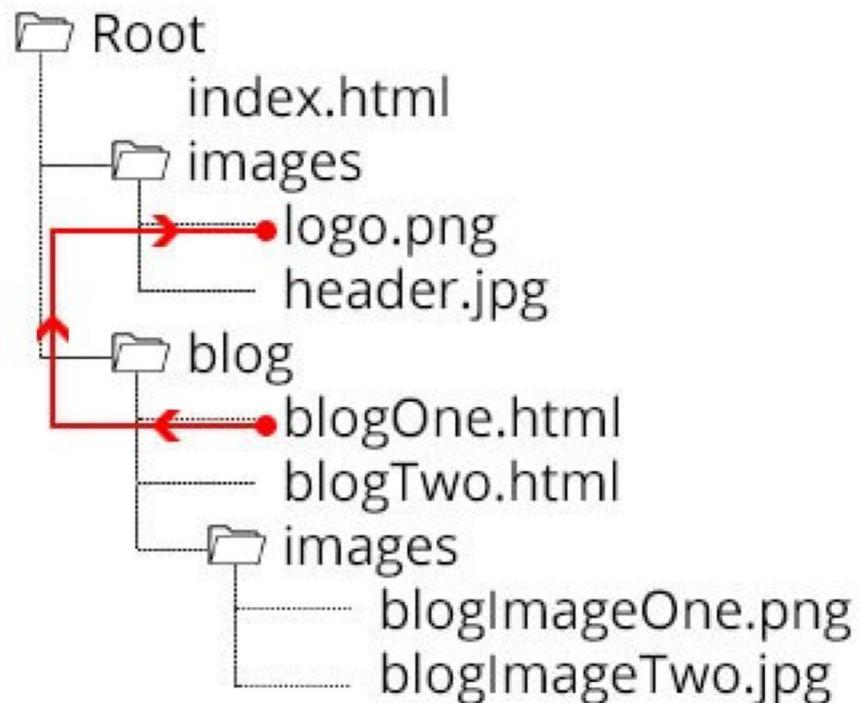
# Absolute vs. Relative URL

## Absolute



<http://www.MySite.com/blog/images/blogImageOne.png>

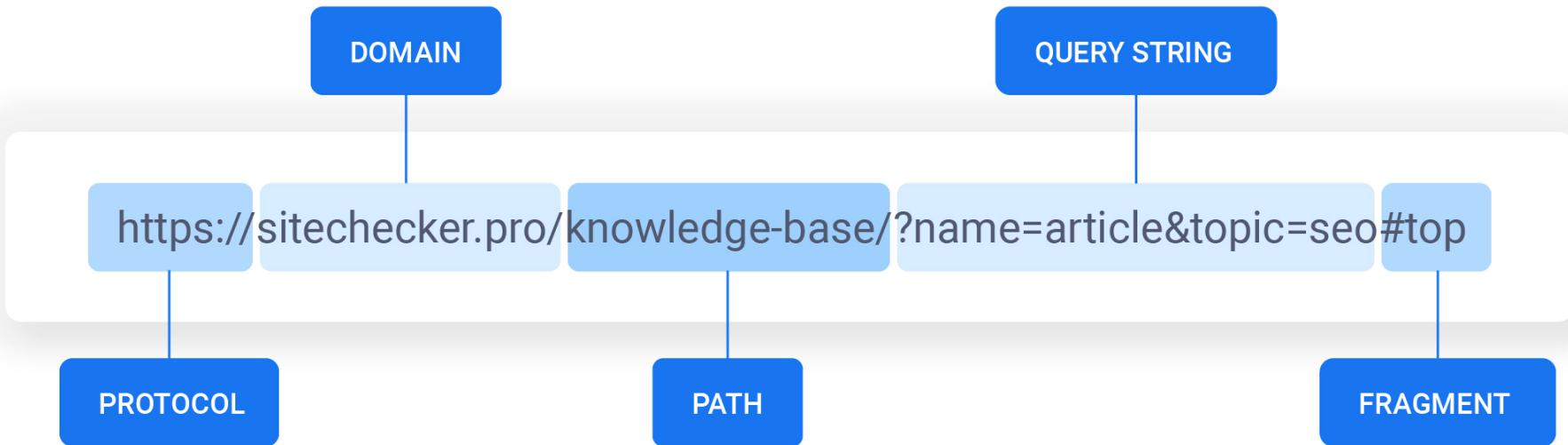
## Relative



[..../images/logo.png](#)

# Absolute URL

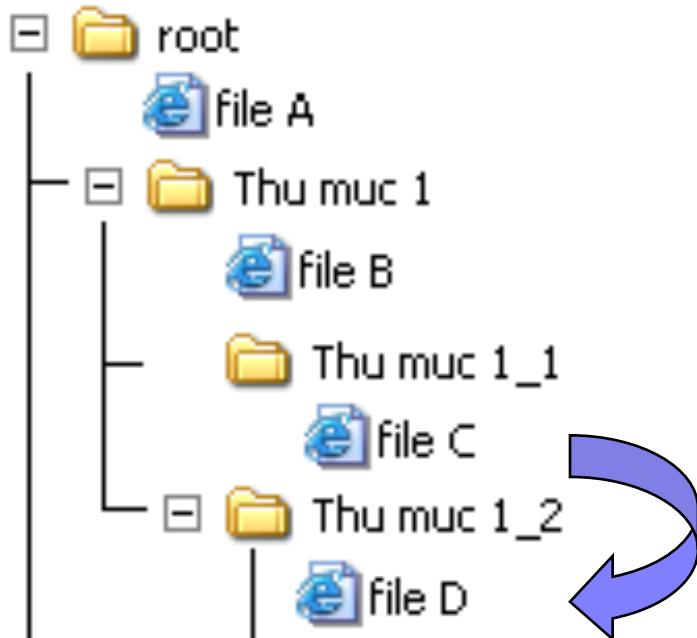
- Specifies the exact location of the resource on the internet



# Relative URL

- A relative URL points to a file/directory in relation to present file directory

	Description
/	Go to root directory of the website
./	Go to present file directory (as default)
../	One step back from the present file directory



**Ex: Create a link in file C to file D:**

**<a href="URL">Link to file D</a>**

**URL = ../Thu muc 1\_2/file D.htm**

# Table

Element	Description
<table>	Create a table
<tr>	Create a table row. A child element of <table>
<th>	Create a table header. A child element of <tr>
<td>	Create a table data container. A child element of <tr>

## HTML Tables

Apples	44%
Bananas	23%
Oranges	13%
Other	10%



```
1 <html>
2 <body>
3
4     <table>
5         <tr>
6             <th>Fruit</th>
7             <th>Percent</th>
8         </tr>
9         <tr>
10            <td>Apples</td>
11            <td>44%</td>
12        </tr>
13        <tr>
14            <td>Bananas</td>
15            <td>23%</td>
16        </tr>
17        <tr>
18            <td>Oranges</td>
19            <td>13%</td>
20        </tr>
21        <tr>
22            <td>Other</td>
23            <td>10%</td>
24        </tr>
25    </table>
26
27 </body>
28 </html>
```

A screenshot of Mozilla Firefox version 3.5.1. The title bar says "Mozilla Firefox". The address bar shows "file:///HTML Tables". The page content displays a table with two columns: "Fruit" and "Percent".

Fruit	Percent
Apples	44%
Bananas	23%
Oranges	13%
Other	10%

A screenshot of Mozilla Firefox version 3.5.1. The title bar says "Mozilla Firefox". The address bar shows "file:///HTML Tables". The page content displays a table with two columns: "Fruit" and "Percent", enclosed in a border.

Fruit	Percent
Apples	44%
Bananas	23%
Oranges	13%
Other	10%

# Table Attributes

Attribute	Description
<b>colspan</b>	Make a cell span more than one column
<b>rowspan</b>	Make a cell span more than one row

```
<table border="1">
  <tr>
    <th>Name</th>
    <th colspan="2">Telephone</th>
  </tr>
  <tr>
    <td>Bill Gate</td>
    <td>(505) 256-3600</td>
    <td>0844 41 45 387</td>
  </tr>
</table>
```

```
<table border="1">
  <tr>
    <th>Name</th>
    <th>Telephone</th>
  </tr>
  <tr>
    <td rowspan="2">Bill Gate</td>
    <td>(505) 256-3600</td>
  </tr>
  <tr>
    <td>0844 41 45 387</td>
  </tr>
</table>
```




Name	Telephone
Bill Gate	(505)256-3600 0844 41 45 387



Name	Telephone
Bill Gate	(505)256-3600 0844 41 45 387



# colspan and rowspan

HTML

```
<table border="1">
  <tr>
    <th>Name</th>
    <th>Telephone</th>
    <th>Country</th>
    <th>Center</th>
  </tr>
  <tr>
    <td rowspan="2">Bill Gate</td>
    <td>(505)256-3600</td>
    <td colspan="2" rowspan="3">silicon valley - usa</td>
  </tr>
  <tr>
    <td>0844 41 45 387</td>
    <td>Steve Job</td>
    <td>1-800-676-2775</td>
  </tr>
  <tr>
    <td>Steve Job</td>
    <td>1-800-676-2775</td>
  </tr>
</table>
```

Name	Telephone	Country	Center
Bill Gate	(505)256-3600		
	0844 41 45 387		silicon valley - usa
Steve Job	1-800-676-2775		



```
<table>
<tr> <td>yes</td> <td colspan="3">yes</td> </tr>
<tr> <td rowspan="2">yes</td> <td>yes</td> <td>yes</td> <td>yes</td> </tr>
<tr> <td>yes</td> <td>yes</td> <td>yes</td> </tr>
</table>
```

This is how to code the table with colspan and rowspan



```
1 <html>
2   <body>
3
4     <table border="1">
5       <tr>
6         <th>Fruit</th>
7         <th>Percent</th>
8       </tr>
9       <tr>
10      <td>Apples</td>
11      <td></td>
12    </tr>
13    <tr>
14      <td>Bananas</td>
15      <td></td>
16    </tr>
17    <tr>
18      <td>Oranges</td>
19      <td>13%</td>
20    </tr>
21    <tr>
22      <td>Other</td>
23      <td></td>
24    </tr>
25  </table>
26
27  </body>
28 </html>
```

Fruit	Percent
Apples	
Bananas	
Oranges	13%
Other	

Fruit	Percent
Apples	
Bananas	
Oranges	13%
Other	

```
<table border="1">
  <tr>
    <th>Fruit</th>
    <th>Percent</th>
  </tr>
  <tr>
    <td>Apples</td>
    <td>&nbsp;</td>
  </tr>
  <tr>
    <td>Bananas</td>
    <td>&nbsp;</td>
  </tr>
  <tr>
```

