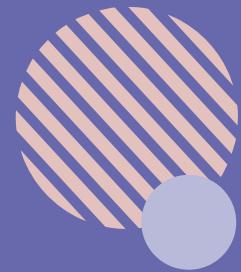


Web Programming

HTML Table, Text, Hyperlink, and Form

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01 Table

02 Text

03 Hyperlink

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Table

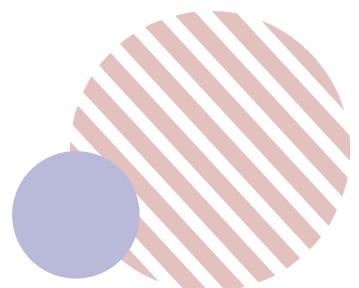




Table Tag

■ <table> ... </table>

- The <table> tag defines an HTML table.
- An HTML table consists of one <table> element and one or more <tr>, <th>, and <td> elements.
- The <tr> element defines a table row, the <th> element defines a table header, and the <td> element defines a table cell.
- An HTML table may also include <caption>, <colgroup>, <thead>, <tfoot>, and <tbody> elements.
- Example

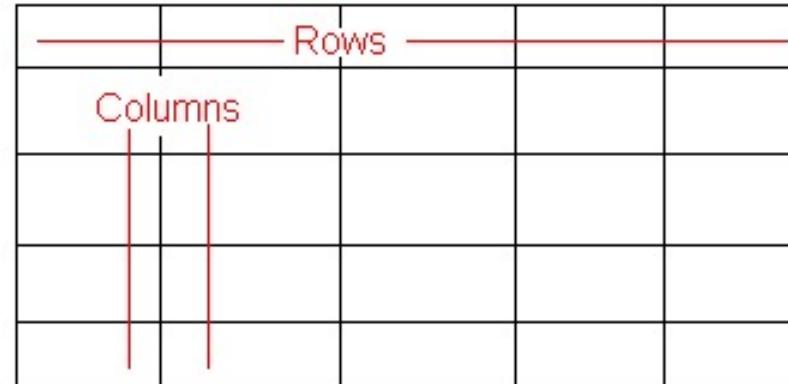
```
<table>
  <tr>
    <th>Month</th>
    <th>Savings</th>
  </tr>
  <tr>
    <td>January</td>
    <td>$100</td>
  </tr>
</table>
```



Table, Row, Column

■ Basic structure

- Table
- Row
- Column



	Column 1	Column 2	Column 3
Row 1	Row 1 Column 1	Row 1 Column 2	Row 1 Column 3
Row 2	Row 2 Column 1	Row 2 Column 2	Row 2 Column 3



Table, Row, and Data Tags

Basic structure

- table: <table> ... </table>
- row: <tr> ... </tr>
- data in a row: <td> ... </td>

Rows	
Columns	

```
1 □ <table border="1">
2 □   <tr>
3 □     <td>row 1, column 1</td>
4 □     <td>row 1, column 2</td>
5 □   </tr>
6 □   <tr>
7 □     <td>row 2, column 1</td>
8 □     <td>row 2, column 2</td>
9 □   </tr>
10 □  </table>
```

The diagram illustrates the structure of a table defined by the provided HTML code. The code consists of 10 numbered lines:

- Line 1: Starts the table with `<table border="1">`.
- Line 2: Starts the first row with `<tr>`.
- Line 3: Places the first data item in the first column of the first row with `<td>row 1, column 1</td>`.
- Line 4: Places the second data item in the second column of the first row with `<td>row 1, column 2</td>`.
- Line 5: Closes the first row with `</tr>`.
- Line 6: Starts the second row with `<tr>`.
- Line 7: Places the third data item in the first column of the second row with `<td>row 2, column 1</td>`.
- Line 8: Places the fourth data item in the second column of the second row with `<td>row 2, column 2</td>`.
- Line 9: Closes the second row with `</tr>`.
- Line 10: Closes the entire table with `</table>`.

Two orange arrows point from the highlighted sections of the code to a visual representation of the resulting table structure. The structure shows two rows and two columns. The first row contains the text "row 1, column 1" in the first cell and "row 1, column 2" in the second cell. The second row contains the text "row 2, column 1" in the first cell and "row 2, column 2" in the second cell.



Table Caption & Header Tags

Basic structure

- Caption: <caption> ... </caption>
- Header: <th> ... </th>

```
1 ⚡<table border="1">
2   <caption>name List</caption>
3   <tr>
4     <th>Title</th>
5     <th>Name</th>
6   </tr>
7   <tr>
8     <td>Miss</td>
9     <td>Jones</td>
10    </tr>
11   <tr>
12     <td>Mr</td>
13     <td>Smith</td>
14   </tr>
15 </table>
```

The diagram illustrates the mapping between the provided HTML code and the resulting table structure. On the left, the code is shown with specific sections highlighted by orange boxes: the entire `<caption>` tag, the two `<th>` tags within the first `<tr>`, and the two `<td>` tags within the second `<tr>`. Orange arrows point from these highlighted areas to the corresponding parts of the table on the right. The table is titled "Name list" and contains two columns: "Title" and "Name". It has two rows: one row with "Miss" and "Jones", and another row with "Mr" and "Smith".

Title	Name
Miss	Jones
Mr	Smith



Regions in a Table (1/2)

In a Table

- <thead>
 - The head of the table. Usually contains the column headings
- <tbody>
 - The body of the table. The table data.
- <tfoot>
 - The foot of the table. Summary and other footer information

Title	Price	Available
CSS Demystified	\$29	16
Mastering JavaScript	\$35	10
HTML5: An Introduction	\$15	6
Total		32





Regions in a Table (2/2)

Example

Title	Price	Available
CSS Demystified	\$29	16
Mastering JavaScript	\$35	10
HTML5: An Introduction	\$15	6
Total		32

Title	Price	Available
CSS Demystified	\$29	16
Mastering JavaScript	\$35	10
HTML5: An Introduction	\$15	6
Total		32

```
<table border="1">
<thead>
<tr>
<th>Title</th>
<th>Price</th>
<th>Available</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSS Demystified</td>
<td>$29</td>
<td>16</td>
</tr>
<tr>
<td>Mastering JavaScript</td>
<td>$35</td>
<td>10</td>
</tr>
<tr>
<td>HTML5: An Introduction</td>
<td>$15</td>
<td>6</td>
</tr>
</tbody>
<tfoot>
<tr>
<td>Total</td>
<td></td>
<td>32</td>
</tr>
</tfoot>
</table>
```



Table Attributes (1/4)

Table attributes

border	Borders in a table	** Not supported in HTML5
bordercolor	Border color in table	** Not supported in HTML5
width	Horizontal size of table	** Not supported in HTML5
height	Vertical size of the table	** Not supported in HTML5
align	Alignment direction of text	** Not supported in HTML5
bgcolor	Background color	** Not supported in HTML5
cellpadding	Space between the cell walls and contents	** Not supported in HTML5
cellspacing	Space between cells	** Not supported in HTML5
colspan	Horizontal Merger (column merges)	
rowspan	Vertical mergers (row mergers)	

Name	Expenses
BITTU	2500.00
RAKESH	1400.00



Table Attributes (2/4)

Border

- Around each table cell
- Value
 - Border width (in pixels)
 - Default: 0 (no border)
- Example

```
<h2>Table without a border</h2>
```

```
<table>
  <tr>
    <th>Title</th>
    <th>Name</th>
  </tr>
  <tr>
    <td>Miss</td>
    <td>Jones</td>
  </tr>
</table>
```

```
<h2>Table with a thick border</h2>
```

```
<table border="8">
  <tr>
    <th>Title</th>
    <th>Name</th>
  </tr>
  <tr>
    <td>Miss</td>
    <td>Jones</td>
  </tr>
</table>
```

Table without a border

Title Name
Miss Jones

Table with a thick border

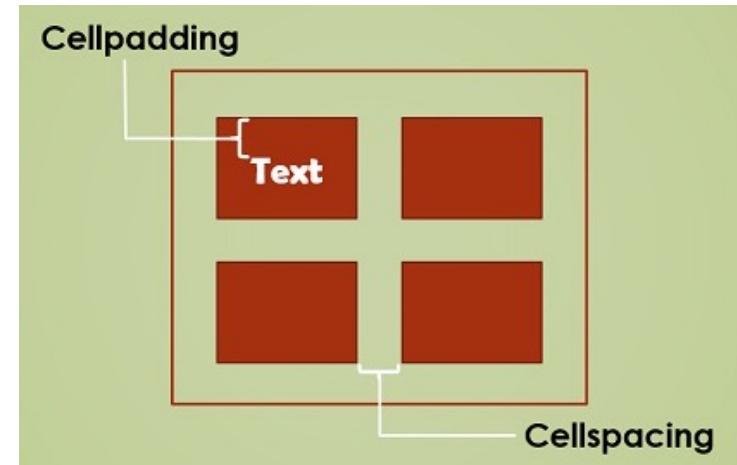
Title	Name
Miss	Jones



Table Attributes (3/4)

■ Cell padding

- Space between the cell walls and contents
- Value
 - In pixels or %
 - Default: 0 (no padding)



■ Cell spacing

- Space between cells
- Value
 - In pixels or %
 - Default: 0 (no spacing)

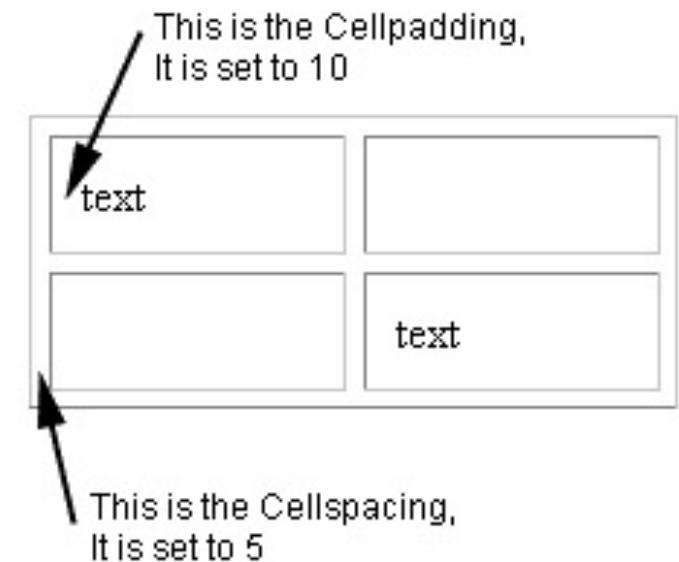




Table Attributes (4/4)

Cell padding & Spacing

- Example

The diagram illustrates the visual representation of the following HTML code:

```
<table cellspacing="15" cellpadding="12" border="2">
  <tr>
    <th>Title</th>
    <th>Name</th>
  </tr>
  <tr>
    <td>Miss</td>
    <td>Jones</td>
  </tr>
  <tr>
    <td>Mr</td>
    <td>Smith</td>
  </tr>
</table>
```

The table has a total width of 15 units due to cellspacing="15". The first row contains two th elements: "Title" and "Name". The second row contains two td elements: "Miss" and "Jones". The third row contains two td elements: "Mr" and "Smith". The border of the table is 2 units wide. The cellpadding attribute creates a 12-unit gap between the text and the edges of the cells. Arrows point from the attribute values to their corresponding visual effects in the table structure.

Title	Name
Miss	Jones
Mr	Smith



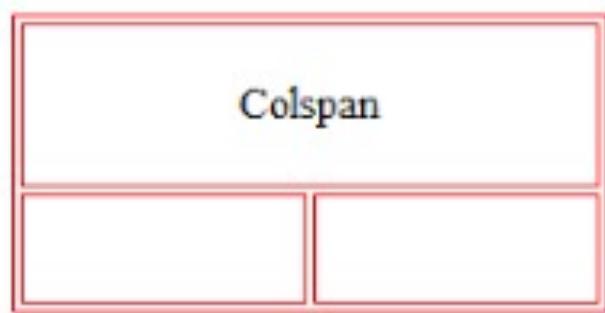
Cell Merge (1/3)

■ *colspan* attribute

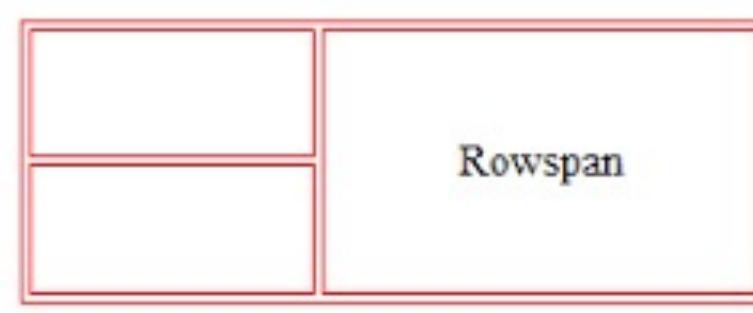
- Horizontal merge
- Allows a cell header to span multiple columns

■ *attribute*

- Vertical merge
- Allows a cell header to span multiple rows



`colspan='2'`

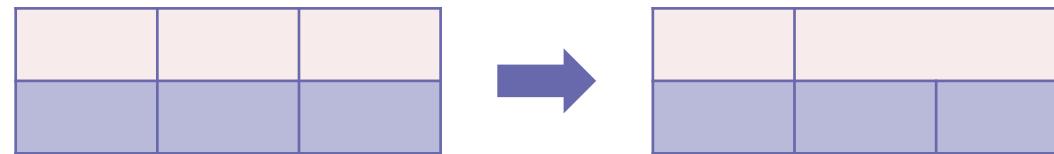


`rowspan='2'`



Cell Merge (2/3)

■ *colspan* example



```
<table border="2" cellpadding="4">
  <tr>
    <th>Name</th>
    <th colspan="2">Hobby</th>
  </tr>
  <tr>
    <td>John</td>
    <td>Football</td>
    <td>Reading</td>
  </tr>
</table>
```

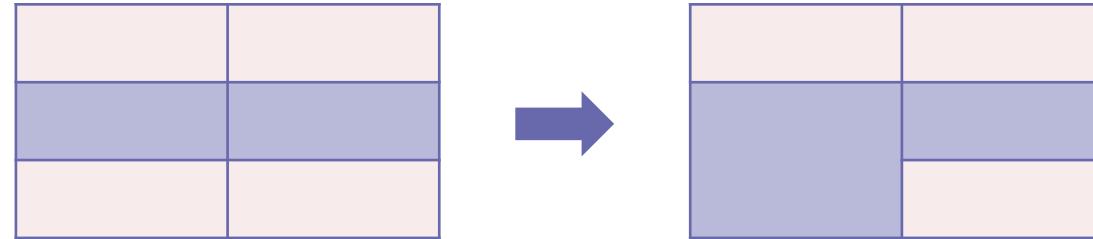
The diagram shows the resulting table structure. It has two rows and three columns. The first row contains two cells: the first cell is labeled "Name" and the second cell is labeled "Hobby". The second row contains three cells: the first cell is labeled "John", the second cell is labeled "Football", and the third cell is labeled "Reading". A blue bracket above the first two columns indicates the effect of the colspan="2" attribute from the first row's th element.

Name	Hobby	
John	Football	Reading



Cell Merge (3/3)

rowspan example



```
<table border="1" cellpadding="4">
  <tr>
    <th>Name</th>
    <td>John</td>
  </tr>
  <tr>
    <th rowspan="2">Hobby</th>
    <td>Football</td>
  </tr>
  <tr>
    <td>Reading</td>
  </tr>
</table>
```

The diagram shows the resulting table structure from the provided HTML code. The first row contains a 'Name' header in the first cell and 'John' in the second cell. The second row contains a 'Hobby' header in the first cell, which spans two rows, and 'Football' in the second cell. The third row contains a 'Reading' cell in the second cell. A blue bracket on the right indicates the span of the 'Hobby' cell across two rows.

Name	John
Hobby	Football
	Reading



Exercise 1

■ Table

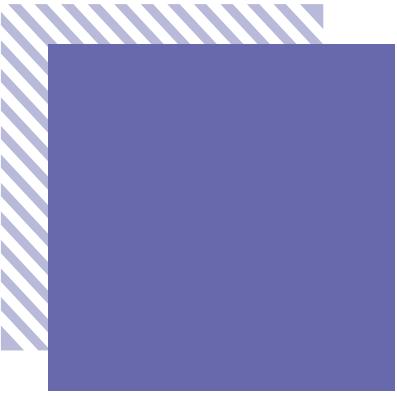
- Create the following tables and save the code as ex_2-1.html.

Web Languages

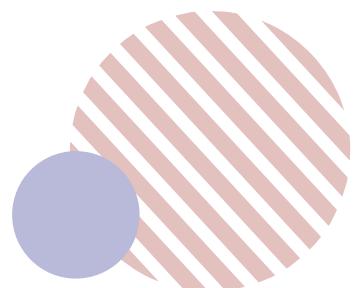
HTML	CSS
JavaScript	PHP

Cell 1	Cell 2		
Cell 3	Cell 4	Cell 5	Cell 6

Cell 1	Cell 2
Cell 3	Cell 4
Cell 5	Cell 5



Text





Special Characters (1/3)

■ Special Characters

- Special characters (symbols) are displayed using HTML entities
- Some characters are reserved in HTML
 - If you use the less than (<) or greater than (>) signs in your text, the browser might mix them with tags
 - To display a less than sign (<) we must write: `<` or `<`
- Character entities are used to display reserved characters in HTML
 - A character entity consists of three parts:
 - ampersand (&)
 - entity name, or # and an entity code number
 - semicolon (;)

`&entity_name;`

OR

`&#entity_number;`



Special Characters (2/3)

■ HTML Entities

Result	Description	Entity Name	Entity Number
	non-breaking space	 	
<	less than	<	<
>	greater than	>	>
&	ampersand	&	&
"	quotation mark	"	"
¢	cent	¢	¢
€	euro	€	€
©	copyright	©	©

■ Example

```
<p>The tag &lt;html&gt; defines an HTML document.</p>
<p>
The character entity &amp; displays the special character &.
</p>
```



The tag <html> defines an HTML document.

The character entity & displays the special character &.



Special Characters (3/3)

■ HTML Entities

- Some mathematical symbols

Char	Number	Entity	Description
∀	∀	∀	FOR ALL
∂	∂	∂	PARTIAL DIFFERENTIAL
∃	∃	∃	THERE EXISTS
∅	∅	∅	EMPTY SETS
∈	∈	∈	ELEMENT OF
∉	∉	∉	NOT AN ELEMENT OF
∋	∋	∋	CONTAINS AS MEMBER
∏	∏	∏	N-ARY PRODUCT
Σ	∑	∑	N-ARY SUMMATION

- Some Greek letters

Char	Number	Entity	Description
Α	Α	Α	GREEK CAPITAL LETTER ALPHA
Β	Β	Β	GREEK CAPITAL LETTER BETA
Γ	Γ	Γ	GREEK CAPITAL LETTER GAMMA
Δ	Δ	Δ	GREEK CAPITAL LETTER DELTA
Ε	Ε	Ε	GREEK CAPITAL LETTER EPSILON



Block Tags (1/3)

■ Block quotation

- <blockquote> ... </blockquote>
- Separates a quotation from another document
- Example

```
<p>In Wikipedia, HTML is defined as:  
  <blockquote cite="https://en.wikipedia.org/wiki/HTML">  
    A markup language designed for the creation of web pages with<br>  
    hypertext and other information to be displayed in a web browser.  
  </blockquote>  
</p>
```



In Wikipedia, HTML is defined as:

A markup language designed for the creation of web pages with
hypertext and other information to be displayed in a web browser.



Block Tags (2/3)

■ Address

- <address> ... </address>
- Separates addresses, signatures, or authorships of documents
- Example

```
<h3>My address is:</h3>
<address>
    #214, AI Building<br>
    School of Computing<br>
    Gachon University, Republic of Korea
</address>
```



My address is:

*#214, AI Building
School of Computing
Gachon University, Republic of Korea*



Block Tags (3/3)

■ Pre-formatted text

- <pre> ... </pre>
- Renders text in a fixed-width font (e.g., equations, codes)
- Example

```
<h3>JavaScript function</h3>
<pre>
    function addition(x, y) {
        return x + y;
    }
</pre>
```



JavaScript function

```
function addition(x, y) {
    return x + y;
}
```



div and span Tags (1/3)

■ *div and span* tags

- span and div both group together related parts of a web page.
- They are often used with CSS3 to design the web page.
- But they serve different functions.

■ div (division)

- divs define logical divisions on your web page. A div is basically a box (block) in which you can place other HTML elements that belong together.
- A block is a page element that starts a new line and has a width equal to the entire page or the parent container.
- divs are most often used to group related paragraphs, images, headings, and links.
- A division can even have other divisions inside of it to provide additional structure and organization.



div and span Tags (2/3)

■ span

- A span element is used for inline organization and styling.
- The span element is typically used to wrap a specific piece of content such as text to give it an additional hook you can use to add styles. Without any style attributes, however, span has no effect on text at all.
- An inline element does not start a new line and only takes up as much space on the page as its content.
- Span tags are used on small segments of text, links, images, and other HTML elements that appear inline with the surrounding content.



div and span Tags (3/3)

Example

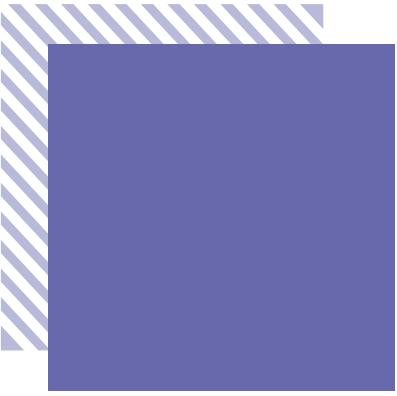
```
<h3>div tag</h3>
<div>Hello,</div>
<div>World!</div>
<hr>
<h3>span tag</h3>
<span>Hello,</span>
<span>World!</span>
```

div tag

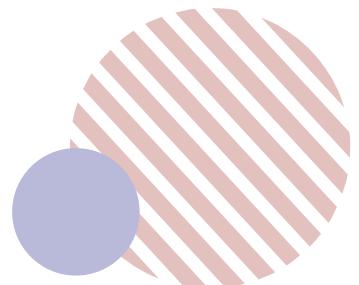
Hello,
World!

span tag

Hello, World!



Hyperlink





Hyperlinks

■ Links

- Links are found in nearly all web pages.
- Links allow users to click their way from page to page.

■ Hyperlinks

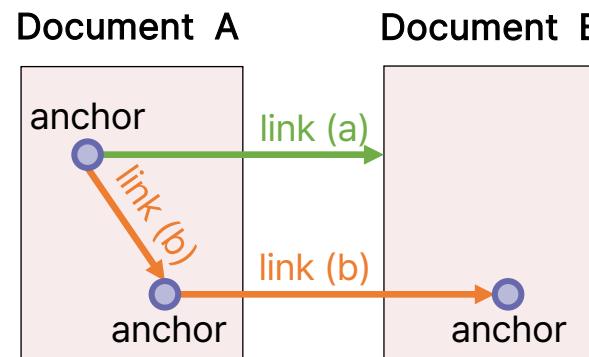
- HTML links are hyperlinks.
- You can click on a link and jump to another document.
- When you move the mouse over a link, the mouse arrow will turn into a little hand.
- Note: A link does not have to be text. A link can be an image or any other HTML element!



Hyperlink Tags (1/2)

■ Anchor tag

- `<a> ... `
- The `<a>` tag defines a hyperlink, which is used to link from one page to another.
- Defines a hyperlink to
 - another document on a web site (a)
 - a specific section of a document (b)
 - an e-mail sender





Hyperlink Tags (2/2)

■ Anchor Tag Attributes

- *href* Attribute (*href* = hypertext reference)
 - The most important attribute of the `<a>` element.
 - Defines as the link's destination.
 - Specifies the destination of a link
 - Example: `Gachon University`
- *target* Attribute
 - Specifies where to open the linked document
 - Example: `Gachon University`
 - Values

Value	Description
_blank	Opens in a new window or tab
_self	Opens in the same frame as it was clicked (this is the default)
_parent	Opens in the parent frame
_top	Opens in the full body of the window
framename	Opens in a named frame



Link to Another Document

■ Absolute link

- to a document on the Internet
- requires a full URL

■ Relative link

- to a document on the same server
- needs only a relative path

```
<p>
    Absolute link to the<br />
    <a href="http://www.w3schools.com/html/">W3 Schools HTML Tutorial</a>
    page.
</p>

<p>
    Relative link to the
    <a href="ex2-4-form.html">next</a>
    page.
</p>
```

Absolute link to the
[W3 Schools HTML Tutorial](http://www.w3schools.com/html/) page.

Relative link to the [next](#) page.



Link to a Specific Section of a Document (1/3)

Within the same document

- Create a link to a named anchor
- Precede the anchor name with a hash #

In another document

- Create a link to a named anchor
- Precede the anchor name with the document's name and a hash #

```
<p>Go to <a href="chapter2.html#section2">Section 2</a></p>
<p>Go to <a href="#footer">Go to bottom</a></p>
```

This is the fist line of the page.

```
<br /><br />
```

This is the middle part of the page.

```
<br /><br />
```

This is the end of the page.

```
<br /><br />
```

```
<p id="section2">Section 2</p>
```

This is the first part of section 2.

```
<br /><br />
```

```
<p>Gor to <a href="#top">TOP</a></p>
```

```
<a href="chapter1.html">Chapter 1</a>
```

```
<br /><br />
```

```
<p id="footer">FOOTER</p>
```

This is the last part of the page.



Link to a Specific Section of a Document (2/3)

■ Link to the same document

- Specify one or more sections to link to
 - Use the *name* attribute of anchor tag `<a>` to create a named anchor for one or more specific sections of the document (Note: Not supported in HTML5! Use *id* attribute.)

```
<h3 id="menu">Menu</h3>
<ul>
    <li><a href="#a001">Jump to a001</a></li>
    <li><a href="#a002">Jump to a002</a></li>
    <li><a href="#a003">Jump to a003</a></li>
</ul>

<hr />

<h3 id="a001">a001</h3>
<p>...</p>

<h3 id="a002">a002</h3>
<p>...</p>

<h3 id="a003">a003</h3>
<p>...</p>

<hr />

<p><a href="#menu">Jump to Menu</a></p>
```

Menu

- [Jump to a001](#a001)
- [Jump to a002](#a002)
- [Jump to a003](#a003)

a001

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor Venenatis tellus in metus vulputate eu. Enim lobortis scelerisque fermentum du aliquet nibh praesent tristique magna sit. Pretium viverra suspendisse potenti n mauris nunc congue nisi vitae. Egestas quis ipsum suspendisse ultrices gravida c

Suspendisse interdum consectetur libero id faucibus nisl tincidunt eget nullam. morbi tempus iaculis urna id volutpat lacus laoreet non. Morbi tristique senectu Mauris pharetra et ultrices neque ornare aenean. Fusce id velit ut tortor pretium elit at.

Aliquam faucibus purus in massa. Sapien et ligula ullamcorper malesuada proin i volutpat. In mollis nunc sed id semper risus. Molestie a iaculis at erat pellentesq tortor dignissim convallis. Molestie a iaculis at erat pellentesque adipiscing. Dap Pellentesque dignissim enim sit amet venenatis urna cursus eget nunc.

Mauris pharetra et ultrices neque ornare aenean euismod. Mauris ultrices eros i vestibulum lectus. Mauris pellentesque pulvinar pellentesque habitant morbi tri aliquet bibendum enim. Nisi quis eleifend quam adipiscing. Et tortor consequat

Non arcu risus quis varius quam quisque id. Sollicitudin ac orci phasellus egestas Risus feugiat in ante metus dictum at tempor. Lectus urna quis convallis convallis aliquet lectus proin nibh nisl condimentum id. Sagittis id consectetur purus ut fa scelerisque varius morbi enim nunc faucibus. Congue quisque egestas diam in a

a002

Venenatis tellus in metus vulputate eu. Enim lobortis scelerisque fermentum du aliquet nibh praesent tristique magna sit. Pretium viverra suspendisse potenti n mauris nunc congue nisi vitae. Egestas quis ipsum suspendisse ultrices gravida c

[ex2-p34.html 다운로드](#)



Link to a Specific Section of a Document (3/3)

Link to the different document

- Specify one or more sections to link to
 - Use the *name* attribute of anchor tag `<a>` to create a named anchor for one or more specific sections in the document (Note: Not supported in HTML5! Use *id* attribute.)

index.html

```
<ul>
    <li><a href="book.html#section-a">Sub-section</a></li>
</ul>
```

book.html

```
<section id="section-a">
    <strong>
        <p>- Sub-section -</p>
        <p>[text of Sub-section here]</p>
    </strong>
</section>
```

• Sub-section



- Sub-section -

[text of Sub-section here]

Clicking "Sub-section" with the mouse moves to the section of the book.html file.



Link to an E-mail Sender

```
<p>  
    Contact:  
        <a href="mailto:helpdesk@gachon.ac.kr">help desk</a>  
</p>
```

Contact: help desk





Anchor Tag Example 1

■ Anchor Tag

- Linking two html files

page01.html

This is page01.html

[Go to page02.html](#)

page02.html

This is page02.html

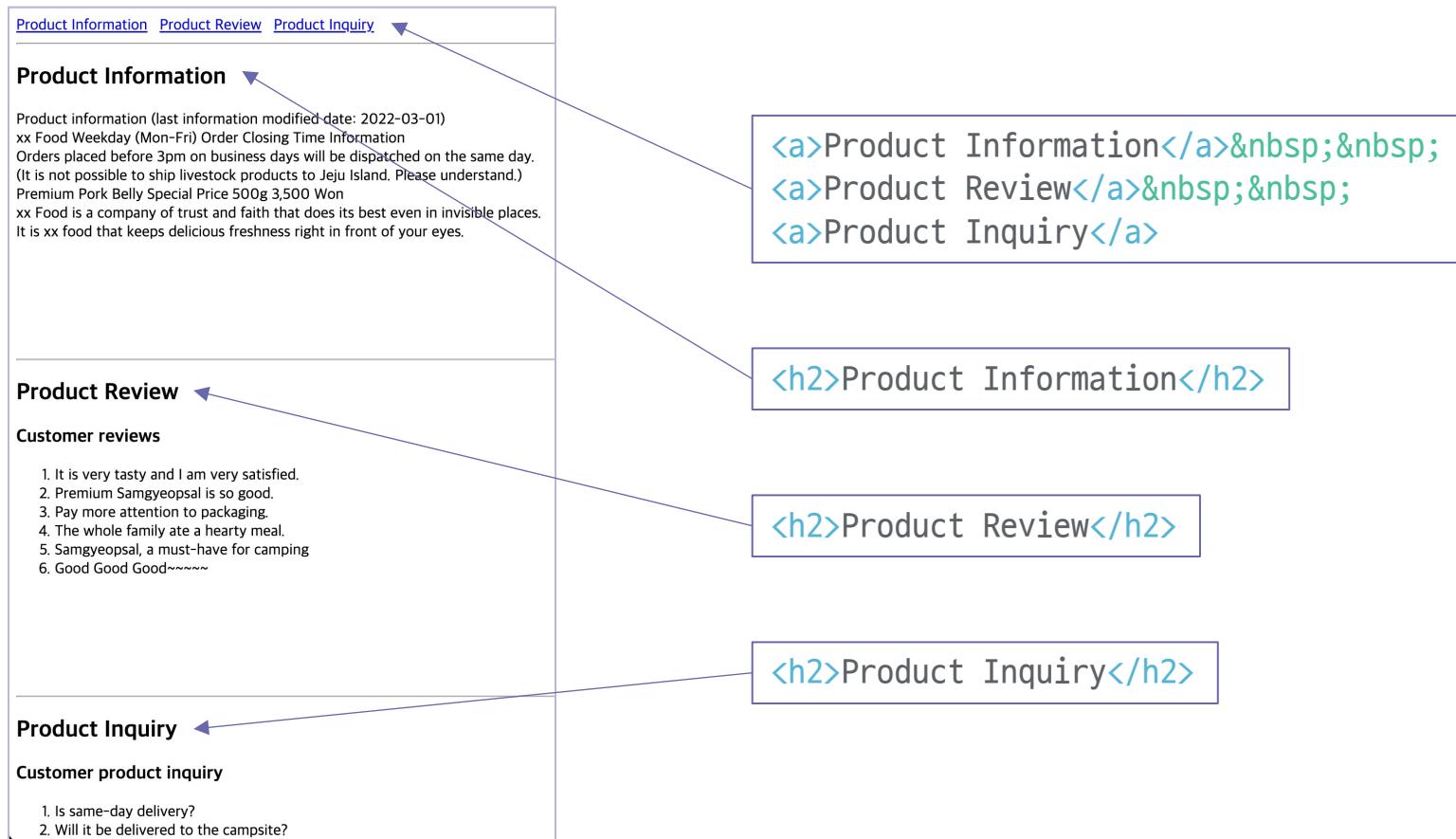
[Go to page01.html](#)



Anchor Tag Example 2

Anchor Tag

- Modify anchor tag and h2 tag to link the content in `<a>` tag to the specific section with the same content in `<h2>` tag



product.html 다운로드



Exercise 2

■ Hyperlink

- Create a web page with
 - simple links to three search engines (google, yahoo, microsoft)
 - links to two different pages that are open in a new window (naver, daum)
 - two lists with any information: one is an ordered list, and the other is an unordered one
 - an anchor at the top that, when clicked, jumps all the way to the bottom of the same page
 - an anchor at the bottom that jumps back to the top

Exercise 3

Quotation

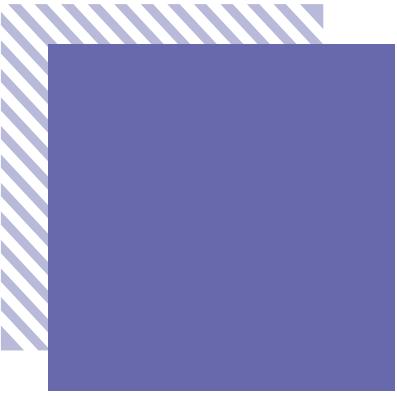
- Print two paragraphs that are both indented.
 - (Use <blockquote> tag)
- Print an h3 level heading followed by a horizontal line.
- Print a paragraph relating to the text in the heading.

Computer software (often called just *software*) is made of one or more computer programs. Sometimes it means one specific program, or it can mean all the software on a computer, including the applications and the operating system.

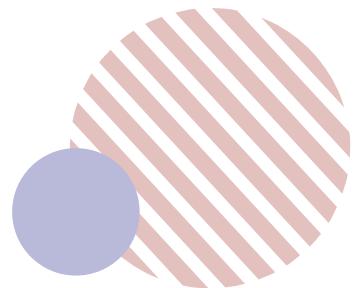
Applications are programs that do a specific thing, such as a game or a word processor. The operating system (Windows 7, OS X, Linux, etc.) is a software that helps the applications run, and controls the display and the keyboard.

Cookie

A *cookie* is a sweet dessert made from flour. Cookies are made in an oven. They are also called biscuits in many English-speaking countries. In the United States and Canada, many varieties of biscuit are called cookies as well.



Form





HTML Forms for User Input

The image shows the Gachon University login page. The background is a photograph of two students, a man and a woman, walking on a grassy campus path. The university's logo, "Gachon University", is visible in the top left corner of the page. The main focus is a "LOGIN" form. At the top right of the form are radio buttons for "KOR" (selected) and "ENG". Below the form are two input fields: one for "아이디" (ID) with a user icon and another for "비밀번호" (Password) with a lock icon. A "로그인" (Login) button is centered below the inputs. At the bottom of the form are links for "아이디찾기" (Forgot ID) and "비밀번호 초기화" (Forgot Password). The overall design is clean and modern.

가천대학교
Gachon University

아름다운 인재의 삼
GACHON UNIVERSITY

GACHON SERVICE
가천대학교 서비스를 알려드립니다.



■ HTML Form

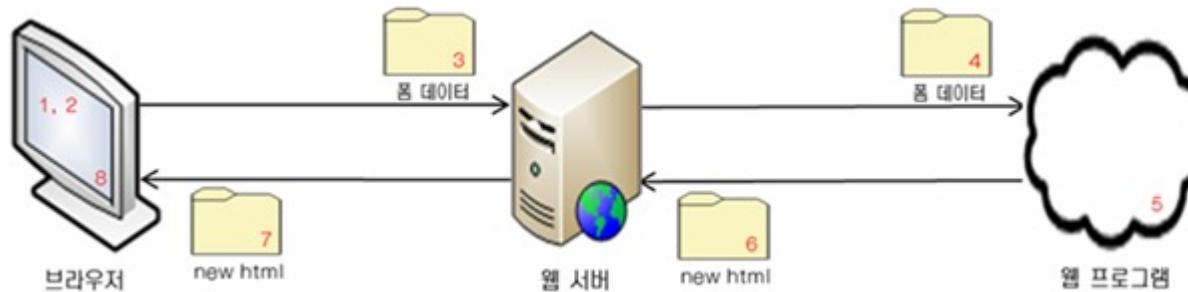
- An HTML form is used to collect user input.
- The user input is most often sent to a server for processing.
- The FORM element
 - The HTML <form> element is used to create an HTML form for user input.
 - The <form> element is a container for different types of input elements, such as: text fields, check boxes, radio buttons, submit buttons, etc.
- The INPUT element
 - The HTML <input> element is the most used form element.
 - An <input> element can be displayed in many ways, depending on the type attribute.



Form Tag

■ <form> ... </form>

- Client wants to send data to the server
 - e.g., Login ID & password, address for order at Amazon.com
- Form is used for user input in HTML documents
 - Contains input elements like text fields, checkboxes, radio-buttons, etc.
- Attributes
 - *action*: specifies where to send the form data when a form is submitted (URL)
 - *method*: specifies how to send form data (Get, Post)





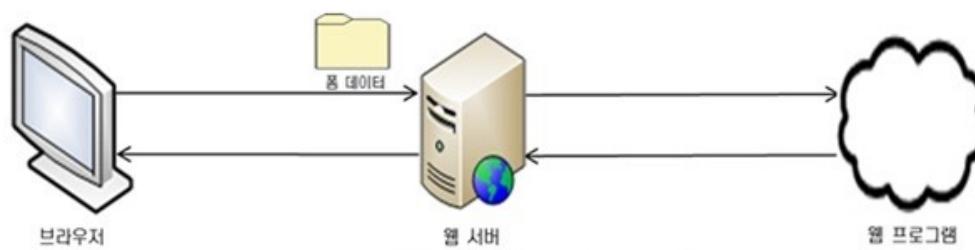
Sending Data using GET

Example

```
<h2>A Sample Form using GET</h2>
<form method="get" action="sample.html">
    First name: <input type="text" name="first name" value="Joe" /><br />
    Last name:
    <input type="text" name="last name" value="Hacker" /><br /><br />
    <input type="submit" value="Submit" />
</form>
```

A Sample Form using GET

First name:
Last name:



/Users/soyeop/workspace/gachon/2022/web/examples/sample.html?first+name=Joe&last+name=Hacker



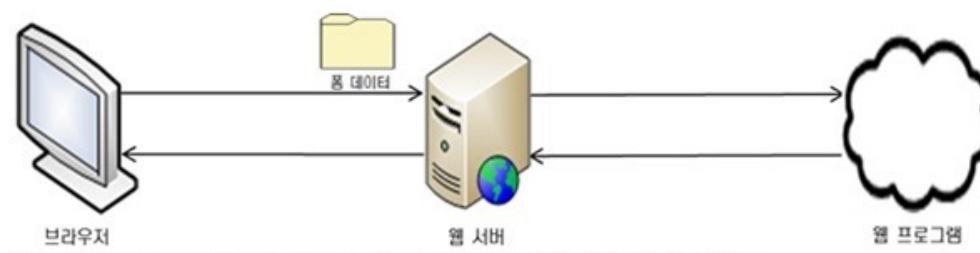
Sending Data using POST

Example

```
<form method="post" action="sample.html">
    First name: <input type="text" name="first name" value="Joe" /><br />
    Last name:
    <input type="text" name="last name" value="Hacker" /><br /><br />
    <input type="submit" value="Submit" />
</form>
```

A Sample Form using GET

First name:
Last name:



/Users/soyeop/workspace/gachon/2022/web/examples/sample.html



Input Tag (1/2)

■ <input> Tag

- Used to collect user input
- Can vary in many ways, depending on the type attribute
- Can be a text field, a checkbox, a combo box, a list box, a password field, a radio button, etc.



Input Tag (2/2)

■ Attributes

- *type*
 - the type of an input element
 - button, checkbox, hidden, image, password, radio, reset, submit, text, etc.
- *name*
 - the name for an input element
- *value*
 - the value of an input element
- *size*
 - the width of an input field
- *maxlength*
 - the maximum length of an input field



Input Types

■ Input Types

Type	Description
<input type="text">	Displays a single-line text input field (<i>default value</i>)
<input type="radio">	Displays a radio button (for selecting one of many choices)
<input type="checkbox">	Displays a checkbox (for selecting zero or more of many choices)
<input type="submit">	Displays a submit button (for submitting the form)
<input type="button">	Displays a clickable button
<input type="password">	Defines a password field (shown as asterisks or circles)
<input type="reset">	Displays a reset button (for resetting all values)
<input type="image">	Displays a submit button using image
<input type="file">	Displays a file-select field and a "Browse" button for file uploads
<input type="hidden">	Displays a hidden input field (no visible to a user)

■ Other values

- color, date, datetime-local, email, month, number, range, search, tel, time, url, week



Text Controls (1/3)

Text Field

- <input type="text" name="textid" ...>
- Attribute value can give an initial value

```
<form>
    First name: <input type="text" name="first name" /><br />
    Last &nbsp;name: <input type="text" name="last name" />
</form>
```

First name:

Last name:



Text Controls (2/3)

■ Password Field

- <input type="password" name="textpwd" ...>
- Characters in a password field are masked (shown as asterisks or circles)
- Always use POST

```
<form>
    Password: <input type="password" name="pwd" />
</form>
```

Password:



Text Controls (3/3)

■ Multi-line Text Area

- <textarea name="..." rows="..." cols="...">>...</textarea>
- Interpretation of regular HTML tags is turned off between <textarea> and </textarea>

```
<form>
    <textarea name="text area" rows="4" cols="50">
        You learn how to mak a web site in this class. The HTML tags such
        as <h1> are not interpreted between <textarea> and &lt;/textarea>.
    </textarea>
</form>
```

Note: The sentence inside the textarea tag should not have a space before the starting letter.

You learn how to mak a web site in this class. The
HTML tags such as <h1> are not interpreted between
<textarea> and </textarea>.



Push Buttons (1/3)

■ Buttons

- `<input type="button" value = "button name">`

■ Submit Buttons

- `<input type="submit" ...>`
- Use *name* if you have multiple buttons
- Use *value* to change button's label

■ Reset Buttons

- `<input type="reset" ...>`
- Use *value* to change button's label
- Clears form data



Push Buttons (2/3)

Example

```
<form name="input" action="some_program" method="get">
    Username: <input type="text" name="user name" /> <br /><br />
    <input type="submit" value="Submit" />
    <input type="reset" value="Reset" />
</form>
```

Username:



Push Buttons (3/3)

■ Multiple Submit Buttons

- If *Add* button is clicked, the form sends:
 - (input-text) Item : "4GB DDR4"
 - (input-submit) "Add Item to Cart"
 - (input-submit) "Delete Item from Cart"

```
<form name="input" action="http://localhost" method="get">
    Item:
    <input type="text" name="item" value="4GB DDR4" /><br /><br />
    <input type="submit" name="Add" value="Add Item to Cart" />
    <input type="submit" name="Delete" value="Delete Item from Cart" />
</form>
```

Item: 4GB DDR4



Buttons for Choices (1/2)

■ Check box (on/off button)

- <input type="checkbox" name="..." checked>
- *checked* attribute makes it initially checked
- *name/value* pair sent only if checkbox is checked when a form is submitted (value is "on")

1. In the past 24 hours, which meals have you enjoyed?

- Breakfast
- Lunch
- Afternoon Snack
- Dinner
- None of the Above

■ Radio button (alternative button)

- <input type="radio" name="..." value="...">
- All radio buttons in a group should have same *name*
- Only one button in a group can be chosen; pressing a different one makes the previous one unchosen

Q.What is your most favourite food?

- Burger
- Pizza
- SandWitch
- Chicken with Rice
- Chicken with Paratha



Buttons for Choices (2/2)

■ Example

```
<form method="post" action="http://some-site/som-program">
  <p>
    Choose your payment method: <br />
    <input type="radio" name="Creditcard" value="Visa" checked/>VISA<br />
    <input type="radio" name="Creditcard" value="Master" />Master Card<br />
    <input type="radio" name="Creditcard" value="Amex" />American Express<br />
  </p>
  <input type="checkbox" name="nonews" checked />
  Check here if you do <i>not</i> want to get our email newsletter.
</form>
```

Choose your payment method:

VISA
 Master Card
 American Express

Check here if you do *not* want to get our email newsletter.



Lists for Selection (1/2)

Combo box

- Creates a drop-down list with multiple options
- Attributes
 - select* gives name
 - option* gives value

```
<form>
  Favorite language:
  <select name="Language">
    <option value="c">C</option>
    <option value="c++">C++</option>
    <option value="java">Java</option>
    <option value="html" selected>HTML</option>
    <option value="css">CSS</option>
    <option value="javascript">JavaScript</option>
  </select>
</form>
```

Favorite language: HTML ▾

C
C++
Java
✓ HTML
CSS
JavaScript



Lists for Selection (2/2)

■ List box

- Identical to combo boxes, but specify attribute *size*

```
<form>
    Favorite language:
    <select name="Language" size="6">
        <option value="c">C</option>
        <option value="c++">C++</option>
        <option value="java">Java</option>
        <option value="html" selected>HTML</option>
        <option value="css">CSS</option>
        <option value="javascript">JavaScript</option>
    </select>
</form>
```

Favorite language:

C
C++
Java
HTML
CSS
JavaScript



Image Type

■ Image

- Displays image button

```
<form>
    Username: <input type="text" name="user name" /> <br /><br />
    <input type="image" src="submitButton.gif" width="200" alt="Submit" />
</form>
```

Username:

Submit



Other Controls

File upload control

- Let's the user select a file and send it to the server
`<input type="file" name="filename">`
- User gets a "Browse..." button

파일 선택 선택된 파일 없음

찾아보기...

Hidden fields

- Not shown to user (but can be seen in source)
 - e.g., user ID
- Preset *name* and *value* are sent with form submission
`<input type="hidden" name="userid" value="hiddenVal">`



Form Example

■ Form Tag

- Create a page like the image
 - Nationality
 - KOREA, USA, JAPAN, CHINA
 - Favorite foods
 - Kimchi, Bulgogi, Pajeon, Bibimbap

Enter your information

Name:

ID:

Password:

Phone: - -

Picture: 파일 선택 선택된 파일 없음

Gender: Man Woman

Language: Korean English Japanese Chinese

Briefly introduce yourself.

Introduce yourself:

Nationality:

Kimchi
Bulgogi
Pajeon
Bibimbap

Favorite foods:

Submit

Exercise 4

1) Create check boxes with the following question and answer options:

- Question: Which web browser do you prefer? (Check all that apply)
- Answers: Chrome, Firefox, Internet Explorer, Safari, Other

2) Create radio buttons with the following question and answer options:

- Question: How often do you read books?
- Answer options: Never read, Once a week, Twice a week, Three times a week or more

1) { Which web browser do you prefer? (Check all that apply)
 Chrome Firefox Internet Explorer Safari Other

2) { How often do you read books?
 Never read
 Once a week
 Twice a week
 Three times a week or more



Exercise 5

- 1) Create an input form with the user name and password fields
- 2) Display a combo box and a list box with the following question and options (* pre-selected):
 - Question: State/territory
 - Options: ACT, NSW, NT, QLD*, SA, TAS, VIC, WA

1) { Username:
 Password:

2) { State/territory:
 QLD

 State/territory:
 QLD
 SA
 TAS
 VIC
 WA



End of Class

