

DEPARTMENT OF COMMERCE (CA)
JAVA PROGRAMMING AND HTML (Semester IV)
II M.COM(CA) Sub Code-18MCC42C
UNIT V

Head and body section-Header section -Title-Prologue-Links-Colourful webpage -Comment line -Sample HTML document-lists-Ordered lists - Unordered lists -Nested lists.

Header section

The **header** is where you tell **Java** what value type, if any, the method will return (an int value, a double value, a string value, etc). As well as the return type, you need a name for your method, which also goes in the **header**.

Example:

```
<head>
  <title>about</title>
</head>
```

Body section

This page describes the general structure and organization of the class **body**. The class **body** component of a class implementation can itself contain two different **sections**: variable declarations and methods. ... Within the class **body** you **define** all the member variables and methods supported by your class.

Example:

```
<html>
<head>
  <link rel="stylesheet" type="text/css" href="styles.css">
  <title>Example for Body section elements</title>
</head>
<body>
  <!-- Body Part -->
  <p> This is Body Section </p>
  <a href="../html_tutorial.php"> goto HTML Index Page </a>
</body>
</html>
```

Title

The <title> tag defines the title of the document. The title must be text-only, and it is shown in the browser's title bar or in the page's tab.

The <title> tag is required in HTML documents!

The contents of a page title are very important for search engine optimization (SEO)! The page title is used by search engine algorithms to decide the order when listing pages in search results.

The <title> element:

- defines a title in the browser toolbar
- provides a title for the page when it is added to favourites
- displays a title for the page in search-engine results

Here are some tips for creating good titles:

- Go for a longer, descriptive title (avoid one- or two-word titles)
- Search engines will display about 50-60 characters of the title, so try not to have titles longer than that
- Do not use just a list of words as the title (this may reduce the page's position in search results)

Example:

```
<title>Student Registration Form Using HTML</title>
```

Prologue

The prologue appears at the beginning of every HTML page, identifies what follows as an HTML document allowing browsers and other special software to distinguish HTML documents from other types (DTDs) of SGML. All HTML documents written according to the current HTML specification (Version 4.01) should use the prologue tag displayed below.

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.01 Transitional//EN" >
```

Links

A link (short for hyperlink) is an HTML object that allows you to jump to a new location when you click or tap it. Links are found on almost every webpage and provide a simple means of navigating between pages on the web.

Links can be attached to text, images, or other HTML elements. Most text links are blue, since that is standard color web browsers use to display links. However, links can be any color since the style of the link text may be customized using HTML or CSS styles. In the early days of the web, links were underlined by default. Today, underlining links is less common.

When a link is applied to an image, the link tag encapsulates, or surrounds the image tag. Since the image tag is nested inside the link tag, the image itself becomes a link.

This method can be used to apply links to other elements such as <div> and objects. However, since CSS can be used to stylize a link, an <a> tag with a CSS class or ID attribute is often used in place of a <div> or tag.

Below is an example of the HTML for a text and image link:

Text Link: Computer Definition

Image Link:

Colour webpages

The Colour class is used to encapsulate colours in the defaults RGB colour space or colours in arbitrary colour spaces identified by a Colour Space. Every colour has an implicit alpha value of 1.0 or an explicit one provided in the constructor. The alpha value defines the transparency of a colour and can be represented by a float value in the range 0.0 - 1.0 or 0 - 255. An alpha value of 1.0 or 255 means that the colour is completely opaque and an alpha value of 0 or 0.0 means that the colour is completely transparent. When constructing a Colour with an explicit alpha or getting the colour/alpha components of a Colour, the colour components are never remultiplied by the alpha component.

Comment Line

This element is used to add a comment to an HTML document. An HTML comment begins with <! — and the comment closes with —>. HTML comments are visible to anyone that views the page source code, but are not rendered when the HTML document is rendered by a browser.

Sample HTML document

All HTML documents must start with a document type declaration: <!DOCTYPE html>. The HTML document itself begins with <html> and ends with </html>. The visible part of the HTML document is between <body> and </body>.

Example

```
<!DOCTYPE html>
<html>
<body>

<h1>My First Heading</h1>
<p>My first paragraph. </p>

</body>
</html>
```

The <!DOCTYPE> Declaration

The <!DOCTYPE> declaration represents the document type, and helps browsers to display web pages correctly.

It must only appear once, at the top of the page (before any HTML tags).

The <!DOCTYPE> declaration is not case sensitive.

Lists

HTML lists allow web developers to group a set of related items in lists.

- Ordered lists
- Unordered lists
- Nested lists

Ordered lists

Ordered (numbered) lists are used to display a list of items that should be in a specific order.

An example would be cooking instructions:

1. Gather ingredients
2. Mix ingredients together
3. Place ingredients in a baking dish
4. Bake in oven for an hour
5. Remove from oven
6. Allow to stand for ten minutes
7. Serve

If the list items were moved around into a different order, the information would no longer make sense:

1. Gather ingredients
2. Bake in oven for an hour
3. Serve
4. Remove from oven
5. Place ingredients in a baking dish
6. Allow to stand for ten minutes
7. Mix ingredients together

Ordered lists can be displayed with several sequencing options. The default in most browsers is decimal numbers, but there are others available:

- Letters
 - Lowercase ascii letters (a, b, c...)
 - Uppercase ascii letters (A, B, C...).
 - Lowercase classical Greek: (έ, ή, ί...)

- Numbers
 - Decimal numbers (1, 2, 3...)
 - Decimal numbers with leading zeros (01, 02, 03...)
 - Lowercase Roman numerals (i, ii, iii...)
 - Uppercase Roman numerals (I, II, III...)
 - Traditional Georgian numbering (an, ban, gan...)
 - Traditional Armenian numbering (mek, yerku, yerek...)

As with unordered lists, you can use CSS to change the style of your ordered lists. See [Styling lists and links](#) for more information.

Ordered list markup

Ordered lists use one set of `` tags wrapped around one or more sets of `` tags:

```
<ol>
  <li>Gather ingredients</li>
  <li>Mix ingredients together</li>
  <li>Place ingredients in a baking dish</li>
  <li>Bake in oven for an hour</li>
  <li>Remove from oven</li>
  <li>Allow to stand for ten minutes</li>
  <li>Serve</li>
</ol>
```

Beginning ordered lists with numbers other than 1

A common requirement in ordered list usage is to get them to start with a number other than 1 (or i, or I, etc.). This is done using the `start` attribute, which takes a numeric value (even if you're using CSS to change the list counters to be alphabetic or Roman). This is useful if you have a single list of items, but need to break up the list with a note or other related information. For example, we could do this with the previous example:

```
<ol>
  <li>Gather ingredients</li>
  <li>Mix ingredients together</li>
  <li>Place ingredients in a baking dish</li>
</ol>
```

`<p>`Before you place the ingredients in the baking dish, preheat the oven to

180 degrees centigrade/350 degrees fahrenheit in readiness for the next step.</p>

```
<ol start="4">  
  <li>Bake in oven for an hour</li>  
  <li>Remove from oven</li>  
  <li>Allow to stand for ten minutes</li>  
  <li>Serve</li>  
</ol>
```

This gives the following result:

1. Gather ingredients
2. Mix ingredients together
3. Place ingredients in a baking dish

Before you place the ingredients in the baking dish, preheat the oven to 180 degrees centigrade/350 degrees fahrenheit in readiness for the next step.

1. Bake in oven for an hour
2. Remove from oven
3. Allow to stand for ten minutes
4. Serve

Unordered lists

Unordered (bulleted) lists are used when a set of items can be placed in any order. An example is a shopping list:

- milk
- bread
- butter
- coffee beans

Although the items are all part of one list, you could put the items in any order and the list would still make sense:

- bread
- coffee beans
- milk
- butter

You can use CSS to change the bullet to one of several default styles, use your own image, or even display the list without bullets — we'll look at how to do that in the Styling lists and links article.

Unordered list markup

Unordered lists use one set of `` tags wrapped around one or more sets of `` tags:

```
<ul>
  <li>bread</li>
  <li>coffee beans</li>
  <li>milk</li>
  <li>butter</li>
</ul>
```

Nested lists

A nested list or a sublist is a list within a list. The trick to marking nested lists up correctly in HTML is to recognize that the sublist is actually a child of a list item and not of a list.

Example:

```
<ul>
  <li>Fruit
    <ul>
      <li>Bananas</li>
      <li>Apples
        <ul>
          <li>Green</li>
          <li>Red</li>
        </ul>
      </li>
      <li>Pears</li>
    </ul>
  </li>
  <li>Vegetables</li>
  <li>Meat</li>
</ul>
```

Output:

- Fruit
 - Bananas
 - Apples
 - Green
 - Red
 - Pears
- Vegetables
- Meat

REFERENCE

1. World Wide Web design with HTML - Xavier TMH Publications, 2000.
2. https://www.w3schools.com/tags/ref_colornames.asp
3. <https://www.webucator.com/how-to/how-properly-nest-lists-html.cfm>

PREPARED BY Dr.N.SHANMUGAVADIVU