

**BCSE203E**  
***Web Programming***

**Dr.Ragavan K**

# Syllabus

## **Module:2 | Hypertext Markup Language**

**2 hours**

HTML Tags, Structure, HTML Coding Conventions - Block Elements, Text Elements, Code-Related Elements, Character References - Lists, Images, section, article, and aside Elements - nav and a Elements - header and footer Elements.

# Html Lists

- HTML Lists are used to specify lists of information.
- There are three different types of HTML lists:
  - Unordered List or Bulleted List (ul)
  - Ordered List or Numbered List (ol)
  - Description List or Definition List (dl)

# Unordered Lists

- ▶ **Unordered list element (ul)**

- ▶ Creates a list in which each item **begins with a bullet symbol** (called a disc)
- ▶ **li (list item):** Entry in an unordered list

- ▶ **Format:**

```
<ul>  
    <li>....</li>  
    <li>....</li>  
    </ul>
```

	Dot	Circle	Square	None
• Apple	○ Apple	■ Apple	Apple	
• Mango	○ Mango	■ Mango	Mango	
• Orange	○ Orange	■ Orange	Orange	
• Banana	○ Banana	■ Banana	Banana	

# Unordered Lists

```
<html>
<head>
    <title>Internet and WWW How to Program – Links</title>
</head>
<body>

<h1>My favorites</h1>

<p><strong>List of items i consume everyday!</strong></p>

<!-- An unordered list -->
<ul>
    <li>Coffee</li>
    <li>Tea</li>
    <li>Milk</li>
</ul>
</body>
</html>
```

## My favorites

List of items i consume everyday!

- Coffee
- Tea
- Milk

# Unordered HTML List - Choose List Item Marker

- ❑ The **list-style-type** property is used to define the style of the list item marker.
- ❑ It can have one of the following values:

<b>Value</b>	<b>Description</b>
disc	Sets the list item marker to a bullet (default)
circle	Sets the list item marker to a circle
square	Sets the list item marker to a square
none	The list items will not be marked

# Unordered HTML List - Choose List Item Marker

```
<html>
<body>
<h1>List of fruits</h1>
<h4>Bullet name->Disc</h4>
<ul style="list-style-type:disc;">
    <li>Apple</li>
    <li>Banana</li>
    <li>Mango</li>
</ul>
<hr>
<h4>Bullet name->Circle</h4>
<ul style="list-style-type:circle">
    <li>Apple</li>
    <li>Banana</li>
    <li>Mango</li>
</ul>
<hr>
<h4>Bullet name->Square</h4>
<ul style="list-style-type:square">
    <li>Apple</li>
    <li>Banana</li>
    <li>Mango</li>
</ul>
<hr>
<h4>Bullet name->None</h4>
<ul style="list-style-type:none">
    <li>Apple</li>
    <li>Banana</li>
    <li>Mango</li>
</ul>
</body>
</html>
```

## List of fruits

### Bullet name->Disc

- Apple
- Banana
- Mango

### Bullet name->Circle

- Apple
- Banana
- Mango

### Bullet name->Square

- Apple
- Banana
- Mango

### Bullet name->None

- Apple
- Banana
- Mango

# Nested Unordered Lists

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

<h2>A Nested List</h2>

<p><strong>Lists can be nested (list inside list):</strong></p>

<ul>
  <hr>
  <li><strong>List-1: Coffee</strong></li>
    {
      <ul style="list-style-type:circle">
        <li>Cold coffee</li>
        <li>Hot coffee</li>
      </ul>
    }
  <hr>
  <li><strong>List-2: Tea</strong></li>
    {
      <ul style="list-style-type:square">
        <li>Black tea</li>
        <li>Green tea</li>
      </ul>
    }
  <hr>
</ul>

</body>
</html>
```

## A Nested List

Lists can be nested (list inside list):

- List-1: Coffee
  - Cold coffee
  - Hot coffee
- List-2: Tea
  - Black tea
  - Green tea

# Ordered Lists or Numbered List

- In the ordered HTML lists, all the **list items are marked with numbers by default.**
- It is known as **numbered list** also.
- **Format:**

```
<ol>  
    <li>....</li>  
    <li>....</li>  
</ol>
```

# Ordered Lists or Numbered List

```
<!DOCTYPE>
<html>
<body>
<h1><strong>Zodiac Signs</strong></h1>
<ol>
  <li>Aries</li>
  <li>Libra</li>
  <li>Scorpio</li>
</ol>
</body>
</html>
```

## Zodiac Signs

1. Aries
2. Libra
3. Scorpio

# Ordered Lists - The Type Attribute

- The **type** attribute of the `<ol>` tag, defines the type of the list item marker:

Type	Description
type="1"	The list items will be numbered with numbers (default)
type="A"	The list items will be numbered with uppercase letters
type="a"	The list items will be numbered with lowercase letters
type="I"	The list items will be numbered with uppercase roman numbers
type="i"	The list items will be numbered with lowercase roman numbers

# Ordered Lists - The Type Attribute

```
<!DOCTYPE html>
<html>
<body>
<h1><strong>Zodiac Signs</strong></h1>
<hr>
<p><strong>Type-1: Numbers</strong></p>
<ol>
<li>Aries</li>
<li>Scorpio</li>
</ol>
<hr>
<p><strong>Type-2: Uppercase letters</strong></p>
<ol type="A">
<li>Aries</li>
<li>Scorpio</li>
</ol>
<hr>
<p><strong>Type-3: Lowercase letters</strong></p>
<ol type="a">
<li>Aries</li>
<li>Scorpio</li>
</ol>
<hr>
<p><strong>Type-4: Uppercase roman numbers</strong></p>
<ol type="I">
<li>Aries</li>
<li>Scorpio</li>
</ol>
<hr>
</body>
</html>
```

## Zodiac Signs

### Type-1: Numbers

- 1. Aries
- 2. Scorpio

### Type-2: Uppercase letters

- A. Aries
- B. Scorpio

### Type-3: Lowercase letters

- a. Aries
- b. Scorpio

### Type-4: Uppercase roman numbers

- I. Aries
- II. Scorpio

# Nested Ordered/Unordered Lists

```
<!DOCTYPE html>
<html>
<head>
    <title> Unordered List </title>
</head>
<body>
    <h2>Nested Unordered List</h2>

    <ol>
        <li>Programming Languages</li>
        <ul>
            <li>C</li>
            <li>C++</li>
        </ul>
        <li>DSA</li>
        <ul>
            <li>Array</li>
            <li>Linked List</li>
            <li>stack</li>
        </ul>
        <li>Web Technologies</li>
        <ul>
            <li>HTML</li>
            <li>CSS</li>
            <li>JavaScript</li>
        </ul>
    </ol>

</body>
</html>
```

## Nested Unordered List

1. Programming Languages
  - C
  - C++
2. DSA
  - Array
  - Linked List
  - stack
3. Web Technologies
  - HTML
  - CSS
  - JavaScript

# Task-6

## **The Best Features of the Internet**

- You can meet new people from countries around the world.
- You have access to new media as it becomes public:
  - New games
  - New applications
    - 1. For business
    - 2. For pleasure
  - Around the clock news
  - Search engines
  - Shopping
  - Programming
    - 1. XML
    - 2. Java
    - 3. XHTML
    - 4. Scripts
    - 5. New languages
- Links
- Keeping in touch with old friends
- It is the technology of the future!

## Task-7

**Numbered list:**

1. Apples
2. Bananas
3. Lemons
4. Oranges

**Letters list:**

- A. Apples
- B. Bananas
- C. Lemons
- D. Oranges

**Lowercase letters list:**

- a. Apples
- b. Bananas
- c. Lemons
- d. Oranges

# Task-8

**Lowercase letters list:**

- a. Apples
- b. Bananas
- c. Lemons
- d. Oranges

**Roman numbers list:**

- I. Apples
- II. Bananas
- III. Lemons
- IV. Oranges

**Lowercase Roman numbers list:**

- i. Apples
- ii. Bananas
- iii. Lemons
- iv. Oranges

# HTML Definition Lists

- ▶ A definition list is a **list of items, describing each item.**
- ▶ The **<dl> tag** defines a definition list.
- ▶ The **<dl> tag is used in conjunction with <dt>** (defines the item in the list) and **<dd> Defines a description of an item** in a definition)
- ▶ **Format:**

```
<dl>
  <dt>....</dt>
    <dd>.....</dd>
  <dt>....</dt>
    <dd>.....</dd>
</dl>
```

# HTML Definition Lists

```
<!DOCTYPE html>
<html>
<body>
<h1><strong>Abbreviations</strong></h1>
<dl>
  <dt>PDF-</dt>
    <dd>Portable Document Format</dd>
  <dt>RAID-</dt>
    <dd>Redundant Array of Independent Disks</dd>
  <dt>RAM-</dt>
    <dd>Random Access Memory</dd>
  <dt>RDMA-</dt>
    <dd>Remote Direct Memory Access</dd>
</dl>
</body>
</html>
```

## Abbreviations

- PDF-  
Portable Document Format
- RAID-  
Redundant Array of Independent Disks
- RAM-  
Random Access Memory
- RDMA-  
Remote Direct Memory Access

# HTML Definition Lists

<dl>

<hr>

<dt><strong>GUI</strong></dt>

<dd>Graphical User Interface. A Graphical User Interface is designed so that the user can perform tasks by using a mouse to point & click to navigate around the computer.</dd>

<hr>

<dt><strong>RAM</strong></dt>

<dd>Random Access Memory. It is a temporary storage area that the processor uses to execute programs and to hold data.</dd>

<hr>

</dl>

## GUI

Graphical User Interface. A Graphical User Interface is designed so that the user can perform tasks by using a mouse to point & click to navigate around the computer.

## RAM

Random Access Memory. It is a temporary storage area that the processor uses to execute programs and to hold data.

# Task-9

## Largest Header

Smallest Header

This is a paragraph

1. First create the ol tags
2. Then create the li tags

- Milk
- Sugar

Cat

Four legged meower

Dog

Four legged woofer

# <del> and <ins> tags

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

<h1>Insert and delete element</h1>

<p><del>Only 50 tickets left!</del></p>
<ins>SOLD OUT!</ins>
<hr>

<p><s>Only 50 tickets left!</s></p>
<p>SOLD OUT!</p>
<hr>

<p><strike>Only 50 tickets left!</strike></p>
<p>SOLD OUT!</p>
<hr>

</body>
</html>
```

## Insert and delete element

Only ~~50~~ tickets left!

SOLD OUT!

---

Only ~~50~~ tickets left!

SOLD OUT!

---

Only ~~50~~ tickets left!

SOLD OUT!

---

# <nav> tag

- The **<nav> html** element represents a section of a page whose **purpose is to provide navigation links, either within the current document or to other documents.**
- Common examples of navigation sections are **menus, tables of contents, and indexes.**

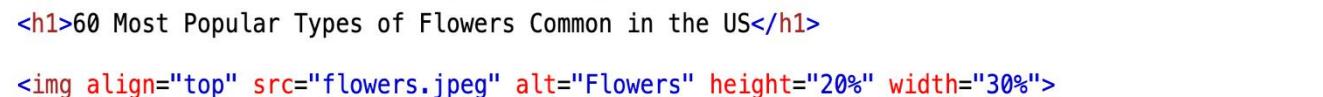
[Bikes](#) > [BMX](#) > Jump Bike 3000

---

## Jump Bike 3000

This BMX bike is a solid step into the pro world. It looks as legit as it rides and is built to polish your skills.

# <nav> tag

```
<h1>60 Most Popular Types of Flowers Common in the US</h1>


A flower, also known as a bloom or blossom, is the reproductive structure found in flowering plants (plants of the division Angiospermae).


<nav>
  <ol>
    <li><a href="https://en.wikipedia.org/wiki/Rose">Rose</a></li>
    <li><a href="https://en.wikipedia.org/wiki/Taxonomy_(biology)">Taxonomy (biology)</a></li>
    <li><a href="https://en.wikipedia.org/wiki/Taxonomy_(biology)#History">History</a></li>
  </ol>
</nav>

<nav>
  <a href="#">Home</a> |
  <a href="#">Previous</a> |
  <a href="#">Next</a> |
  <a href="#">Exit</a>
</nav>
```

## 60 Most Popular Types of Flowers Common in the US



A flower, also known as a bloom or blossom, is the reproductive structure found in flowering plants (plants of the division Angiospermae).

1. [Rose](#)
2. [Taxonomy \(biology\)](#)
3. [History](#)

[Home](#) | [Previous](#) | [Next](#) | [Exit](#)

# <section> tag

- A web page may contain many **chapters, headers, footers, or other sections on a web page**
- The HTML **<section> tag** is used to **define sections in a document.**

# <section> tag

```
<!DOCTYPE>
<html>

<body>
<h2> Sports</h2>

<section>
<h3> Football </h3>
<p> Football is a family of team sports that involve, to varying degrees, kicking a ball to score a goal. Unqualified, the word football normally means the form of football that is the most popular where the word is used.
</p>
</section>

<section>
<h3> Cricket</h3>
<p> Cricket is a bat-and-ball game played between two teams of eleven players on a field at the centre of which is a 22-yard (20-metre) pitch with a wicket at each end, each comprising two bails balanced on three stumps.
</p>
</section>

</body>
</html>
```

## Sports

### Football

Football is a family of team sports that involve, to varying degrees, kicking a ball to score a goal. Unqualified, the word football normally means the form of football that is the most popular where the word is used.

### Cricket

Cricket is a bat-and-ball game played between two teams of eleven players on a field at the centre of which is a 22-yard (20-metre) pitch with a wicket at each end, each comprising two bails balanced on three stumps.

# <div> tag

- The **<div> tag** is known as the **Division tag**.
- The div tag is used in HTML **to make divisions of content in the web page like** (text, images, header, footer, navigation bar, etc).
- Div tag has both **open (<div>)** and **closing (</div>)** tags and it is mandatory to close the tag.
- The Div is the **most usable tag** in web development because it **helps us to separate data in the web page**.

# <div> tag

```
<body>
<center>
<div>
<!--open tag of Div!-->
<caption>
<h1> <font color="Blue">Gym </font> </h1>
</caption>
<h1 align="justify"><font color="Green" size="5">A gym,
short for gymnasium (pl.: gymnasiums or gymnasia), is an
indoor venue for exercise and sports. </font>
</h1>
</div>
<!--closing tag of Div!-->
</center>

<div style="border:1px solid pink;padding:20px;font-
size:20px">

<p align="right"> <b> <i> <font face="Verdana" size="6"
color="red">The div tag is generally used by web developers
to group HTML elements together and apply CSS styles to
many elements at once. </font> </i> </b> </p>

</div>

</body>
```

## Gym

A gym, short for gymnasium (pl.: gymnasiums or gymnasia), is an indoor venue for exercise and sports.

***The div tag is generally used by web developers to group HTML elements together and apply CSS styles to many elements at once.***

# <span> tag

- A **<span> element** which is used to **color a part of a text**
- The <span> tag is an inline container used to mark up a part of a text, or a part of a document
- The <span> tag is much like the <div> element, but <div> is a **block-level element** and <span> is an **inline element**

# <span> tag

```
<!DOCTYPE html>
<html>
<body>
    <h2><center>Student life </center></h2>
    <p>
        Student life is
        <span style="color:red;font-weight:bolder">
            one of the most memorable phases of a person's life.
        </span>
        The phase of student life
        <span style="background-color:lightgreen;">
            builds the foundation of our life.
        </span>
    </p>
    <div>
        In student life, we do not just learn from books. We learn
        to grow emotionally, physically, philosophically as well as
        socially.
    </div>
</body>
</html>
```

Student life is **one of the most memorable phases of a person's life.** The phase of student life **builds the foundation of our life.**

In student life, we do not just learn from books. We learn to grow emotionally, physically, philosophically as well as socially.

## Student life

# Task-10

## Welcome to my site. Please come in and stay awhile.

I started this web site because Halloween has always been my favorite holiday. But during the last year, I started selling some of my favorite Halloween products, and they've become quite a hit.

If you click on the Personal link, you can browse my favorite Halloween pictures, stories, and films. And if you join my email list, I will keep you up-to-date on all things Halloween.

### Product categories

- [Props](#)
- [Costumes](#)
- [Special Effects](#)
- [Masks](#)

### My guarantee

If you aren't completely satisfied with everything you buy from my site, you can return it for a full refund. **No questions asked!**



## Reference for first letter selector

```
<!DOCTYPE html>
<html>
<head>

<style>
p::first-letter {
  font-size: 200%;
  color: red;
}
</style>

</head>
<body>

<p>My name is _____ </p>
<p>I live in Vellore.</p>

</body>
</html>
```

M<sub>y</sub> name is \_\_\_\_\_

I live in Vellore.

# Task-11

## Objective

To obtain a full-time entry level Web developer position with an opportunity for growth and advancement.

## Interests

- 1. Blogging
- 2. Flash Animations

## Education

### Associate's of Science Degree, 2005

- Some Community College
- Computer Information Systems

### Webmaster Certificate, 2004

- Another Community College
- Web site design and server-side programming

## Experience

### Web Programmer

- Horizon Wireless, 2003-current
- PHP programming
- MySQL database design

## References

Rebecca Isbrainey

Professor, Some Community College, 909-606-8552

Wade W. Wilson

Director of Web Development, Horizon Wireless, 111-397-7765

