

# Web Application Development

❖ HTML

# HTML

- HTML
  - Stands for hyper text markup language
  - Hyper Text
    - The text that has reference/link to another text document
  - Markup language
    - Language that is both machine and human readable, It is text-encoding system consisting of a set of symbols inserted in a text document to control its structure, formatting and contents
- HTML Page
  - HTML pages are text documents containing HTML structure

# What is HTML?

- HTML is **markup** language
- HTML is an **interpreted** language
- HTML **describes the structure/content** of a page
- HTML files are text files with extension “htm” or “html” (we will always use “.html” extension in this class)

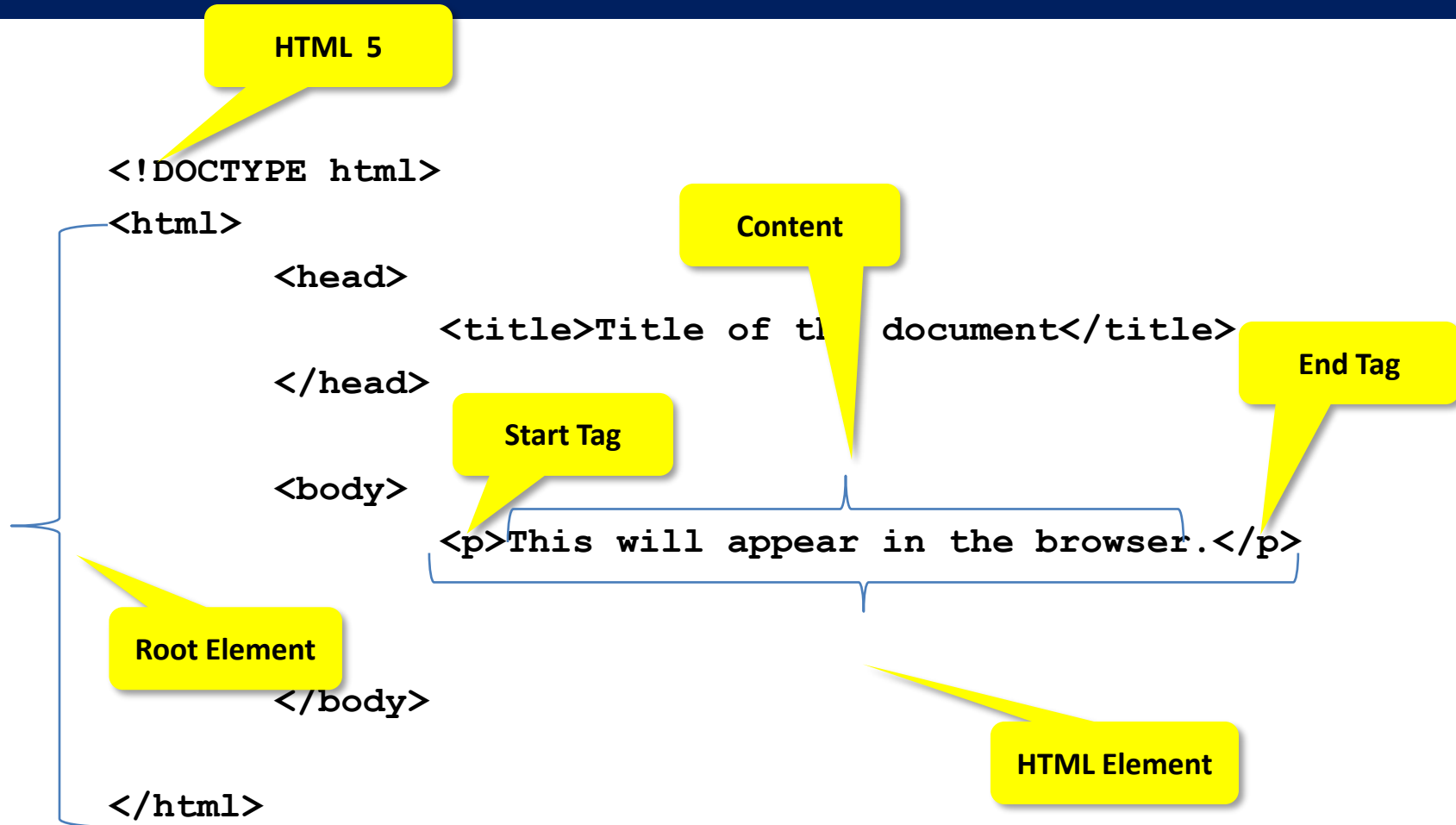
# HTML Tags

- HTML markup tags are usually called HTML tags
  - HTML tags are keywords surrounded by angle brackets like `<html>`
  - HTML tags normally come in pairs like `<p>` and `</p>`
    - The first tag in a pair is the **start tag**, the second tag is the **end tag**
    - Start and end tags are also called **opening tags** and **closing tags**

# HTML Elements

- An HTML element is defined by a start tag, some content, and an end tag.
- Example
  - `<body>...</body>`
  - `<h1>...</h1>`
  - `<p>...</p>`

# HTML Document



# Example: HTML Elements

- Don't worry about contents

```
<html>
```

## This is the Main Heading

```
<body>
```

```
<h1>This is
```

This text might be an introduction to the rest of the page. And if the page is a long one it might be split up into several sub-headings.

```
<p>This text  
the page.
```

```
be split
```

### This is a Sub-Heading

```
<h2>This is
```

```
<p>Many long  
you follow  
There may
```

Many long articles have sub-headings so to help you follow the structure of what is being written. There may even be sub-sub-headings (or lower-level headings).

```
headings)
```

### Another Sub-Heading

```
<h2>Another
```

```
<p>Here you
```

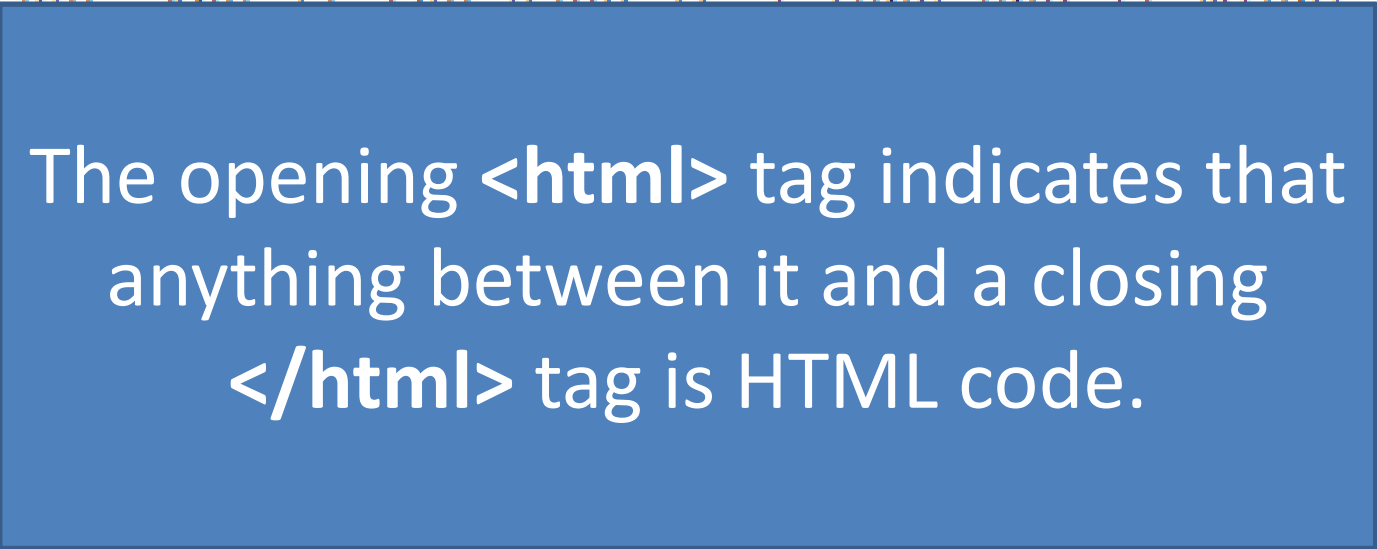
Here you can see another sub-heading.

```
</body>
```

```
</html>
```

# Example: HTML Elements

```
<html>
  <body>
    <h1>This is the Main Heading</h1>
    <p>This text might be an introduction to the rest of
      the page. And if the page is a long one it might
      be sp
    <h2>This
    <p>Many
      you f
      There
      headi
    <h2>Another sub-heading</h2>
    <p>Here you can see another sub-heading.</p>
  </body>
</html>
```

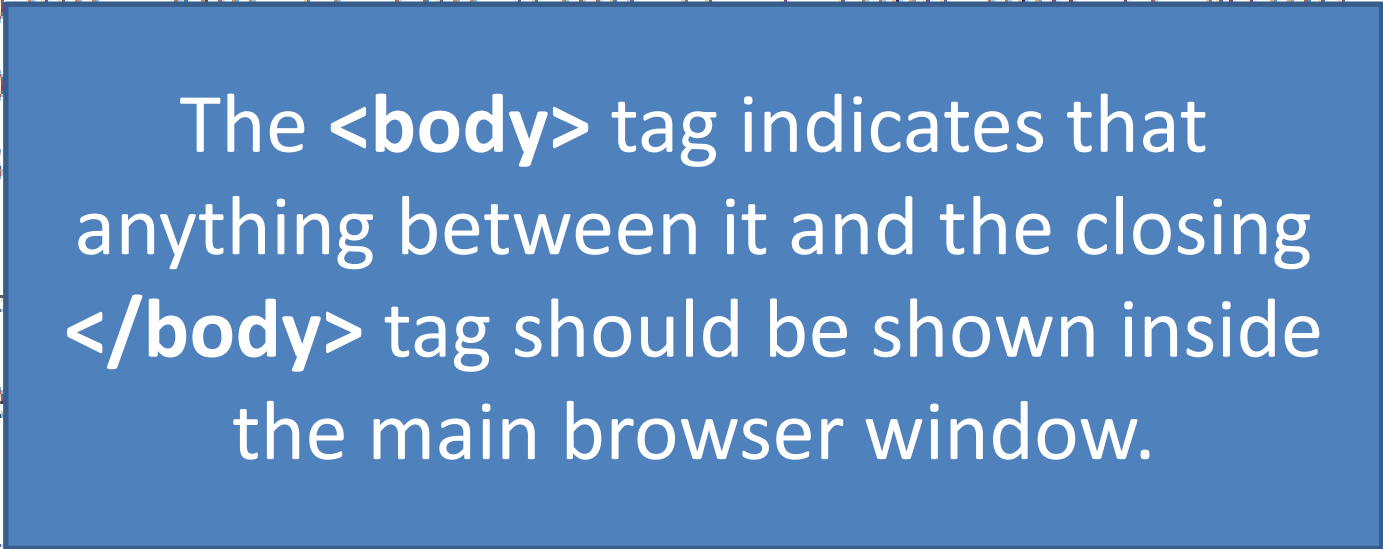


The opening **<html>** tag indicates that anything between it and a closing **</html>** tag is HTML code.



# Example: HTML Elements

```
<html>
  <body>
    <h1>This is the Main Heading</h1>
    <p>This text might be an introduction to the rest of
      the page. And if the page is a long one it might
      be sp
    <h2>This
    <p>Many
      you f
      There
      headi
    <h2>Another sub-heading</h2>
    <p>Here you can see another sub-heading.</p>
  </body>
</html>
```



The **<body>** tag indicates that anything between it and the closing **</body>** tag should be shown inside the main browser window.

# Example: HTML Elements

```
<html>
```

```
<body>
```

```
<h1>This is
```

## This is the Main Heading

This text might be an introduction to the rest of the page. And if the page is a long one it might be split up into several sub-headings.

Words

</h1>

### This is a Sub-Heading

Many long articles have sub-headings so to help you follow the structure of what is being written. There may even be sub-sub-headings (or lower-level headings).

```
heading
```

```
<h2>Anothe
```

### Another Sub-Heading

```
<p>Here yo
```

Here you can see another sub-heading.

```
</body>
```

```
</html>
```

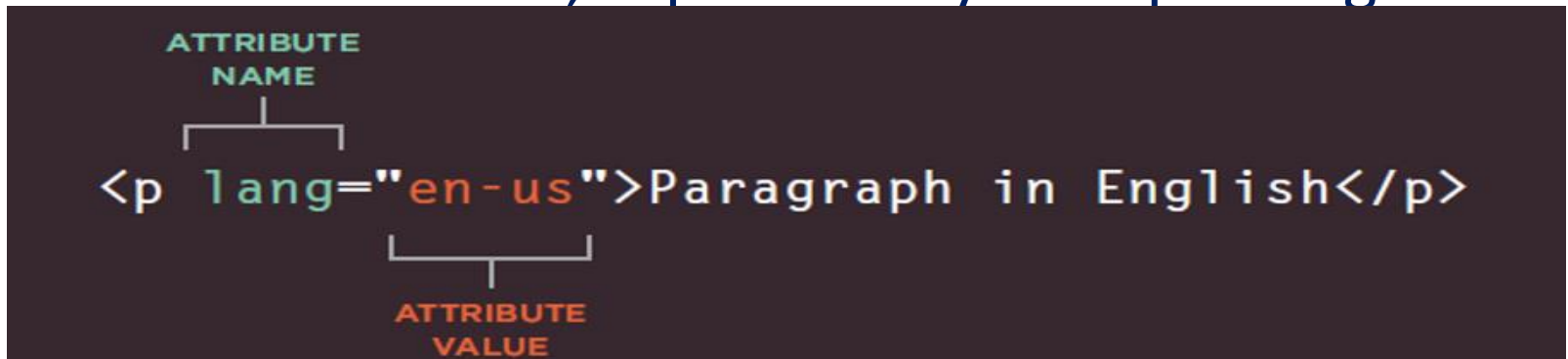
# Example: HTML Elements

```
<html>
  <body>
    <h1>This is the Main Heading</h1>
    <p>This text might be an introduction to the rest of
      the page. And if the page is a long one it might
      need some sub-headings.</p>
    <h2>Another sub-heading</h2>
    <p>Here you can see another sub-heading.</p>
  </body>
</html>
```

paragraph of text  
appears between these  
<p> and </p> tags.

# Attributes

- Attributes Tell Us More About Elements
  - Attributes provide additional information about the contents of an element. They appear on the opening tag of the element and are made up of two parts: a name and a value, separated by an equals sign.



```
<h2 title="inside h2">Web Application Development</h2>  
<h4 title="inside h4 ">Welcome to the course</h4>  
<h4 Style="color:blue">Why it appears blue</h4>
```

# Exercise

- Write down corresponding HTML code

## **Web Application Development**

Welcome to the course

Why it appears blue

# Headings

- HTML has six "levels" of headings:
  - **<h1>** is used for main headings
  - **<h2>** is used for subheadings
  - If there are further sections
  - under the subheadings then the
  - **<h3>** element is used, and so on...

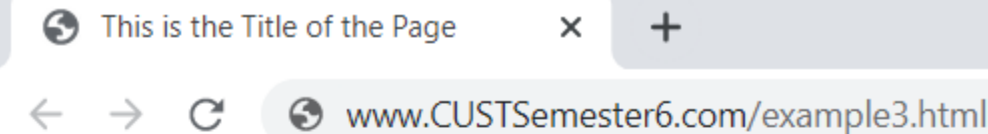
# Headings

- HTML has six "levels" of headings:
  - **<h1>** is used for main headings
  - **<h2>** is used for subheadings
  - If there are further sections
  - under the subheadings then the
  - **<h3>** element is used, and so on...

# Heading

- Example code

```
<html>
<head>
<title>This is the Title of the Page</title>
</head>
<body>
<h1>This is a Main Heading</h1>
<h2>This is a Level 2 Heading</h2>
<h3>This is a Level 3 Heading</h3>
<h4>This is a Level 4 Heading</h4>
<h5>This is a Level 5 Heading</h5>
<h6>This is a Level 6 Heading</h6>
</body>
</html>
```



**This is a Main Heading**

**This is a Level 2 Heading**

**This is a Level 3 Heading**

**This is a Level 4 Heading**

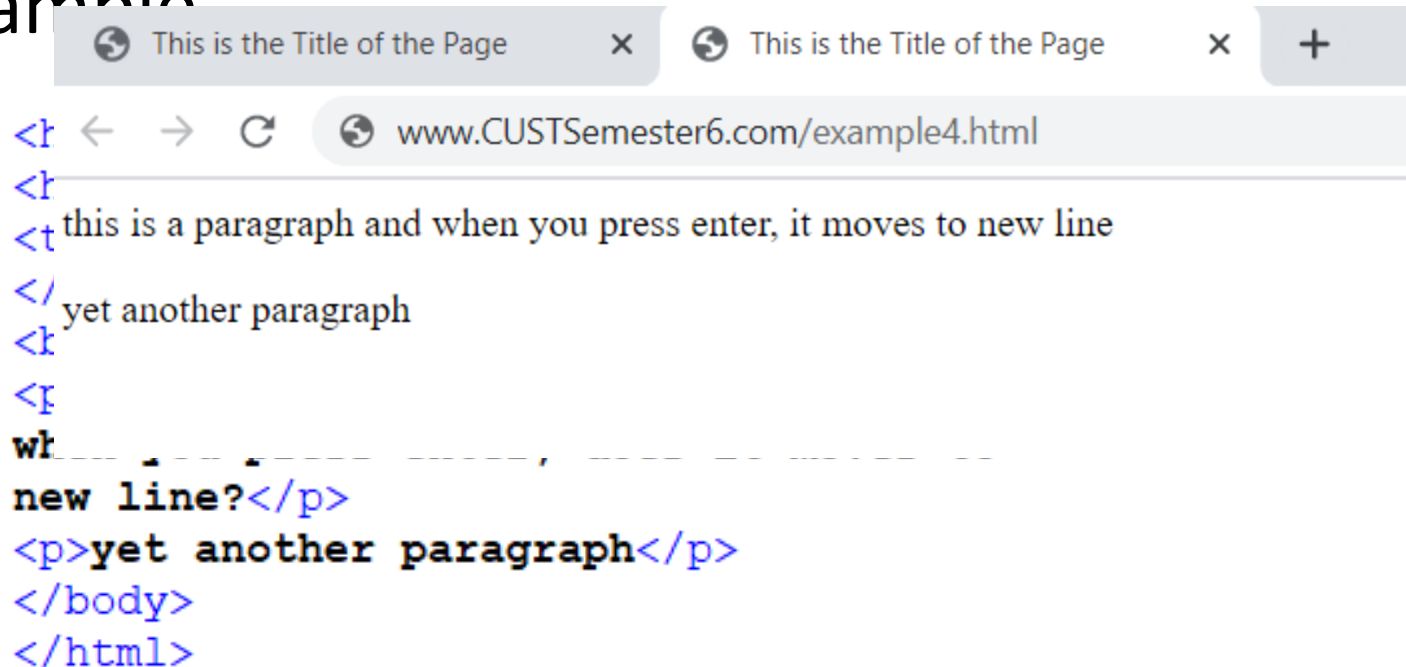
**This is a Level 5 Heading**

**This is a Level 6 Heading**



# Paragraph

- A paragraph consists of one or more sentences that form a kind of dialogue.
- Example



The screenshot shows a web browser with two tabs, both titled "This is the Title of the Page". The address bar displays the URL "www.CUSTSemester6.com/example4.html". The browser content area shows the following HTML code:

```
<!--  
<t  
<t this is a paragraph and when you press enter, it moves to new line  
</  
<k yet another paragraph  
<k  
<!--  
wt  
new line?</p>  
<p>yet another paragraph</p>  
</body>  
</html>
```

# Bold and Italic

- Bold
  - By enclosing words in the tags `<b>` and `</b>` we can make characters appear bold.
- Italic
  - By enclosing words in the tags `<i>` and `</i>` we can make characters appear italic.
- Example

```
<html>
<body>

<p><b>This text is bold</b></p>
<p><i>This text is italic</i></p>
<p>This is<sub> subscript</sub> and <sup>superscript</sup></p>

</body>
</html>
```

**This text is bold**

*This text is italic*

This is subscript and superscript

# Line Breaks & Horizontal Rules

- Example

```
<html>
<head>
<title>This is the Title of the Page</title>
</head>
<body>
<p>The Earth<br />gets one hundred tons heavier
every day<br />due to falling space dust.</p>
```

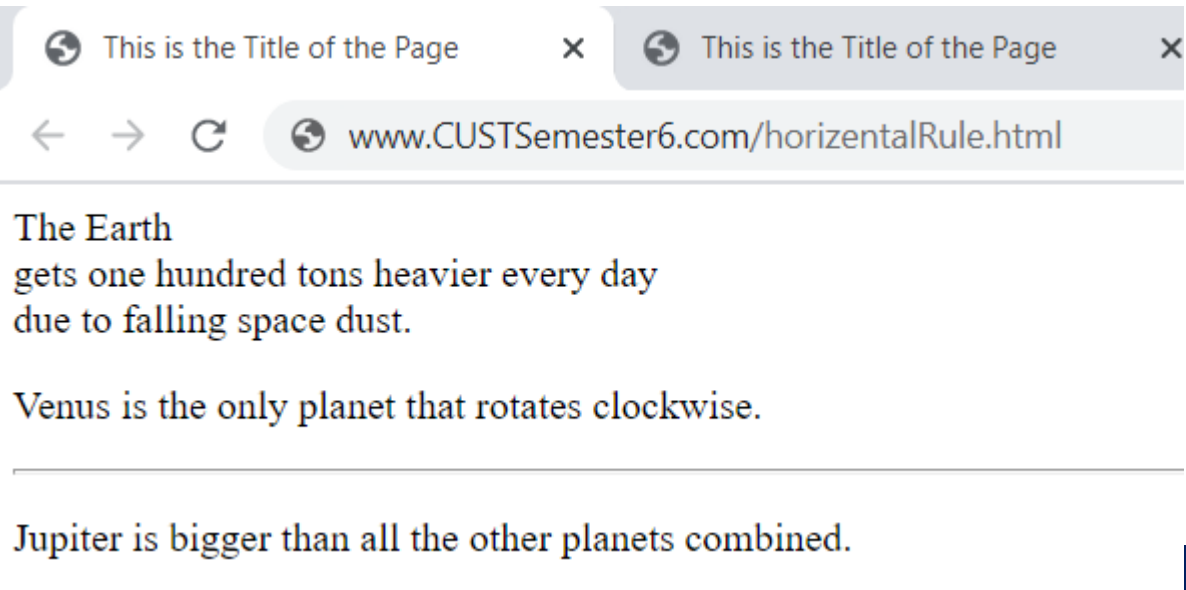
```
<p>Venus is the o
clockwise.</p>
```

```
<hr />
```

```
<p>Jupiter is big
combined.</p>
```

```
</body>
```

```
</html>
```



# Abbreviation or Accronym

- Abbreviation or an acronym
  - Use an abbreviation or an acronym, when you like to add shortened versions of something else

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

```
<h1>The abbr element</h1>
```

```
<p>The <abbr title="World Health Organization">WHO</abbr> was founded in 1948.</p>
```

```
</body>  
</html>
```

## The abbr element

The WHO was founded in 1948.

# HTML Quotations

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

<p>The HTML address.</p>

<address>
Written by John Doe.<br>
Visit us at:<br>
Example.com<br>
Box 564, Disneyland<br>
USA
</address>

</body>
</html>
```

The HTML address.

*Written by John Doe.  
Visit us at:  
Example.com  
Box 564, Disneyland  
USA*

# HTML Comments

- Just like other languages, HTML also provides tags to add comments

```
<!-- Write your comments here -->
```

# HTML Images

- The HTML `<img>`
  - tag is used to embed an image in a web page.

```
<html>
<body>

<h2>HTML Image</h2>


</body>
</html>
```

HTML Image



# Absolute Paths

- An **absolute URL** contains everything you need to uniquely identify a particular file on the Internet.

<http://www.cust.edu.pk/Faculties/tabid/56/Default.aspx>

`C://courses/web/page.html`



# Relative Paths

- A **relative URL** indicates where the resource is in relation to the current page.
  - **Same Directory** `contact.html`
  - **Subdirectory**
    - `arts/index.html`
    - `entertainment/arts/index.html`
  - **Parent Directory**
    - `../index.html`
    - `../../index.html`
  - **From the Root** `/contact.html`

# Lists

- HTML provides us with three different types:
  - **Ordered lists**
    - are lists where each item in the list is numbered.
  - **Unordered lists**
    - are lists that begin with a bullet point (rather than characters that indicate order).
  - **Definition lists**
    - are made up of a set of terms along with the definitions for each of those terms.

# List

- Ordered List
  - `<ol>`
    - The ordered list is created with the `<ol>` element.
  - `<ul>`
    - The unordered list is created with `<ul>` element.
  - `<li>`
    - Each item in the list is placed between an opening `<li>` tag
    - and a closing `</li>` tag. (The `li` stands for list item.)
  - Browsers indent lists by default.

# List

- Example

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

<h2>An Unordered HTML List</h2>

<ul>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ul>

<h2>An Ordered HTML List</h2>

<ol>
  <li>Coffee</li>
  <li>Tea</li>
  <li>Milk</li>
</ol>

</body>
</html>
```

## An Unordered HTML List

- Coffee
- Tea
- Milk

## An Ordered HTML List

1. Coffee
2. Tea
3. Milk

# List

- Definition List
  - The definition list is created with the **<dl>** element and usually consists of a series of terms and their definitions.

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

<dl>
  <dt>Coffee</dt>
  <dd>Black hot drink</dd>
  <dt>Milk</dt>
  <dd>White cold drink</dd>
</dl>

</body>
</html>
```

Coffee	Black hot drink
Milk	White cold drink

# Example HTML document

## Scrambled Eggs

Eggs are one of my favourite foods. Here is a recipe for deliciously rich scrambled eggs.

## Ingredients

- 2 eggs
- 1tbs butter
- 2tbs cream

## Method

1. Melt butter in a frying pan over a medium heat
2. Gently mix the eggs and cream in a bowl
3. Once butter has melted add cream and eggs
4. Using a spatula fold the eggs from the edge of the pan to the center every 20 seconds (as if you are making an omelette)
5. When the eggs are still moist remove from the heat (it will continue to cook on the plate until served)

```
<html>
  <head>
    <title>Lists</title>
  </head>
  <body>
    <h1>Scrambled Eggs</h1>
    <p>Eggs are one of my favourite foods. Here is a
      recipe for deliciously rich scrambled eggs.</p>
    <h2>Ingredients</h2>
    <ul>
      <li>2 eggs</li>
      <li>1tbs butter</li>
      <li>2tbs cream</li>
    </ul>
    <h2>Method</h2>
    <ol>
      <li>Melt butter in a frying pan over a medium
        heat</li>
      <li>Gently mix the eggs and cream in a bowl</li>
      <li>Once butter has melted add cream and eggs</li>
      <li>Using a spatula fold the eggs from the edge of
        the pan to the center every 20 seconds (as if
        you are making an omelette)</li>
      <li>When the eggs are still moist remove from the
        heat (it will continue to cook on the plate
        until served)</li>
    </ol>
  </body>
</html>
```

# Link

- Hyperlink
  - A **hyperlink** is a word, phrase, or image that you can click on to jump to a new document or a new section within the current document.
  - Example
    - `<a href="url">link text</a>`

# Hyperlink

- Example

```
<!DOCTYPE html>
<html>
  <body>
    <ul>
      <li><a href="index.html">Home</a></li>
      <li><a href="about-us.html">About</a></li>
      <li><a href="movies.html">Movies</a></li>
      <li><a href="contact.html">Contact</a></li>
    </ul>
  </body>
</html>
```

- [Home](#)
- [About](#)
- [Movies](#)
- [Contact](#)



# Hyperlink

- Opening link in new window
  - Open link in new page by using *target="\_blank"*

```
<!DOCTYPE html>
<html>
  <body>
    <p>
      <ul>
        <li><a href="index.html" target="_blank">Home</a></li>
        <li><a href="about-us.html">About</a></li>
        <li><a href="movies.html">Movies</a></li>
        <li><a href="contact.html">Contact</a></li>
      </ul>
    </p>
  </body>
</html>
```

# Hyperlink

- Linking to a Specific Part of the Same Page

```
<!DOCTYPE html>
<html>
  <body>
    <h1 id="top">Film-Making Terms</h1>
    <a href="#bottom">bottom</a><br />
    <br /><br /><br /><br /><br />
    <br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br />
    <br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br />
    <br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br />
    <br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br />
    <br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br />
    <br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br />
    <br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br /><br />

    <h2 id="bottom">Bottom of the page</h2>
    <p>A speech, preface, introduction, or brief scene
preceding the the main action or plot of a film;
contrast to epilogue</p>
    <p><a href="#top">Top</a></p>
  </body>
</html>
```

# Hyperlink

- Linking to a Specific Part of the another Page
  - If you want to link to a specific part of a different page (whether on your own site or a different website) you can use a similar technique.

# Images

- There are three rules to remember when you are creating images.
  - Save images in the right format
  - Save images at the right size
  - Use the correct resolution

# Figure & Figure Caption

- **<figure>** element to contain images
- The **<img>** element is used to add images to a web page
- **<figcaption>** allow web page authors to add a caption to an image.

```
<figure>  
    
  <br />  
  <figcaption>Sea otters hold hands when they  
    sleep so they don't drift away from each  
    other.</figcaption>  
</figure>
```



# Images

```
<html>
<head>
  <title>Images</title>
</head>
<body>
  <h1>
    
  </h1>
  <figure>
    
    <p>
      <figcaption>
        This recipe for individual chocolate
        cakes is so simple and so delectable!
      </figcaption>
    </p>
  </figure>
  <h4>More Recipes:</h4>
  <p>
    
    
    
  </p>
</body>
</html>
```

## From A to Zucchini



This recipe for individual chocolate cakes is so simple and so delectable!

### More Recipes:



# Tables

- A table represents information in a grid format.
- **Table**
  - The `<table>` element is used to create a table. The contents of the table are written out row by row.
- **Row**
  - start of each row using the opening `<tr>` tag and `</tr>` closing tag
- **Cell**
  - Each cell of a table is represented using a `<td>` element with `</td>` closing tag

# Tables

```
<table>
  <tr>
    <td>15</td>
    <td>15</td>
    <td>30</td>
  </tr>
  <tr>
    <td>45</td>
    <td>60</td>
    <td>45</td>
  </tr>
  <tr>
    <td>60</td>
    <td>90</td>
    <td>90</td>
  </tr>
</table>
```

15	15	30
45	60	45
60	90	90



# Tables

```
<table>
  <tr>
    <th></th>
    <th scope="col">Saturday</th>
    <th scope="col">Sunday</th>
  </tr>
  <tr>
    <th scope="row">Tickets sold:</th>
    <td>120</td>
    <td>135</td>
  </tr>
  <tr>
    <th scope="row">Total sales:</th>
    <td>$600</td>
    <td>$675</td>
  </tr>
</table>
```

	Saturday	Sunday
<b>Tickets sold:</b>	120	135
<b>Total sales:</b>	\$600	\$675

# Tables

```
<table>
  <tr>
    <th></th>
    <th>9am</th>
    <th>10am</th>
    <th>11am</th>
    <th>12am</th>
  </tr>
  <tr>
    <th>Monday</th>
    <td colspan="2">Geography</td>
    <td>Math</td>
    <td>Art</td>
  </tr>
  <tr>
    <th>Tuesday</th>
    <td colspan="3">Gym</td>
    <td>Home Ec</td>
  </tr>
</table>
```

	9am	10am	11am	12am
Monday	Geography		Math	Art
Tuesday	Gym			Home Ec

# Tables

```
<html>
  <head>
    <title>Tables</title>
  </head>
  <body>
    <table>
      <thead>
        <tr>
          <th></th>
          <th scope="col">Home starter hosting</th>
          <th scope="col">Premium business hosting</th>
        </tr>
      </thead>
      <tbody>
        <tr>
          <th scope="row">Disk space</th>
          <td>250mb</td>
          <td>1gb</td>
        </tr>
        <tr>
          <th scope="row">Bandwidth</th>
          <td>5gb per month</td>
          <td>50gb per month</td>
        </tr>
        <!-- more rows like the two above here -->
      </tbody>
    </table>
    <tfoot>
      <tr>
        <td colspan="3">Sign up now and save 10%!</td>
      </tr>
    </tfoot>
  </body>
</html>
```

	Home starter hosting	Premium business hosting
Disk space	250mb	1gb
Bandwidth	5gb per month	50gb per month
Sign up now and save 10%!		

# HTML Forms

- Whenever you want to collect information from visitors you will need a form, which lives inside a **<form>** element.
- Information from a form is sent in name/value pairs.
- Each form control is given a name, and the text the user types in or the values of the options they select are sent to the server.

# HTML Form Structure

- **<form>**
  - This element should always carry the **action** attribute and will usually have a **method** and **id** attribute too.
- **Action**
  - Every **<form>** element requires an **action** attribute. Its **value** is the URL for the page on the server that will receive the information.
- **Method**
  - Forms can be sent using one of two methods: **get** or **post**.

# HTML FORMS

```
<form action="http://www.example.com/login.php">
  <p>Username:
    <input type="text" name="username" size="15"
      maxlength="30" />
  </p>
  <p>Password:
    <input type="password" name="password" size="15"
      maxlength="30" />
  </p>
</form>
```

What does it means  
(type="password")

Username:

Password:

# HTML FORMS

```
<form action="http://www.example.com/comments.php">
  <p>What did you think of this gig?</p>
  <textarea name="comments" cols="20" rows="4">Enter
    your comments...</textarea>
</form>
```

What did you think of this gig?

Enter your comments...

```
<form action="http://www.example.com/profile.php">
  <p>Please select your favorite genre:
    <br />
    <input type="radio" name="genre" value="rock"
      checked="checked" /> Rock
    <input type="radio" name="genre" value="pop" />
      Pop
    <input type="radio" name="genre" value="jazz" />
      Jazz
  </p>
</form>
```

Please select your favorite genre:

☐ Rock ☐ Pop ☒ Jazz

What happens if you repeat same name in radio control???

# HMTL FORMS

```
<form action="http://www.example.com/profile.php">
  <p>Please select your favorite music service(s):
  <br />
  <input type="checkbox" name="service"
    value="itunes" checked="checked" /> iTunes
  <input type="checkbox" name="service"
    value="lastfm" /> Last.fm
  <input type="checkbox" name="service"
    value="spotify" /> Spotify
</p>
</form>
```

Please select your favorite music service(s):  
☒ iTunes ☐ Last.fm ☐ Spotify

```
<form action="http://www.example.com/login/"
  method="post">
  <label for="username">Username:</label>
  <input type="text" name="username"
    required="required" /></title><br />
  <label for="password">Password:</label>
  <input type="password" name="password"
    required="required" />
  <input type="submit" value="Submit" />
</form>
```

Username:  Password:

Please fill out this field.



# Grouping Form Elements

You can group related form controls together inside the `<fieldset>` element.

The `<legend>` element can come directly after the opening `<fieldset>` tag and contains a caption which helps identify the purpose of that group of form controls.

```
<fieldset>
  <legend>Contact details</legend>
  <label>Email:<br />
  <input type="text" name="email" /></label><br />
  <label>Mobile:<br />
  <input type="text" name="mobile" /></label><br />
  <label>Telephone:<br />
  <input type="text" name="telephone" /></label>
</fieldset>
```



# HTML Form Example

```
<html>
<head>
  <title>Forms</title>
</head>
<body>
  <form action="http://www.example.com/review.php" method="get">
    <fieldset>
      <legend>
        Your Details:
      </legend>
      <label>
        Name:
        <input type="text" name="name" size="30" />
      </label>
      <br />
      <label>
        Email:
        <input type="email" name="email" size="30" />
      </label>
    </fieldset>
    <br />
    <fieldset>
      <legend>
        Your Review:
      </legend>
      <p>
        <label for="hear-about">
          How did you hear about us?
        </label>
        <select name="referrer" id="hear-about">
          <option value="google">Google</option>
          <option value="friend">Friend</option>
          <option value="advert">Advert</option>
          <option value="other">Other</option>
        </select>
      </p>
      <p>
        Would you visit again?
        <br />
        <label>
          <input type="radio" name="rating" value="yes" />
          Yes
        </label>
        <input type="radio" name="rating" value="no" /> No
        <input type="radio" name="rating" value="maybe" /> Maybe
      </p>
      <p>
        Comments:
        <input type="text" />
      </p>
      <p>
        <input checked="" type="checkbox" /> Sign me up for email updates
      </p>
      <p>
        <input type="submit" value="Submit review" />
      </p>
    </fieldset>
  </form>
</body>
</html>
```

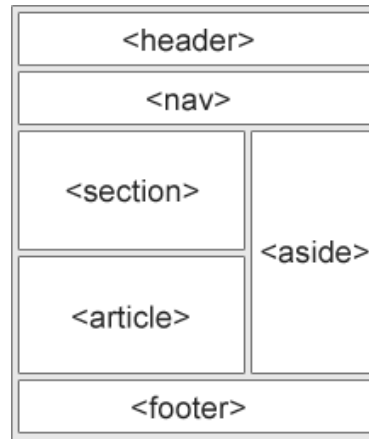


# **HTML5 SEMANTIC ELEMENTS**

# New Semantic Elements

- Many web sites contain HTML code like: `<div id="nav">` `<div class="header">` `<div id="footer">` to indicate navigation, header, and footer.
- HTML5 offers new semantic elements to define different parts of a web page, for example:

- `<header>`
- `<footer>`
- `<nav>`
- `<section>`
- `<article>`
- `<aside>`



- **Internet Explorer 8 and earlier**, does not support new semantic elements

# **HTML5 MULTIMEDIA ELEMENTS**

# HTML5 Video

- Before HTML5, **there was no standard** for showing videos on a web page.
- Before HTML5, videos could only be **played with a plug-in (like flash)**.
- The HTML5 **<video>** element specifies a standard way to embed a video in a web page.

# HTML5 Video

- HTML5 **<video>** element supports 3 video formats: **MP4**, **WebM**, and **Ogg**:

Browser	MP4	WebM	Ogg
Internet Explorer	YES	NO	NO
Chrome	YES	YES	YES
Firefox	YES	YES	YES
Safari	YES	NO	NO
Opera	YES (from Opera 25)	YES	YES

# HTML5 Video

- The **controls** attribute adds video controls, like play, pause, and volume.
- Text between the <video> and </video> tags will only display in browsers that do not support the <video> element. To start a video automatically use the **autoplay** attribute
- **Multiple <source>** elements can link to different video files. The browser will use the first recognized format.

```
<video width="320" height="240" controls autoplay>
  <source src="movie.mp4" type="video/mp4" />
  <source src="movie.ogg" type="video/ogg" />
  Your browser does not support the video tag.
</video>
```



# HTML5 Audio

- Before HTML5, **there was no standard** for playing audio files on a web page.
- Before HTML5, audio files could only be **played with a plug-in (like flash)**.
- The HTML5 **<audio>** element specifies a standard way to embed audio in a web page.

# HTML5 Audio

- HTML5 **<audio>** element supports 3 audio formats: **MP3**, **Wav**, and **Ogg**:

Browser	MP3	Wav	Ogg
Internet Explorer	YES	NO	NO
Chrome	YES	YES	YES
Firefox	YES	YES	YES
Safari	YES	YES	NO
Opera	YES	YES	YES

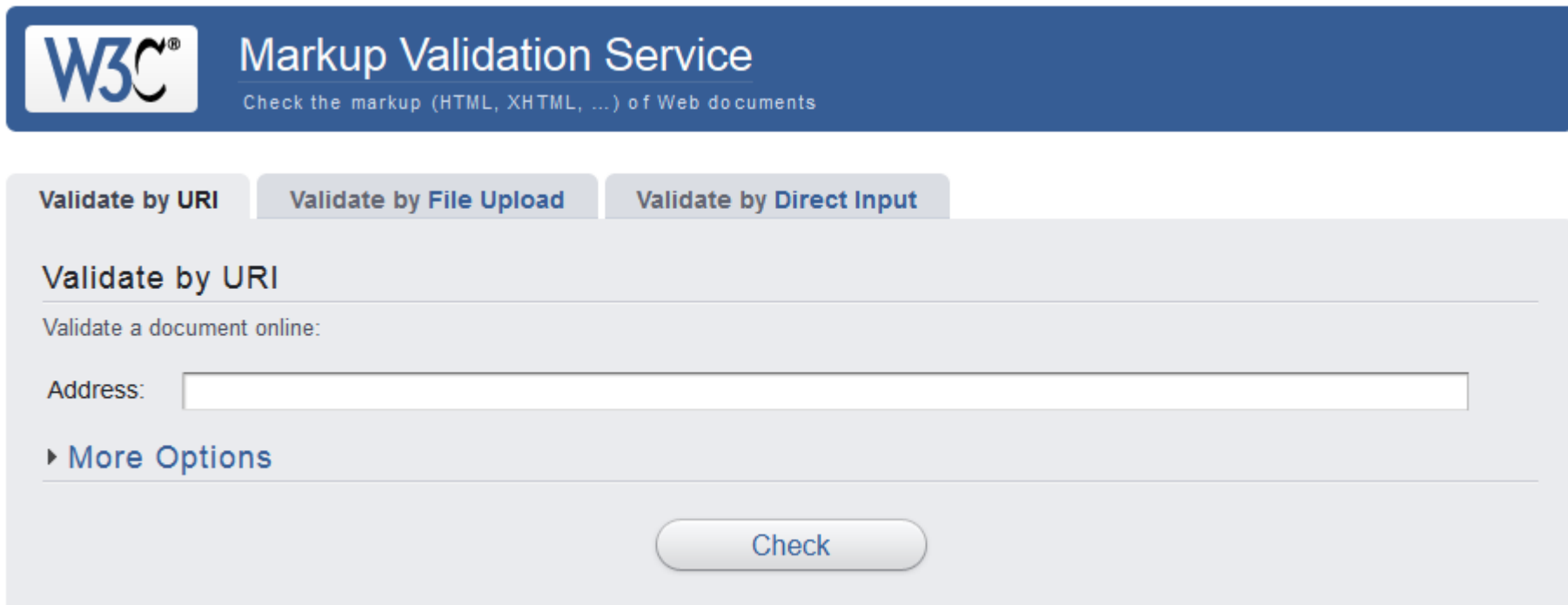
# HTML5 Audio

- The **controls** attribute adds audio controls, like play, pause, and volume.
- Text between the <audio> and </audio> tags will display in browsers that do not support the <audio> element. To start a audio automatically use the **autoplay** attribute
- **Multiple <source>** elements can link to different audio files. The browser will use the first recognized format.

```
<audio controls autoplay>
  <source src="sound.ogg" type="audio/ogg" />
  <source src="sound.mp3" type="audio/mpeg" />
  Your browser does not support the audio element.
</audio>
```

# Markup Validation Service

- <http://validator.w3.org/>
- <https://validator.w3.org/nu/>



The screenshot shows the W3C Markup Validation Service interface. At the top, there is a dark blue header with the W3C logo and the text "Markup Validation Service" and "Check the markup (HTML, XHTML, ...) of Web documents". Below this, there are three tabs: "Validate by URI", "Validate by File Upload", and "Validate by Direct Input". The "Validate by URI" tab is selected. Under this tab, there is a section titled "Validate by URI" with the text "Validate a document online:". Below this text is a text input field labeled "Address:". To the right of the input field is a "Check" button. Below the input field, there is a link that says "More Options".

- This validator checks the markup validity of Web documents in HTML

# HTML Entities

Result	Description	Entity Name	Entity Number
	non-breaking space	&nbsp;	&#160;
<	less than	&lt;	&#60;
>	greater than	&gt;	&#62;
&	ampersand	&amp;	&#38;
¢	cent	&cent;	&#162;
£	pound	&pound;	&#163;
¥	yen	&yen;	&#165;
€	euro	&euro;	&#8364;
©	copyright	&copy;	&#169;
®	registered trademark	&reg;	&#174;

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

# HTML Page

- HTML page can be created on multiple text editor including:
  - Notepad/Notepad ++
  - Sublime Text
  - Visual Studio Code (VS Code)
  - Visual Studio
  - Adobe Dreamweaver
  - Much more...

# HTML Self Study – Tags & Attributes

- **HTML Tag Reference**

- <https://www.w3schools.com/tags/>

- **HTML Global Attributes**

- [https://www.w3schools.com/tags/ref\\_standardattributes.asp](https://www.w3schools.com/tags/ref_standardattributes.asp)