WEB TECHNOLOGIES (20CS2203) UNIT-1 INTRODUCTION TO WEB WORLD JAVASCRIPT

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Course Learning Objectives:

- To demonstrate basic skills in analysing the usability of a web site.
- To identify how to plan user research related to web design.
- To Learn how to design, add client side script and publish web page
- To Learn about server side programming and deploy the app into a server
- To Learn about storing the data into SQL and NoSQL
- To Learn about Front-End Web UI Frameworks and GIT repository Tools
- To learn the language of the Web: jQuery Frontend design and Bootstrap
- To learn the language of Web: NodeJS

COURSE OUTCOME (CO.1)

Learn how to design, add client side script and publish web page

CONTENTS:

- Introduction to Web World: Recap on HTML
- Inserting Frames and frame sets
- Inserting hyperlinks, lists, tables and images
- JavaScript: Client side scripting with JavaScript
- Variables, functions, conditions, loops and repetition,
- Pop up boxes,
- Objects,
- HTML DOM and web,
- Browser environments,
- Form validation,
- Events and Event Listeners

HTML is the standard markup language for creating Web pages.

- HTML stands for Hyper Text Markup Language
- HTML is the standard markup language for creating Web pages
- HTML describes the structure of a Web page
- HTML elements tell the browser how to display the content

A Simple HTML Document Example

```
<!DOCTYPE html>
<html>
<head>
<title>Page Title</title>
</head>
<body>
<h1>My First Heading</h1>
My first paragraph
</body>
</html>
```

Example Explained

- The <!DOCTYPE html> declaration defines that this document is an HTML5 document
- The <html> element is the root element of an HTML page
- The <head> element contains meta information about the HTML page
- The <title> element specifies a title for the HTML page (which is shown in the browser's title bar or in the page's tab)
- The <body> element defines the document's body, and is a container for all the visible contents, such as headings, paragraphs, images, hyperlinks, tables, lists, etc.
- The <h1> element defines a large heading
- The element defines a paragraph

What is an HTML Element?

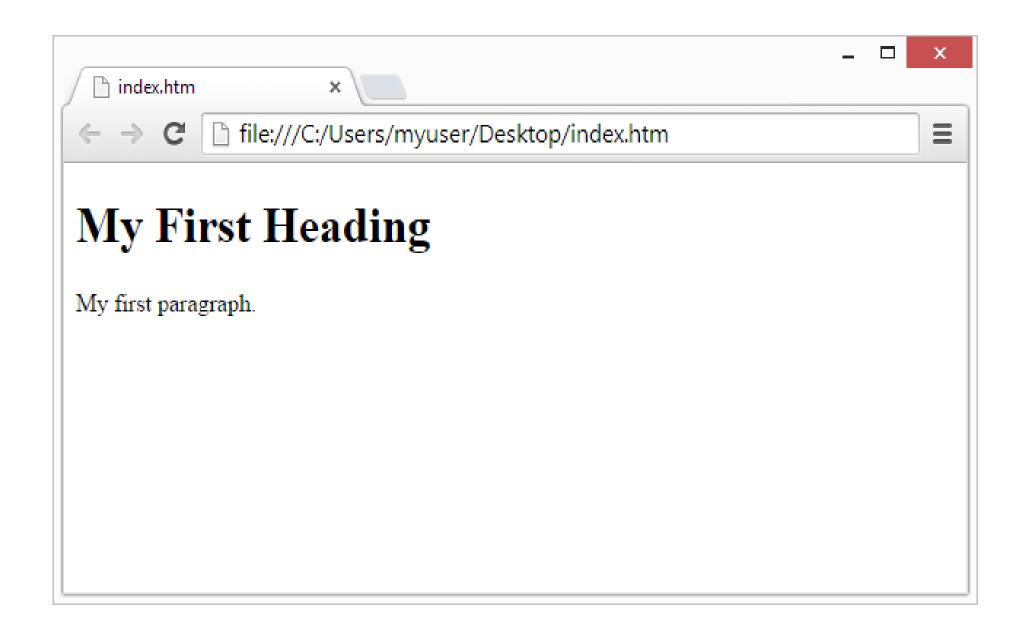
An HTML element is defined by a start tag, some content, and an end tag:

<tagname> Content goes here... </tagname>

- The HTML element is everything from the start tag to the end tag:
- <h1>My First Heading</h1>
- My first paragraph.

Web Browsers

- The purpose of a web browser (Chrome, Edge, Firefox, Safari) is to read HTML documents and display them correctly.
- A browser does not display the HTML tags, but uses them to determine how to display the document:



HTML Page Structure

ml>		
<head></head>		
<title>Page</td><td>title</title>		
<body></body>		
<h1>This</h1>	s is a heading	
This	is a paragraph.	
This	is another paragraph.	

HTML Documents

- 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>.

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.
- The <!DOCTYPE> declaration for HTML5 is:

<!DOCTYPE html>

HTML Headings

- HTML headings are defined with the <h1> to <h6> tags.
- <h1> defines the most important heading. <h6> defines the least important heading:

EXAMPLE

- <!DOCTYPE html>
- <html>
- <body>
- <h1>This is heading 1</h1>
- <h2>This is heading 2</h2>
- <h3>This is heading 3</h3>
- <h4>This is heading 4</h4>
- <h5>This is heading 5</h5>
- <h6>This is heading 6</h6>
- </body>
- </html>

HTML Paragraphs

HTML paragraphs are defined with the tag:

```
EXAMPLE:
```

```
<!DOCTYPE html>
```

```
<html>
```

<body>

```
This is a paragraph.
```

This is another paragraph.

```
</body>
```

</html>

HTML Links

HTML links are defined with the <a> tag:

```
<!DOCTYPE html>
<html>
<body>
<h2>HTML Links</h2>
HTML Links</h2>
HTML links are defined with the a tag:
<a href="https://rguktsklm.ac.in/">This is a link</a>
</body>
</html>
```

- The link's destination is specified in the href attribute.
- Attributes are used to provide additional information about HTML elements.

HTML Attributes

- All HTML elements can have attributes
- Attributes provide additional information about elements
- Attributes are always specified in the start tag
- Attributes usually come in name/value pairs like: name="value"

The src Attribute

 The tag is used to embed an image in an HTML page. The src attribute specifies the path to the image to be displayed:

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

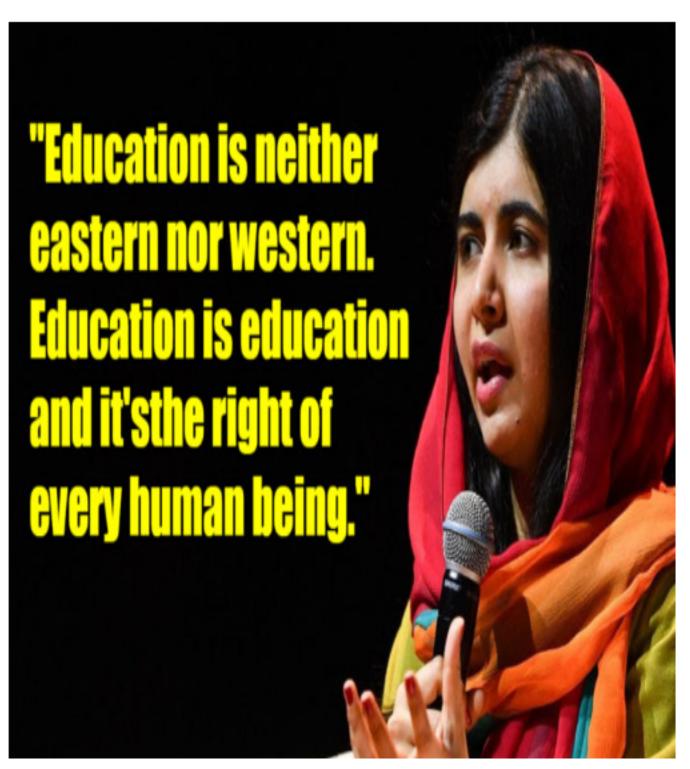
```
<h2>The src Attribute</h2>
```

HTML images are defined with the img tag, and the filename of the image source is specified in the src attribute:

```
<img src="image.jpg" width="500" height="600">
</body>
</html>
```

The src Attribute

HTML images are defined with the img tag, and the filename of the image source is specified in the src attribute:



The title Attribute

- The title attribute defines some extra information about an element.
- The value of the title attribute will be displayed as a tooltip when you mouse over the element:

EXAMPLE:

```
<!DOCTYPE html>
```

- <html>
- <body>
- <h2 title="I'm a header">The title Attribute</h2>
- Mouse over this paragraph, to display the title attribute
 as a tooltip.
- </body>
- </html>

Bigger Headings

 Each HTML heading has a default size. However, you can specify the size for any heading with the style attribute, using the CSS font-size property:

EXAMPLE:

```
<!DOCTYPE html>
```

<html>

<body>

<h1 style="font-size:60px;">Heading 1</h1>

You can change the size of a heading with the style attribute, using the font-size property.

</body>

</html>

- The HTML element defines preformatted text.
- The text inside a element is displayed in a fixed-width font (usually Courier), and it preserves both spaces and line breaks:

EXAMPLE:

```
<!DOCTYPE html>
<html>
<body>
The pre tag preserves both spaces and line breaks:
My Bonnie lies over the ocean.
 My Bonnie lies over the sea.
 My Bonnie lies over the ocean.
 Oh, bring back my Bonnie to me.
</body>
</html>
```

HTML Styles

 The HTML style attribute is used to add styles to an element, such as color, font, size, and more.

Example:

```
<!DOCTYPE html>
<html>
<body>
Normal
Red
Blue
Big
</body>
</html>
```

The HTML Style Attribute

- Setting the style of an HTML element, can be done with the style attribute.
- The HTML style attribute has the following syntax:

<tagname style="property:value;">

Background Color

 The CSS background-color property defines the background color for an HTML element.

```
<!DOCTYPE html>
<html>
<body style="background-color:powderblue;">
<h1>This is a heading</h1>
This is a paragraph.
</body>
</html>
```

Set background color for two different elements:

```
<body>
<h1 style="background-color:powderblue;">This is a heading</h1>
This is a paragraph.
</body>
```

Text Color

The CSS color property defines the text color for an HTML element:

- Example
- <h1 style="color:blue;">This is a heading</h1>
 This is a paragraph.

Fonts

 The CSS font-family property defines the font to be used for an HTML element:

Example

```
<h1 style="font-family:verdana;">This is a heading</h1>
This is a paragraph.
```

Text Size

The CSS font-size property defines the text size for an HTML element:

Example

```
<h1 style="font-size:300%;">This is a heading</h1>
This is a paragraph.
```

Text Alignment

 The CSS text-align property defines the horizontal text alignment for an HTML element:

Example

```
<h1 style="text-align:center;">Centered Heading</h1>
Centered paragraph.
```

HTML Formatting Elements

Formatting elements were designed to display special types of text:

- Bold text
- Important text
- <i>- Italic text
- Emphasized text
- <mark> Marked text
- <small> Smaller text
- Deleted text
- <ins> Inserted text
- <sub> Subscript text
- <sup> Superscript text

Example: <i>This text is italic.</i>

HTML < mark > Element

 The HTML <mark> element defines text that should be marked or highlighted:

Example

>Do not forget to buy <mark>milk</mark> today.

HTML Element

 The HTML element defines text that has been deleted from a document. Browsers will usually strike a line through deleted text:

Example

My favorite color is blue red.

HTML <ins> Element

 The HTML <ins> element defines a text that has been inserted into a document. Browsers will usually underline inserted text:

Example

My favorite color is blue <ins>red</ins>.

HTML <sub> Element

 The HTML <sub> element defines subscript text. Subscript text appears half a character below the normal line, and is sometimes rendered in a smaller font. Subscript text can be used for chemical formulas, like H₂O:

Example

This is _{subscripted} text.

HTML <sup> Element

 The HTML <sup> element defines superscript text. Superscript text appears half a character above the normal line, and is sometimes rendered in a smaller font. Superscript text can be used for footnotes, like WWW^[1]:

Example

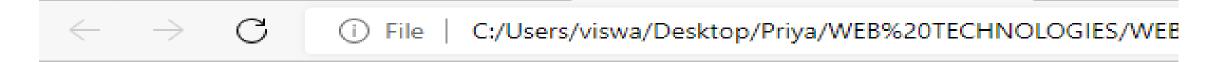
This is ^{superscripted} text.

Color Names

• In HTML, a color can be specified by using a color name:

Example:

```
<!DOCTYPE html>
<html>
<body>
<h1 style="background-color:Tomato;">Tomato</h1>
<h1 style="background-color:Orange;">Orange</h1>
<h1 style="background-color:DodgerBlue;">DodgerBlue</h1>
<h1 style="background-color:MediumSeaGreen;">MediumSeaGreen</h1>
<h1 style="background-color:Gray;">Gray</h1>
<h1 style="background-color:SlateBlue;">SlateBlue</h1>
<h1 style="background-color:Violet;">Violet</h1>
<h1 style="background-color:LightGray;">LightGray</h1>
</body>
</html>
```



Tomato

Orange

DodgerBlue

MediumSeaGreen

Gray

SlateBlue

Violet

LightGray

Text Color

You can set the color of text:

```
<h1 style="color:Tomato;">Hello World</h1>
Lorem ipsum...
Ut wisi enim...
```

Border Color

You can set the color of borders:

```
<h1 style="border:2px solid Tomato;">Hello World</h1>
<h1 style="border:2px solid DodgerBlue;">Hello World</h1>
<h1 style="border:2px solid Violet;">Hello World</h1>
```

HTML Styles - CSS

Cascading Style Sheets (CSS) is used to format the layout of a webpage.

 With CSS, you can control the color, font, the size of text, the spacing between elements, how elements are positioned and laid out, what background images or background colors are to be used, different displays for different devices and screen sizes, and much more!

Using CSS

- CSS can be added to HTML documents in 3 ways:
- Inline by using the style attribute inside HTML elements
- Internal by using a <style> element in the <head> section
- External by using a link> element to link to an external CSS file

Inline CSS

- An inline CSS is used to apply a unique style to a single HTML element.
- An inline CSS uses the style attribute of an HTML element.
- The following example sets the text color of the <h1> element to blue, and the text color of the element to red:

```
<!DOCTYPE html>
<html>
<body>
<h1 style="color:blue;">A Blue Heading</h1>
A red paragraph.
</body>
</html>
```

Internal CSS

- An internal CSS is used to define a style for a single HTML page.
- An internal CSS is defined in the <head> section of an HTML page, within a <style> element.
- The following example sets the text color of ALL the <h1> elements (on that page) to blue, and the text color of ALL the elements to red. In addition, the page will be displayed with a "powderblue" background color:

EXAMPLE:

```
<!DOCTYPE html>
<html>
<head>
<style>
body {background-color: powderblue;}
h1 {color: blue;}
  {color: red;}
</style>
</head>
<body>
<h1>This is a heading</h1>
This is a paragraph.
</body>
</html>
```

External CSS

- An external style sheet is used to define the style for many HTML pages.
- To use an external style sheet, add a link to it in the <head> section of each HTML page:

Example <!DOCTYPE html> <html> <head> k rel="stylesheet" href="styles.css"> </head> <body> <h1>This is a heading</h1> This is a paragraph. </body> </html>

- The external style sheet can be written in any text editor. The file must not contain any HTML code, and must be saved with a .css extension.
- Here is what the "styles.css" file looks like:

"styles.css":

```
    body {
        background-color: powderblue;
    }
    h1 {
        color: blue;
    }
    p {
        color: red;
     }
```

CSS Colors, Fonts and Sizes

- Here, we will demonstrate some commonly used CSS properties. You will learn more about them later.
- The CSS color property defines the text color to be used.
- The CSS font-family property defines the font to be used.
- The CSS font-size property defines the text size to be used.
- Example
- Use of CSS color, font-family and font-size properties:

```
EXAMPLE:
<!DOCTYPE html>
<html>
<head>
<style>
h1 {
  color: blue;
  font-family: verdana;
  font-size: 300%;
}
```

```
p {
 color: red;
 font-family: courier;
 font-size: 160%;
</style>
</head>
<body>
<h1>This is a heading</h1>
This is a paragraph.
</body>
</html>
```

HTML FORMS

- Text Input Controls
- Checkboxes Controls
- Radio Box Controls
- Select Box Controls
- File Select boxes
- Hidden Controls
- Clickable Buttons
- Submit and Reset Button

Radio Box Controls

```
<html>
<body>
<h2>Radio Buttons</h2>
<form>
 <input type="radio" name="gender" value="male" checked> Male<br>
 <input type="radio" name="gender" value="female"> Female<br>
 <input type="radio" name="gender" value="other"> Other
</form>
</body>
</html>
```

Checkboxes Controls

```
<!DOCTYPE html>
<html>
 <head>
   <title>Checkbox Control</title>
 </head>
 <body>
   <form>
    <input type = "checkbox" name = "maths" value = "on"> Maths
    <input type = "checkbox" name = "physics" value = "on"> Physics
   </form>
 </body>
</html>
```

Text Input Controls

```
<!DOCTYPE html>
<html>
 <head>
   <title>Text Input Control</title>
 </head>
 <body>
   <form >
    First name: <input type = "text" name = "first_name" />
    <br>
    Last name: <input type = "text" name = "last_name" />
   </form>
 </body>
</html>
```

PASSWORD

```
<!DOCTYPE html>
<html>
 <head>
   <title>Password Input Control</title>
 </head>
 <body>
   <form >
    User ID : <input type = "text" name = "user_id" />
    <br>
    Password: <input type = "password" name = "pwd" />
   </form>
 </body>
</html>
```

Multiple-Line Text Input Controls

```
<!DOCTYPE html>
<html>
 <head>
   <title>Multiple-Line Input Control</title>
 </head>
 <body>
   <form>
    Description: <br/>
    <textarea rows = "5" cols = "50" name = "description">
      Enter description here...
    </textarea>
   </form>
 </body>
</html>
```

Select Box Controls

```
<!DOCTYPE html>
<html>
 <head>
   <title>Select Box Control</title>
 </head>
 <body>
  <form>
    <select name = "dropdown">
     <option value = "Maths" selected>Maths
     <option value = "Physics">Physics
    </select>
  </form>
 </body>
</html>
```

File Select boxes

```
<!DOCTYPE html>
<html>
 <head>
   <title>File Upload Box</title>
 </head>
 <body>
   <form>
    <input type = "file" name = "fileupload" accept = "image/*" />
   </form>
 </body>
</html>
```

Hidden Controls

```
<!DOCTYPE html>
<html>
 <head>
   <title>File Upload Box</title>
 </head>
 <body>
   <form>
    This is page 10
    <input type = "hidden" name = "pagename" value = "10" />
    <input type = "submit" name = "submit" value = "Submit" />
    <input type = "reset" name = "reset" value = "Reset" />
   </form>
 </body>
</html>
```

Clickable Buttons

```
<!DOCTYPE html>
<html>
<body>
<h2>The Button Element</h2>
<button type="button" onclick="alert('Hello</pre>
  world!')">Click Me!</button>
</body>
```

</html>

HTML FRAMES

- HTML <frame> tag define the particular area within an HTML file where another HTML web page can be displayed.
- A <frame> tag is used with <frameset>, and it divides a webpage into multiple sections or frames, and each frame can contain different web pages.

Example:

How to create frame1,frame2 and frame 3

Frame1.html:

```
<!DOCTYPE html>
<html>
<head>
  <style>
   div{
    background-color:blue;
    height: 500px;
  </style>
</head>
<body>
  <div>
    <h2>This is first frame</h2>
  </div>
</body>
</html>
```

HTML FRAMESET:

</html>

HTML <frameset> tag is used to contain the group of frames which can be controlled and styled as a unit. The <frameset> element also specifies the number of rows and columns in the frameset, and how much space they will occupy in a frame.

```
Example:
<!DOCTYPE html>
<html>
<head>
  <title>Frame tag</title>
</head>
 <frameset cols="50%,50%">
  <frame src="http://rguktsklm.ac.in/departments.php?department=cse">
  <frame src="http://rguktsklm.ac.in/universitydata.php?data=overview">
 </frameset>
```









Rajiv Candhi University of Knowledge Technologies - A.P., Srikakulam Campus පෘස්ති ෆාරදා බුසුමම කරම්මම ඔඩුමහැදග්රාර - එ.කී , **ල්**නමාණ පෘදරවම් Catering to the Educational Needs of Gifted Rural Youth of Andhra Pradesh





Computer Science & Engineering

Computer science and engineering is an academic program at RGUKT that integrates the fields of

computer engineering and computer science.

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Overview

About RGUKT Founding of RGUKT RGUKT Educational Objectives RGUKT Objectives Why RGUKT?

Founding of Rgukt

- The idea to create IIIIs in Andhra Pradesh came in April 2007. at the request of the Chief Minister of Andhra Pradesh. He was dissatisfied with the opportunities available to the rural youth and wanted to set up at least three IIIIs in the three regions of Andhra Pradesh which would ensure better. opportunities for rural students.
- A Task Force was created under the Chairmanship of Prof. K.C. Reddy. This Task Force produced a report to the government. recommending the structure and functioning of the proposed. institutions. Activate Windows
- In March of 2008, the AP Government createst #SIUS his/year. Windows. act of the Legislature as a full-fledged university which would

1. Design the following static web pages required for an online book store web site.

HOME PAGE:

The static home page must contain three frames.

Top frame: Logo and the college name and links to Home page, Login page, Registration page, Catalogue page and Cart page (the description of these pages will be given below).

Left frame: At least four links for navigation, which will display the catalogue of respective links.

For e.g.: When you click the link "MCA" the catalogue for MCA Books should be displayed in the Right frame.

Right frame: The pages to the links in the left frame must be loaded here. Initially this page contains description of the web site.

Expected Output:



MCA

Description of the Website

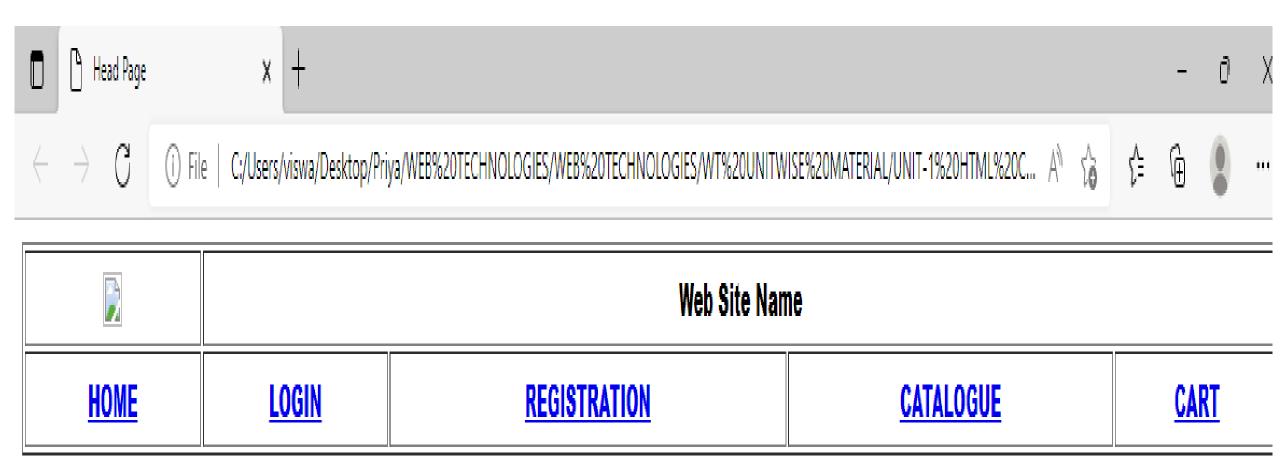
MBA

BCA

Activate Windows

```
head.html
```

```
<html>
<head>
     <title>Head Page</title>
</head>
<body>
  <fontface="Arial Black" size="3">
  <table border="1" cellspacing="2" cellpadding="5"
   width="100%"> 
       <img src="6.jpg" width="20" height="20"/>
       Web Site Name
   <a href="description.html"target="des_page">HOME</a>
           <a href="login.html"target="des_page">LOGIN</a>
           align="center"><a href="catalogue.html" target="des_page">CATALOGUE</a>
           align="center"><a href="cart.html" target="des_page">CART</a>
     </font>
</body>
</html>
```



dept.html

```
<html>
<head>
      <title>Departments Page</title>
</head>
<body>
<fontface="Arial Black" size="4">
<a href="cat_mca.html"target="des_page">MCA</a>
 <1r>
      <a href="cat_mba.html" target="des_page">MBA</a>
 </r/>
      <a href="cat_bca.html"target="des_page">BCA</a>
 </font>
</body>
</html>
```



MCA

MBA

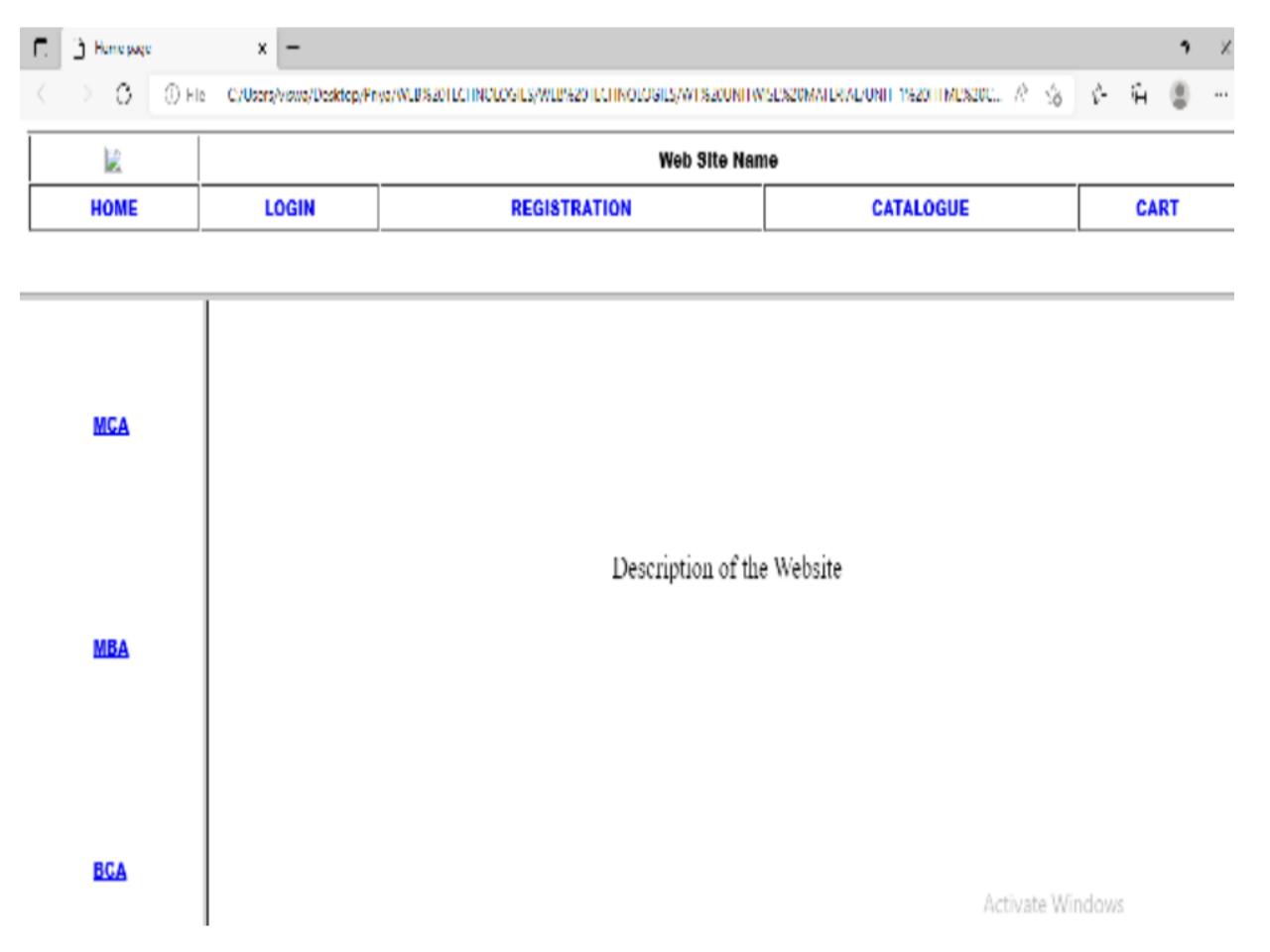
desc.html

```
<html>
 <head>
      <title> Description page</title>
 </head>
<body>
 <fontface="TIMES NEW ROMAN" size="5">
 <center>
      Description of the Website
 </center>
 </font>
</body>
</html>
```



home.html

```
<html>
   <head>
        <title>Home page</title>
   </head>
   <framesetrows="20,80">
        <frame src="head.html" name="head_page">
          <frameset cols="15,85">
                <frame src="dept.html" name="dept_page">
                <frame src="desc.html" name="des_page">
        </frameset>
   </frameset>
</html>
```



2. LOGIN PAGE: Login page must contain Login field, Password field, Submit and reset

buttons. login.html

```
<html>
 <head>
    <title>Login page</title>
 </head>
<body>
<center>
    <fontface="Arial Black" size="4"><u><b>LOGIN
    <form name="f1" action="" method="post">
    >
      Login
      <
      Password
      <input type="password" size="25">
      <
         <input type="submit" value="SUBMIT">
             
         <input type="reset" value="RESET">
      </form>
</center>
</body>
</html>
```



LOGIN FORM

Login	JV
Password	*****
	SUBMIT

3. CATALOGUE PAGE:

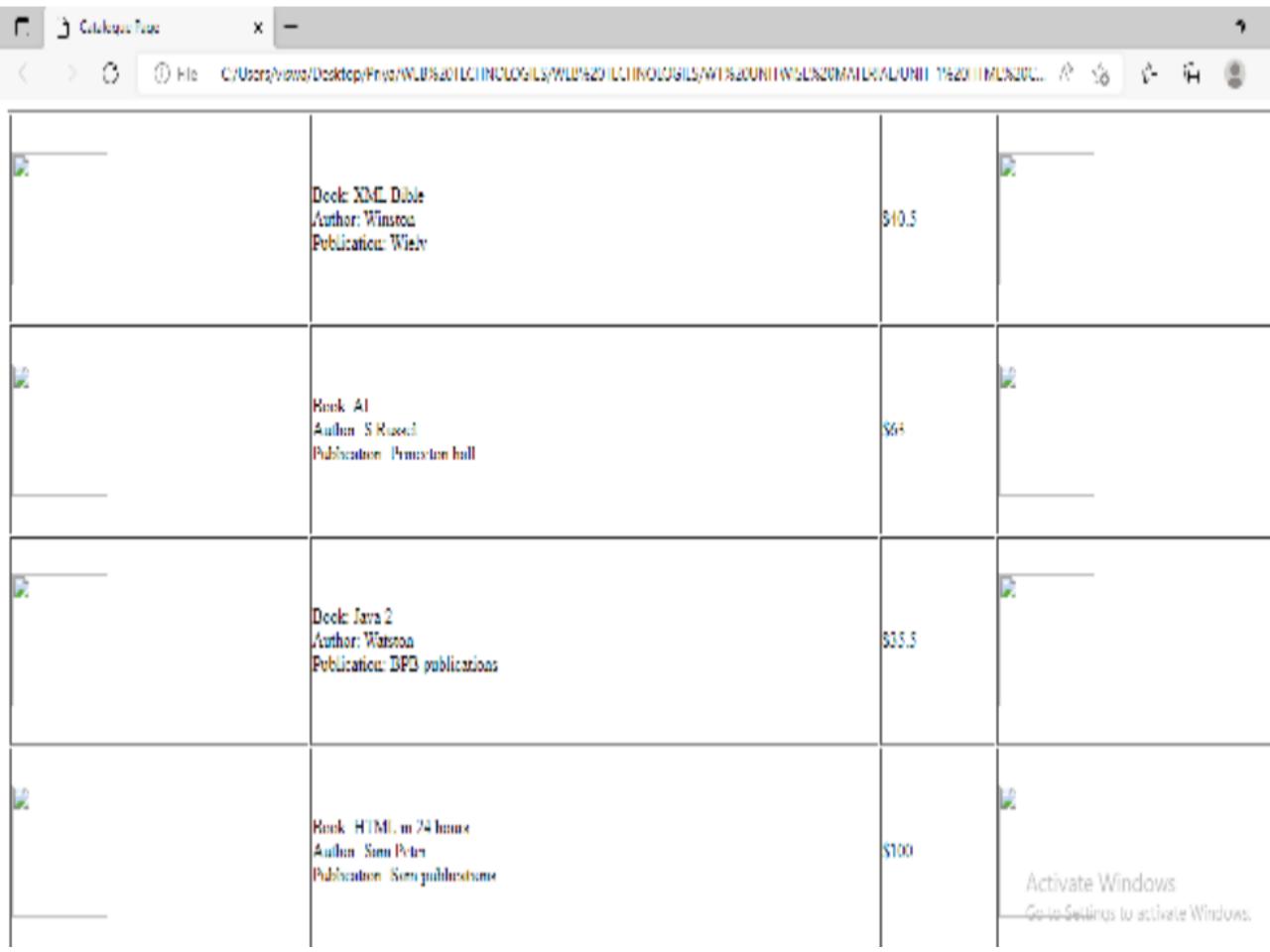
The catalogue page should contain the details of all the books available in the web site in a table. The details should contain the following:

- Snap shot of Cover Page.
- Author Name.
- 3. Publisher.
- Price.
- Add to cart button.

catalogue.html

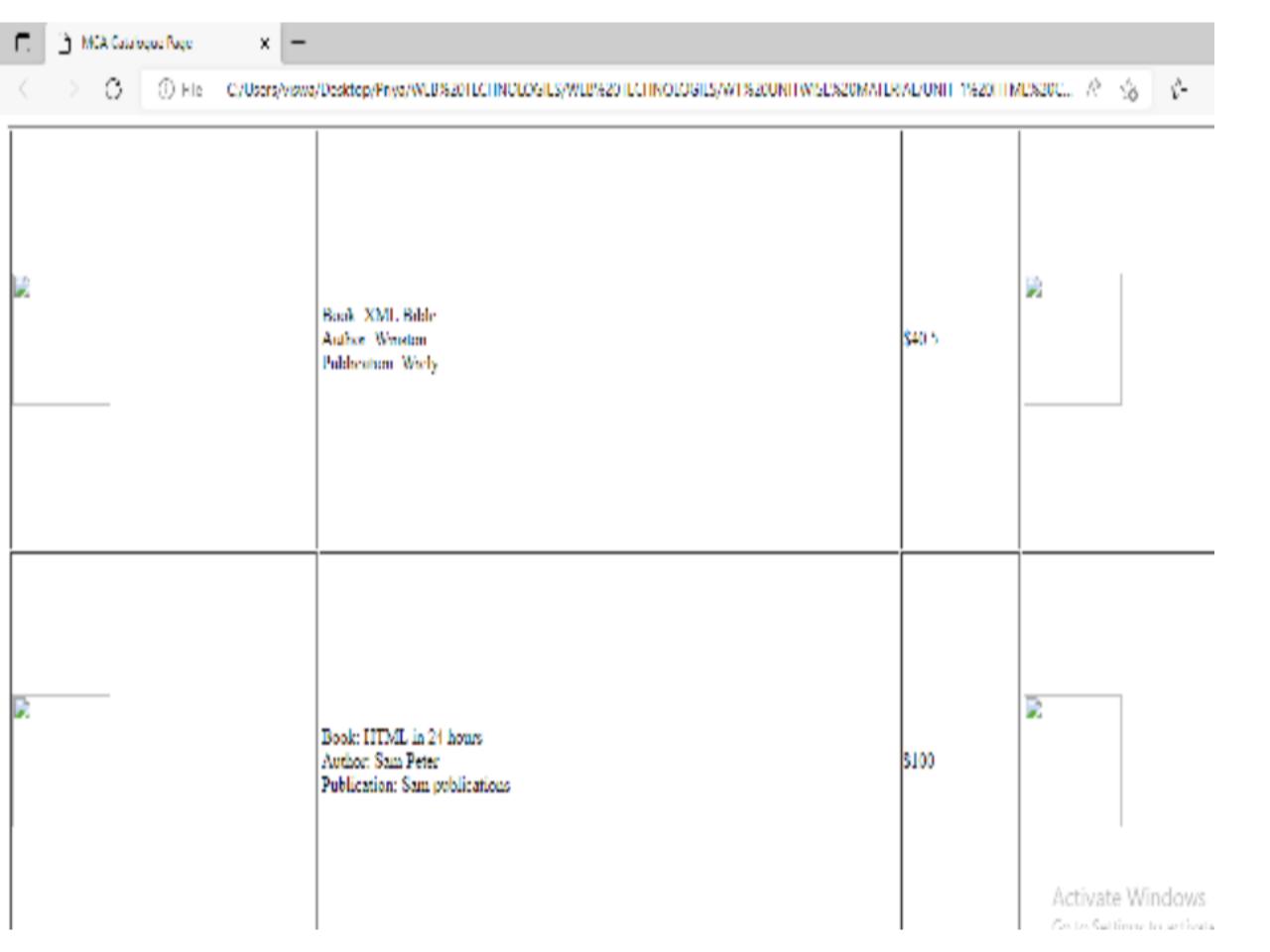
```
<html>
<head>
      <title> Catalogue Page</title>
</head>
<br/>body>
  <imq src="xmlb.gif" height="100" width="100"/>
      Book: XML Bible
      <br >br>Author: Winston
      <br>Publication: Wielv
      $40.5
      <imq src="adc.gif" height="100" width="100"/>
  <
      <imq src="ai.gif" height="100" width="100"/>
      Book: AL
      <br />
hr>Author: S Russel.
      <br>Publication: Princeton hall
      $63
      <imq src="adc.gif" height="100" width="100"/>
  <
      <imq src="java2.gif" height="100" width="100"/>
      Book: Java 2
      <br/>br>Author: Watston
      <br/>br>Publication: BPB publications
      $35.5
      <imq src="adc.gif" height="100" width="1100"/>
```

```
TYUL T
  <imq src="java2.gif" height="100" width="100"/>
       Book: Java 2
       <br />
hr>Author: Watston
       <br/>br>Publication: BPB publications
       $35.5
       <img src="adc.gif" height="100" width=|1100"/>
   <img src="html.gif" height="100" width="100"/>
       Book: HTML in 24 hours
       <br >br>Author: Sam Peter
       <br>Publication: Sam publications
       $100
       <img src="adc.gif" height="100" width="100"/>
  </body>
</html>
```



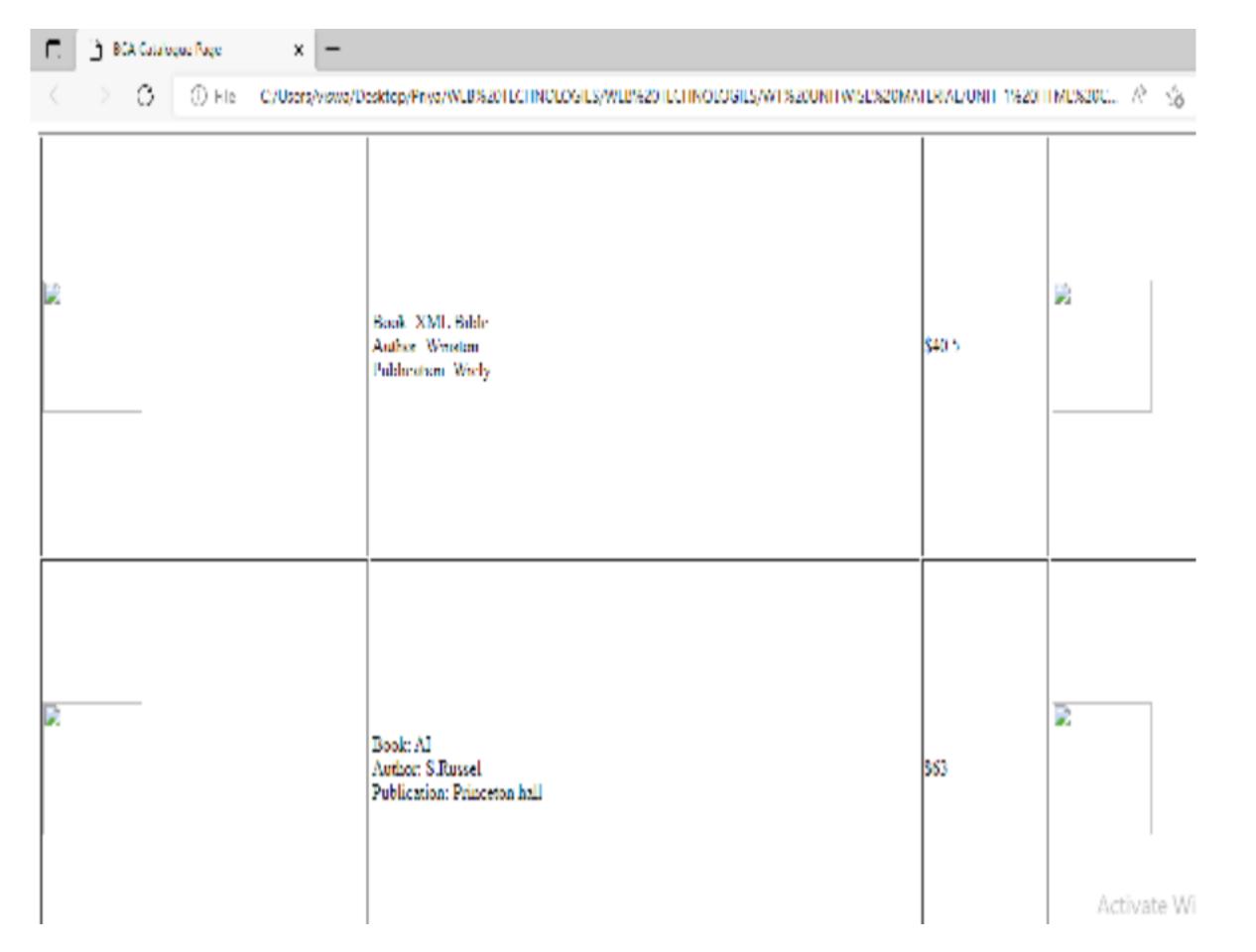
cat mca.html

```
<html>
<head>
      <title> MCA Catalogue Page</title>
</head>
<body>
  <
      <img src="xmlb.gif" height="100" width="100"/>
      Book: XML Bible
      <br />
hr>Author: Winston
      <br/>br>Publication: Wiely
      $40.5
      <img src="adc.gif" height="100" width="100"/>
   -
      <imq src="html.gif" height="100" width="100"/>
      Book: HTML in 24 hours
      <br />
shr>Author: Sam Peter
      <br>Publication: Sam publications
      $100
      <imq src="adc.gif" height="100" width="100"/>
  </body>
</html>
```



cat bca.html

```
<html>
<head>
      <title> BCA Catalogue Page</title>
</head>
<body>
  <img src="xmlb.gif" height="100" width="100"/>
      Book: XML Bible
      <br />
br>Author: Winston
      <br/>br>Publication: Wiely
      $40.5
      <imq src="adc.gif" height="100" width="100"/>
  <
      <img src="ai.gif" height="100" width="100"/>
      Book: Al
      <br />
br>Author: S.Russel
      <br/>br>Publication: Princeton hall
      $63
      <img src="adc.gif" height="100" width="100"/>
  </body>
</html>
```



4. REGISTRATION PAGE:

Create a "registration form "with the following fields

- Name (Text field)
- Password (password field)
- E-mail id (text field)
- Phone number (text field)
- Sex (radio button)
- Date of birth (3 select boxes)
- Languages known (check boxes English, Telugu, Hindi, Tamil)
- Address (text area)

registration.html

```
<html>
<head>
 <title>Registration Page</title>
</head>
<br/>v>odv>
<center>
<h3 align="center"><u>REGISTRATION PAGE</u></h3>
<
<form name="f1" action="" method="post" onsubmit="">
NAME<input type="text" size="30" name="uname"/>
 PASSWORD<input type="password" size="30" name="pass"/>
 E-MAIL ID<input type="text" size="30" name="email"/>
 PHONE NUMBER<input type="text" size="15" name="phone"/>
 GENDERinput type="radio" name="gen" value="m" /> MALE
       <input type="radio" name="gen" value="f" />FEMALE 
 DATE OF BIRTH
    <option value="dav">DAY</option>
            <option value="1">1</option>
            <option value="2">2</option>
            <option value="3">3</option>
            <option value="4">4</option>
            <option value="5">5</option>
```

```
<option value="6">6</option>
        <option value="7">7</option>
        <option value="8">8</option>
        <option value="9">9</option>
        <option value="10">10</option>
        <option value="11">11</option>
        <option value="12">12</option>
        <option value="13">13</option>
        <option value="14">14</option>
        <option value="15">15</option>
        <option value="16">16</option>
        <option value="17">17</option>
        <option value="18">18</option>
        <option value="19">19</option>
        <option value="20">20</option>
        <option value="21">21</option>
        <option value="22">22</option>
        <option value="23">23</option>
        <option value="24">24</option>
        <option value="25">25</option>
        <option value="26">26</option>
        <option value="27">27</option>
        <option value="28">28</option>
        <option value="29">29</option>
        <option value="30">30</option>
        <option value="31">31</option>
</select>
<select name="month">
        <option value="month">MONTH</option>
        <option value="ian">JANUARY
        <option value="feb">FEBRUARY</option>
        <option value="mar">MARCH</option>
```

```
<option value="apr">APRIL</option>
        <option value="may">MAY</option>
        <option value="jun">JUNE</option>
        <option value="jul">JULY</option>
        <option value="aug">AUGUST</option>
        <option value="sep">SEPTEMBER</option>
        <option value="oct">OCTOBER</option>
        <option value="nov">NOVEMBER</option>
        <option value="dec">DECEMBER</option>
</select>
<select name="year">
        <option value="vear">YEAR</option>
        <option value="1986">1986</option>
        <option value="1987">1987</option>
        <option value="1988">1988</option>
        <option value="1989">1989</option>
        <option value="1990">1990</option>
        <option value="1991">1991</option>
        <option value="1992">1992</option>
        <option value="1993">1993</option>
        <option value="1994">1994</option>
        <option value="1995">1995</option>
        <option value="1996">1996</option>
        <option value="1997">1997</option>
        <option value="1998">1998</option>
        <option value="1999">1999</option>
        <option value="2000">2000</option>
        <option value="2001">2001</option>
        <option value="2002">2002</option>
        <option value="2003">2003</option>
        <option value="2004">2004</option>
        <option value="2005">2005</option>
        <option value="2006">2006</option>
        <option value="2007">2007</option>
        <option value="2008">2008</option>
        <option value="2009">2009</option>
        <option value="2010">2010</option>
        <option value="2011">1980</option>
        <option value="2012">1981</option>
        coption value="2013">1982
```

```
ropuon value – 2000 n2000 riopuonn
             <option value="2006">2006</option>
             <option value="2007">2007</option>
             <option value="2008">2008</option>
             <option value="2009">2009</option>
             <option value="2010">2010</option>
             <option value="2011">1980</option>
             <option value="2012">1981</option>
             <option value="2013">1982</option>
             <option value="2014">1983</option>
      </select>
      LANGUAGES KNOWN
      -
             <input type="checkbox" value="eng" name="lang" />ENGLISH
             <input type="checkbox" value="tel" name="lang" />TELUGU
             <input type="checkbox" value="hin" name="lang" />HINDI <input
             type="checkbox" value="tam" name="lang" />TAMIL
       -
      ADDRESS
      <textarea name="addr" cols="25" rows="5"></textarea>
      <input type="submit" value="SUBMIT"/>
            <input type="reset" value="RESET" />
      </form>
</center>
</body>
</html>
```

	P Regist	tration P	ge × +
\leftarrow	\rightarrow (3	File C:/Users/viswa/Desktop/Priya/WEB%20TECHNOLOGIES/WEB%20TECHNOLOGIES/WT%20UNITWISE%20MATERIAL/UNIT-1%20

REGISTRATION PAGE

NAME		
PASSWORD		
E-MAIL ID		
PHONE NUMBER		
GENDER	OMALE OFEMALE	
DATE OF BIRTH	DAY V MONTH V YEAR V	
LANGUAGES KNOWN	□ENGLISH □TELUGU □HINDI □TAMIL	
ADDRESS		
SUBMIT RESET		

HTML-HYPERLINKS

HTML Links - Syntax

- The HTML <a> tag defines a hyperlink. It has the following syntax:
 link text
- The most important attribute of the <a> element is the href attribute, which indicates the link's destination.

EXAMPLE:

```
<!DOCTYPE html>
<html>
<body>
<h1>HTML Links</h1>
<a href="https://rguktsklm.ac.in/">RGUKT SRIKAKULAM</a>
</body>
</html>
```

- By default, links will appear as follows in all browsers:
- An unvisited link is underlined and blue
- A visited link is underlined and purple
- An active link is underlined and red

HTML Links - The target Attribute

- By default, the linked page will be displayed in the current browser window.
 To change this, you must specify another target for the link.
- The target attribute specifies where to open the linked document.
- The target attribute can have one of the following values:
- _self Default. Opens the document in the same window/tab as it was clicked
- _blank Opens the document in a new window or tab
- _parent Opens the document in the parent frame
- _top Opens the document in the full body of the window

EXAMPLE:

```
<!DOCTYPE html>
<html>
<body>
<h2>The target Attribute</h2>
<a href=" https://rguktsklm.ac.in/" target="_blank"> RGUKT SRIKAKULAM
</a>
If target="_blank", the link will open in a new browser window or tab.
</body>
</html>
```

HTML Links - Use an Image as a Link

To use an image as a link, just put the tag inside the <a> tag:

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>lmage as a Link</h2>
```

The image below is a link. Try to click on it.

```
<a href="https://www.google.com/"><img src="smiley.gif" alt="google"
style="width:42px;height:42px;"></a>
```

```
</body>
```

```
</html>
```

Link to an Email Address

 Use mailto: inside the href attribute to create a link that opens the user's email program (to let them send a new email):

Example:

- <!DOCTYPE html>
- <html>
- <body>

<h2>Link to an Email Address</h2>

To create a link that opens in the user's email program (to let them send a new email), use mailto: inside the href attribute:

Send email

- </body>
- </html>

LISTS and TABLES

LISTS:

- Unordered lists
- Ordered lists
- Definition/description lists

Example

An unordered HTML list:

- Item
- Item
- Item
- Item

An ordered HTML list:

- 1. First item
- 2. Second item
- 3. Third item
- 4. Fourth item

Unordered lists

```
Syntax:
<UL [TYPE="square | disc |circle "] >
<LI>item name1 </LI>
<LI>item name2 </LI>
<LI>item name n </LI>
</UL>
```

EXAMPLE:

```
<html>
<head>
<title>Unordered Lists</title>
</head>
<body>
<h3>B.Tech Courses </h3>
ul type="disc">
CSE 
<|i>| <|i>| T </|i>|
ECE
EEE
MECH
```

- <h3>PG Courses </h3>
- M.Tech
- MCA
- MBA
- </body>
- </html>



B.Tech Courses

- CSE
- IT
- ECE
- EEE
- MECH

PG Courses

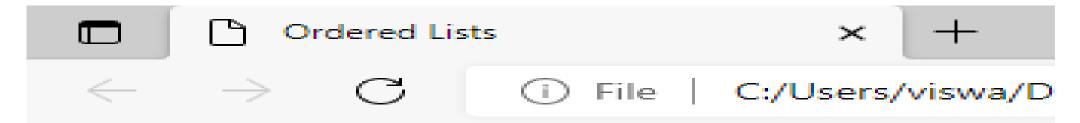
- M.Tech
- MCA
- MBA

Ordered Lists

```
Syntax:
<OL [TYPE="1 | A | a | I|i] start="n">
<LI>item name1
<LI>item name2
<LI>item name n
</0L>
Different Ordered list types Type="1" (default)
  e.g.1,2,3,4.... Type="A" Capital letters e.g.A,B,C...
  Type="a" Small letters e.g. a,b,c.....
Type="I" Large roman letters e.g. I, II, III,...
```

Example:

```
<html>
<head> <title>Ordered Lists</title> </head>
<body text="maroon">
<h3>Colors in VIBGYOR</h3>
<0L>
<LI>Violet</LI>
<LI>Indigo</LI>
<LI>Blue</LI>
<LI>Green</LI>
<LI>Yellow</LI>
<LI>Orange</LI>
<LI>Red</LI>
</OL>
<h3>Types of Fruits</h3>
<OL type="A" start="5">
<LI>Apple</LI>
<LI>Banana</LI>
<LI>Grapes</LI>
</OL>
</body>
</html>
```



Colors in VIBGYOR

- Violet
- 2. Indigo
- 3. Blue
- Green
- Yellow
- Orange
- 7. Red

Types of Fruits

- E. Apple
- F. Banana
- G. Grapes

<u>Definition/Description List</u> <<u>DL>.....</DL></u>

A Definition list is a list of definition terms <DT> and corresponding Definition Description <DD> on a new line. To create a definition it must start with <DL> and immediately followed by the first definition term <DT>

EXAMPLE:

```
<html>
<head><title>Definition List</title> </head>
<body>
<DL>
<DT>HTML</DT>
<DD>
   HTML is a scripting language which is used to create web pages.<br/>if you
   are thinking of creating your own web pages, you need to known at least
   basic HTML.
</DD>
<DT>JAVA </DT>
<DD>
   Java is an Object-Oriented Programming Language<br/>

br/>
used to create
   robust Client/Server applications.
</DD>
</DL>
</body>
</html>
```



HTML

HTML is a scripting language which is used to create web pages.

if you are thinking of creating your own web pages, you need to known at least basic HTML.

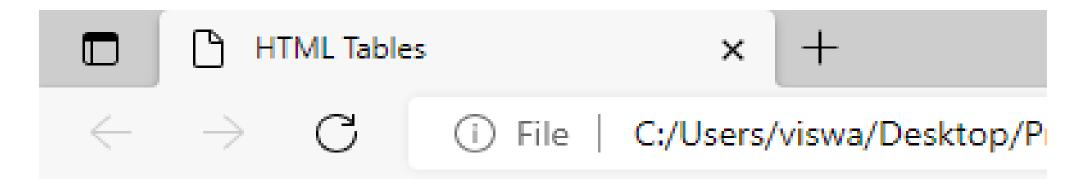
JAVA

Java is an Object-Oriented Programming Language used to create robust Client/Server applications.

Tables

Example:

```
<html>
<head>
 <title>HTML Tables</title>
</head>
  <body>
 Row 1, Column 1
   Row 1, Column 2
  Row 2, Column 1
   Row 2, Column 2
  </body>
</html>
```



Row 1, Column 1 Row 1, Column 2 Row 2, Column 1 Row 2, Column 2

Table heading

```
<html>
<head>
 <title>HTML Table Header</title>
</head>
<body>
 Name
   Salary
  Ramesh Raman
   5000
```

```
Shabbir Hussein
/td>
/td>
/td>

</body>
</html>
```

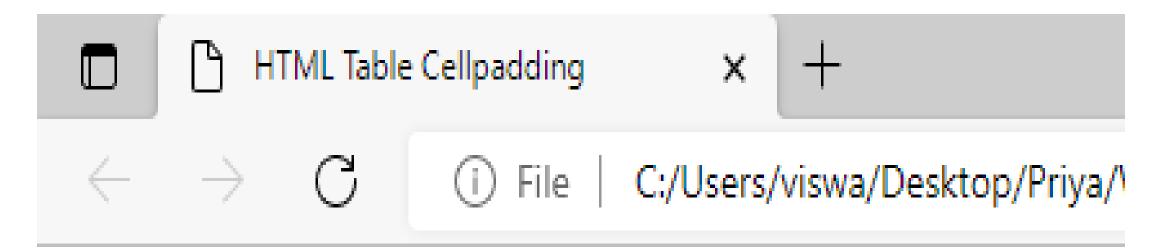


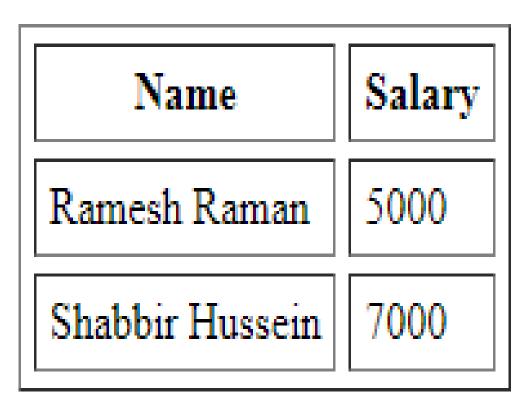
Cellpadding and Cellspacing Attributes

Attributes called *cellpadding* and *cellspacing* which you will use to adjust the white space in your table cells. The cellspacing attribute defines space between table cells, while cellpadding represents the distance between cell borders and the content within a cell.

Example

```
<html>
<head>
 <title>HTML Table Cellpadding</title>
</head>
<body>
 Name
  Salary
  Ramesh Raman
  5000
  Shabbir Hussein
  7000
  </body>
</html>
```





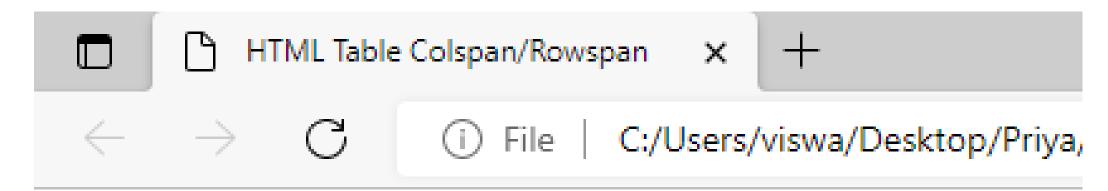
Colspan and Rowspan Attributes

You will use **colspan** attribute if you want to merge two or more columns into a single column. Similar way you will use **rowspan** if you want to merge two or more rows.

Example

```
<html>
<head>
 <title>HTML Table Colspan/Rowspan</title>
</head>
<body>
 Column 1
   Column 2
   Column 3
```

```
>
  Row 1 Cell 1
  Row 1 Cell 2
  Row 1 Cell 3
  Row 2 Cell 2
  Row 2 Cell 3
  Row 3 Cell 1
  </body>
</html>
```



Column 1	Column 2	Column 3
llRow I Cell II	Row 1 Cell 2	Row 1 Cell 3
	Row 2 Cell 2	Row 2 Cell 3
Row 3 Cell 1		

Tables Backgrounds

- You can set table background using one of the following two ways -
- bgcolor attribute You can set background color for whole table or just for one cell.
- background attribute You can set background image for whole table or just for one cell.
- You can also set border color also using border color attribute.
- Note The bgcolor, background, and bordercolorattributes deprecated in HTML5. Do not use these attributes.

```
Example:
<!DOCTYPE html>
<html>
<head>
 <title>HTML Table Background</title>
</head>
<body>
 Column 1
   Column 2
   Column 3
  Row 1 Cell 1
   Row 1 Cell 2
   Row 1 Cell 3
```

```
Row 2 Cell 2
    Row 2 Cell 3
   Row 3 Cell 1
   </body>
                     HTML Table Background
                                           > <
                        File
                                       C:/Users/visw
</html>
                        Column 2
             Column 1
                                    Column 3
                       Row 1 Cell 2 Row 1 Cell 3
            Row 1 Cell 1
                       Row 2 Cell 2 Row 2 Cell 3
            Row 3 Cell 1
```

Table background image

```
<html>
<head>
  <title>HTML Table Background</title>
 </head>
  <body>
  <table border = "1" bordercolor = "green" background =
  "C:\Users\viswa\Desktop\Priya\WEB TECHNOLOGIES\WEB
  TECHNOLOGIES\WT UNITWISE MATERIAL\UNIT-1 HTML CSS/pic.jpg">
   Column 1
    Column 2
    Column 3
   Row 1 Cell 1
    Row 1 Cell 2Row 1 Cell 3
```

```
Row 2 Cell 2
    Row 2 Cell 3
   Row 3 Cell 1
   </body>
                HTML Table Background
</html>
                  C
                             C:/Users/viswa/Desktop/Priya/WEB%20T
                         Column 3
                  Ros
                        2 Row 2 Cell 3
```

Table Height and Width

You can set a table width and height using width and height attributes. You can specify table width or height in terms of pixels or in terms of percentage of available screen area.

Example: <!DOCTYPE html> <html> <head> <title>HTML Table Width/Height</title> </head> <body> Row 1, Column 1 Row 1, Column 2

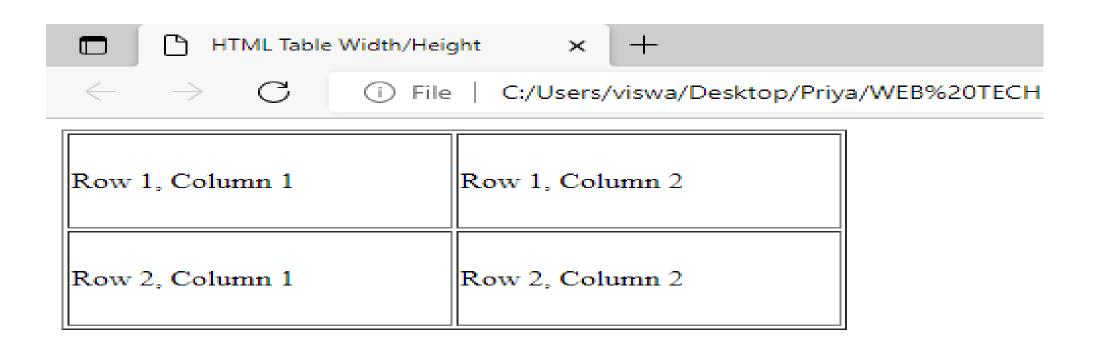
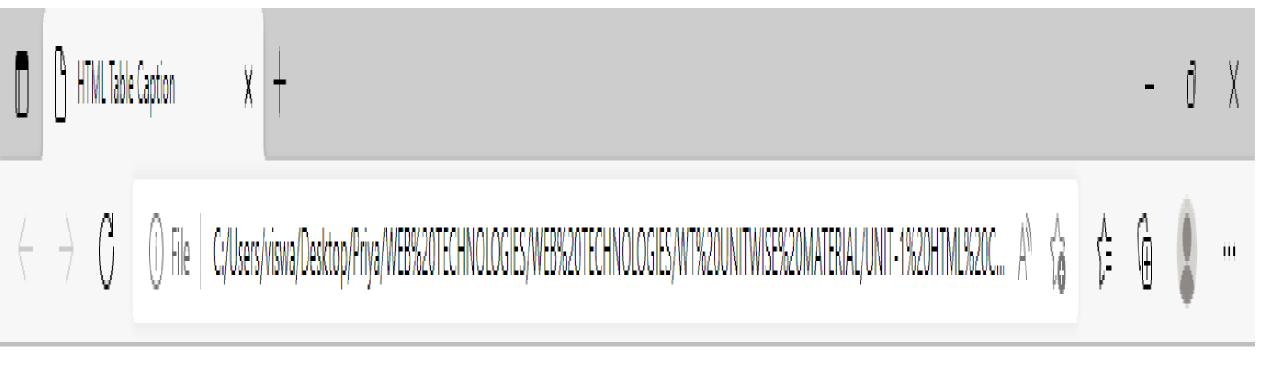


TABLE CAPTION

```
<!DOCTYPE html>
<html>
<head>
  <title>HTML Table Caption</title>
 </head>
<body>
  <caption>This is the caption/caption>
   row 1, column 1row 1, column 2
   row 2, column 1row 2, column 2
   </body>
</html>
```



This is the caption

row 1, column 1	row 1, column 2
row 2, column 1	row 2, column 2

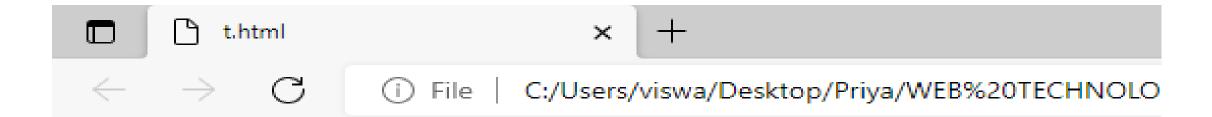
HTML Images

Example:

</html>

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

<h2>HTML Image</h2>
<img src="pic.jpg" alt="img" width="500" height="333">
</body>
```



HTML Image



HTML Images Syntax

- The HTML tag is used to embed an image in a web page.
- Images are not technically inserted into a web page; images are linked to web pages. The tag creates a holding space for the referenced image.
- The tag is empty, it contains attributes only, and does not have a closing tag. The tag has two required attributes:

src - Specifies the path to the image

alt - Specifies an alternate text for the image

Syntax:

The alt Attribute

- The required alt attribute provides an alternate text for an image, if the user for some reason cannot view it (because of slow connection, an error in the src attribute, or if the user uses a screen reader).
- The value of the alt attribute should describe the image:

If a browser cannot find an image, it will display the value of the alt attribute:

Image Size - Width and Height

You can use the style attribute to specify the width and height of an image.

```
Example:
<!DOCTYPE html>
<html>
<body>
<h2>Image Size</h2>
Here we use the style attribute to specify the width and height of an image:

<img src="pic.jpg" alt="Girl " style="width:500px;height:600px;">
</body>
</html>
```

Background Image on a HTML element

 To add a background image on an HTML element, use the HTML style attribute and the CSS background-image property:

```
Example:
<!DOCTYPE html>
<html>
<body>
<h2>Background Image</h2>
A background image for a p element:
You can specify background images<br>
for any visible HTML element.<br>
In this example, the background image<br>
is specified for a p element.<br>
By default, the background-image<br>
will repeat itself in the direction(s)<br>
where it is smaller than the element<br/>
where it is specified. (Try resizing the<br>
browser window to see how the <br>
background image behaves.
</body>
</html>
```



Background Image

A background image for a p element:



Learning resources Text Books

- Ralph Moseley and M. T. Savaliya, WileyIndia "Developing Web Applications"
- Jeffrey C. Jackson," Web Technologies—A Computer Science Perspective", PearsonEducation,
- Dreamtech Press "Web TechnologiesBlack Book," HTML 5,
- Web Technologies: HTML, JAVASCRIPT, PHP, JAVA, JSP, XML and AJAX, Black Book Kindle Edition by Kogent Learning Solutions Inc. (Author)
- O'Reilly Head First Servlets and JSP, 2nd Edition
- Node.js Web Development: Create real-time server-side applications with this practical, step-by-step guide, 3rd Edition
- Bootstrap: Responsive Web Development Book by Jake Spurlock

Reference Books

- Joel Sklar, Cengage "Web Design", Learning
- Robert. W. Sebesta, "Programming the World Wide Web", Fourth Edition, PearsonEducation
- P.J. Deitel & H.M. Deitel "Internet and World Wide Web How to program", Pearson