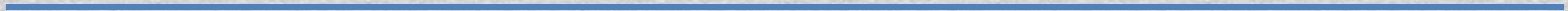


HTML Tables, Forms and Audio Video



Time Table					
	Mon	Tue	Wed	Thu	Fri
Hours	Science	Maths	Science	Maths	Arts
	Social	History	English	Social	Sports
	Lunch				
	Science	Maths	Science	Maths	Project
	Social	History	English	Social	

Table Structure

- A table consists of one or several rows.
- Each row has one or more columns.
- Following core HTML tags can be used to describe tabular data:
- The `<table>` element defines the start and end of the table.
- The `<tr>` element defines the start and end of a row in the table.
- The `<td>` element defines a table cell.
- We can also use `<th>` element to define the heading in table cell.

```
<table border=1>
  <tr>
    <td>row 1, col 1 </td>
    <td>row 1, col 2 </td>
  </tr>

  <tr>
    <td>row 2,col 1 </td>
    <td>row 2,col 2 </td>
  </tr>
</table>
```

row 1, col 1	row 1, col 2
row 2,col 1	row 2,col 2

Colspan Attribute

- Spanning refers to a process of extending a cell across multiple rows or columns. To span two or more columns, use the colspan attribute of the <td> and <th> elements.
- The value of colspan attribute specifies the number of columns to be merged.

CPISM		DISM	
Name:	Roll Number:	Name:	Roll Number:
Saad Shaikh	939814	Asad Ali	839715
Kamran Siddiqui	939854	Adil Abdullah	874156
Aneeq	939656	Usman	874156

Example of Colspan

```
<table border="1" cellpadding="20"
cellspacing="5">
```

```
<tr>
```

```
<th colspan="2"> CPISM </th>
```

```
<th colspan="2"> DISM </th>
```

```
</tr>
```

```
<tr>
```

```
<th>Name:</th>
```

```
<th>Roll Number: </th>
```

```
<th>Name:</th>
```

```
<th>Roll Number: </th>
```

```
</tr>
```

```
<tr>
```

```
<td>Saad Shaikh </td>
```

```
<td>939814 </td>
```

```
<td>Asad Ali</td>
```

```
<td>839715</td>
```

```
</tr>
```

```
<tr>
```

```
<td>Kamran Siddiqui</td>
```

```
<td>939854 </td>
```

```
<td>Adil Abdullah</td>
```

```
<td> 874156</td>
```

```
</tr>
```

```
<tr>
```

```
<td> Aneeq </td>
```

```
<td>939656</td>
```

```
<td>Usman </td>
```

```
<td>874156</td>
```

```
</tr>
```

```
</table>
```

Rowspan Attribute

- To make a cell span more than one row, use the **rowspan** attribute.
- The value of rowspan attribute specifies the number of columns to be merged.

Faculty Name:	Saad Shaikh
Batch Timings:	9 TO 11 (TTS)
	11 TO 1 (MWF)

Example Of Rowspan

- To add a caption to a table, use the **<caption>** tag.

```
<table cellpadding="10" cellspacing="5" style="width:50%">
<caption> Faculty Batch Timing Info </caption>
<tr>
  <th>Faculty Name:</th>
  <td style="text-align:center">Saad Shaikh</td>
</tr>
<tr>
  <th rowspan="2">Batch Timings:</th>
  <td>9 TO 11 (TTS)</td>
</tr>
<tr>
  <td>11 TO 1 (MWF)</td>
</tr>
</table>
```

Table With Caption

- To add a caption to a table, use the `<caption>` tag.

```
<table cellpadding="10" cellspacing="5" style="width:50%">
```

```
<caption> Faculty Batch Timing Info </caption>
```

```
<tr>
```

```
<th>Faculty Name:</th>
```

```
<td style="text-align:center">Saad Shaikh</td>
```

```
</tr>
```

```
<tr>
```

```
<th rowspan="2">Batch Timings:</th>
```

```
<td>9 TO 11 (TTS)</td>
```

```
</tr>
```

```
<tr>
```

```
<td>11 TO 1 (MWF)</td>
```

```
</tr>
```

```
</table>
```

Faculty Batch Timing Info

Faculty Name:	Saad Shaikh
Batch Timings:	9 TO 11 (TTS)
	11 TO 1 (MWF)

Table Padding

- To control the space between the border and the content in a table, use the padding property on `<td>` and `<th>` elements.

Example:

```
th, td {  
    padding: 15px;  
    text-align: left;  
}
```

HTML5 FORMS



Emergency Contact Info [More Actions ▼](#)

First Name	<input type="text"/>	Name	<input type="text"/>
Last Name	<input type="text"/>	Relationship	<input type="text"/>
Gender	Male <input type="checkbox"/>	Address	<input type="text"/>
Date of Birth	<input type="text"/> 31 [dd-MM-yyyy]		

Medical Information

Hospital Preference	<input type="text"/>	City	<input type="text"/>
Insurance Company	<input type="text"/>	State	-Select-
Policy Number	<input type="text"/>	Country	-Select-
Physician's Name	<input type="text"/>	Home Phone	<input type="text"/>
Phone Number	<input type="text"/>	Work Phone	<input type="text"/>
Allergies (if any)	<input type="text"/>		



Forms

- Html forms are the primary method for gathering data from site visitors.
- Forms contain different controls through which user enters the details.
These includes:
 - Text fields
 - Buttons
 - Check boxes
 - Color Pickers
- Html5 have introduced many new features that enables website designers to validate user entries without using Java Script language.

Basic syntax:

`<form>`

form elements

`</form>`

The `<input>` Element

- HTML forms contain **form elements**.
- Form elements are different types of input elements, checkboxes, radio buttons, submit buttons, and more.
- The `<input>` element is the most important **form element**.
- The `<input>` element has many variations, depending on the **type** attribute.

For example:

- `<form>`
First name:`
`
`<input type="text" name="firstname">
`
Last name:`
`
`<input type="text" name="lastname">`
`</form>`
-

Input types

- `<input type="text">` defines a one-line input field for text input.
- `<input type="radio">` defines a radio button.
- `<input type="submit">` defines a button for submitting a form to a form-handler.

Type	Description
text	Defines normal text input
radio	Defines radio button input (for selecting one of many choices)
submit	Defines a submit button (for submitting the form)

Html5 new input types

Type	Description
email	The <input type="email"> is used for input fields that should contain an e-mail address.
url	The <input type="url"> is used for input fields that should contain a URL address.
tel	The <input type="tel"> is used for input fields that should contain a telephone number.
datetime	The <input type="datetime"> allows the user to select a date and time.
time	The <input type="time"> allows the user to select a time
month	The <input type="month"> allows the user to select a month and year.

Html5 new input types

Types	Description
range	The <input type="range"> is used for input fields that should contain a value within a range.
color	The <input type="color"> is used for input fields that should contain a color.
date	The <input type="date"> is used for input fields that should contain a date.
number	The <input type="number"> is used for input fields that should contain a numeric value.

Basic attributes of form

- **The Action Attribute**

- The **action attribute** defines the action to be performed when the form is submitted.
- The common way to submit a form to a server, is by using a submit button.
- `<form action="action_page.php">`

- **The Method Attribute**

- The **method attribute** specifies the HTTP method (**GET** or **POST**) to be used when submitting the forms:
- `<form action="action_page.php" method="get">`
- `<form action="action_page.php" method="post">`

- **The Name Attribute**

- To be submitted correctly, each input field must have a name attribute.
 - `<input type="text" name="lastname" value="Mouse">`
-

Html5 New Form Attributes

- HTML5 has introduced several new attributes that can be used with form and input elements.

Attributes	Description
placeholder	The placeholder attribute specifies a hint that describes the expected value of an input field.
required	It specifies that an input field must be filled out before submitting the form.
multiple	It specifies that an input field must be filled out before submitting the form.
autofocus	It specifies that an <input> element should automatically get focus when the page loads.
pattern	The pattern attribute specifies a regular expression that the <input> element's value is checked against.
form	The form attribute specifies one or more forms an <input> element belongs to

Working With Input Types

text

`<input type="text">` defines a one-line input field for text input.

- **Example**

```
<form>
```

```
  First name:<br>
```

```
  <input type="text" name="firstname"><br>
```

```
  Last name:<br>
```

```
  <input type="text" name="lastname">
```

```
</form>
```

password

`<input type="password">` defines a **password field**.

- Example

`<form>`

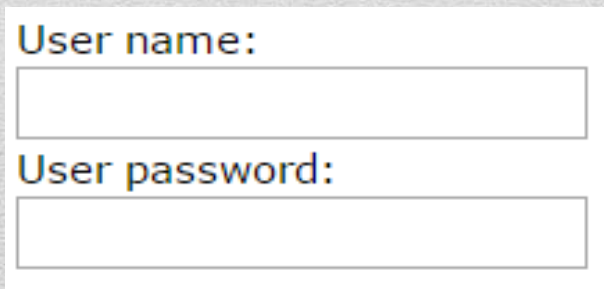
User name:`
`

`<input type="text" name="username">
`

User password:`
`

`<input type="password" name="psw">`

`</form>`



User name:

User password:

submit

- `<input type="submit">` defines a button for **submitting** form input to a **form-handler**.

- **Example**

```
<form action="action_page.php">
```

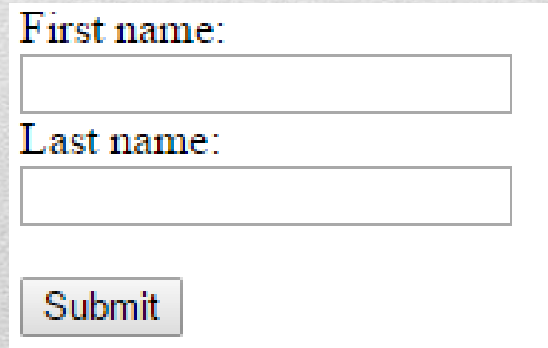
```
  First name:<br>
```

```
  <input type="text" name="firstname" value="Saad"><br>
```

```
  Last name:<br>
```

```
  <input type="text" name="lastname" value="Shaikh"><br> <input ty  
pe="submit" value="Submit">
```

```
</form>
```



First name:

Last name:

Submit

radio

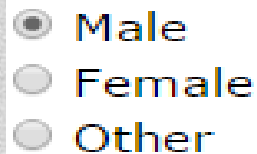
- `<input type="radio">` defines a **radio button**.
- Radio buttons let a user select **ONLY ONE** of a limited number of choices.
- **Example**

`<form>`

`<input type="radio" name="gender" value="male" checked> Male
`

`<input type="radio" name="gender" value="female"> Female
`

`<input type="radio" name="gender" value="other"> Other</form>`



checkbox

Checkboxes let a user to select ZERO or MORE options of a limited number of choices.

- **Example**

```
<form>
```

```
  <input type="checkbox" name="vehicle1" value="Bike">
```

```
I have a bike<br>
```

```
  <input type="checkbox" name="vehicle2" value="Car"> I  
have a car
```

```
</form>
```

☐ I have a bike

☐ I have a car

number

- The `<input type="number">` is used for input fields that should contain a numeric value.
- You can set restrictions on the numbers.
- **Example**

`<form>`

Quantity (between 1 and 5):

`<input type="number" name="quantity" min="1" max="5">`

`<input type="submit">`

`</form>`

Quantity (between 1 and 5):

date

- The `<input type="date">` is used for input fields that should contain a date.
- **Example**

`<form>`

 Birthday:

`</form>`

Birthday:

April 2016 ▼

Sun	Mon	Tue	Wed	Thu	Fri	Sat
27	28	29	30	31	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

color

- The `<input type="color">` is used for input fields that should contain a color.

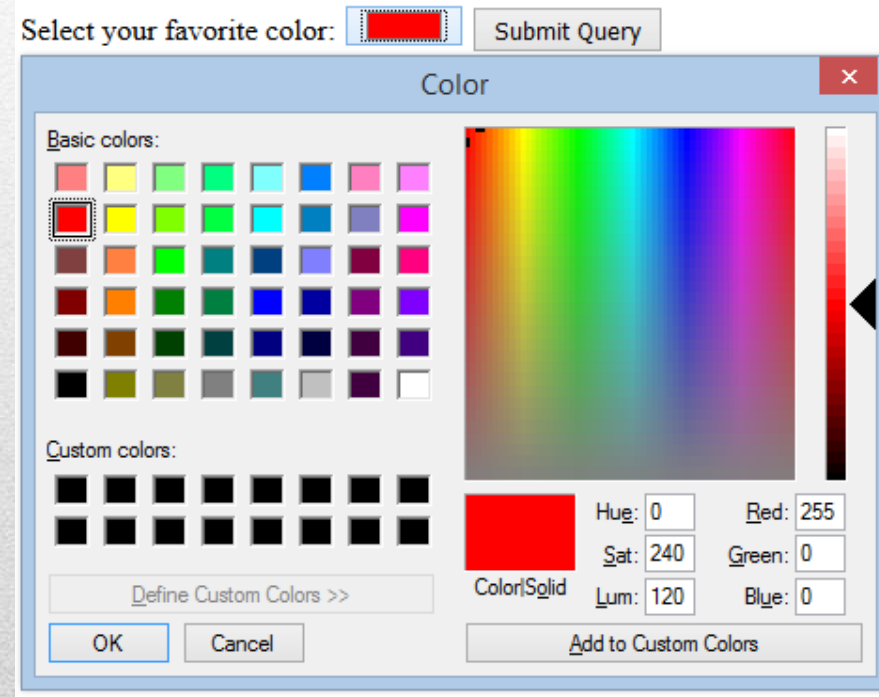
Example:

`<form>`

Select your favorite color:

`<input type="color" name="favoritecolor">`

`</form>`



email

- The `<input type="email">` is used for input fields that should contain an e-mail address.
- Depending on browser support, the e-mail address can be automatically validated when submitted.

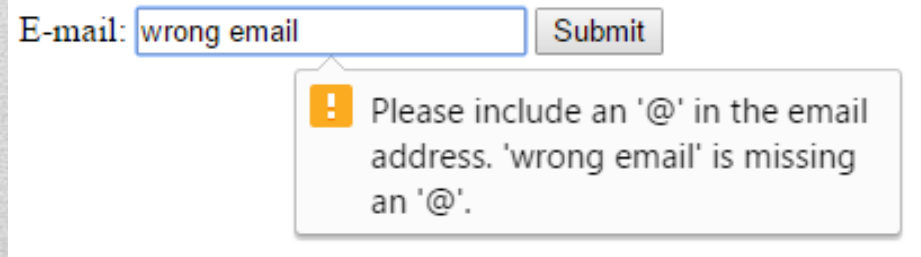
- Example

- `<form>`

E-mail:

`<input type="email" name="email">`

`</form>`



A screenshot of a web form with the label "E-mail:" followed by a text input field containing the text "wrong email". To the right of the input field is a "Submit" button. Below the input field, a yellow warning icon is displayed next to a message box that reads: "Please include an '@' in the email address. 'wrong email' is missing an '@'."

url

- The `<input type="url">` is used for input fields that should contain a website address.
- **Example**

`<form>`

Add your homepage:

`<input type="url" name="homepage">`

`</form>`

Add your homepage:

Submit

Html5 New Attributes

- HTML5 has provided several new attributes that perform the validations without writing JavaScript snippets for them.
 - Now I will discuss some important attributes that are introduced in HTML5.
-

The autocomplete Attribute

- The autocomplete attribute specifies whether a form or input field should have autocomplete on or off.
- When autocomplete is on, the browser automatically complete values based on values that the user has entered before.

Example:

```
<form autocomplete="on">
```

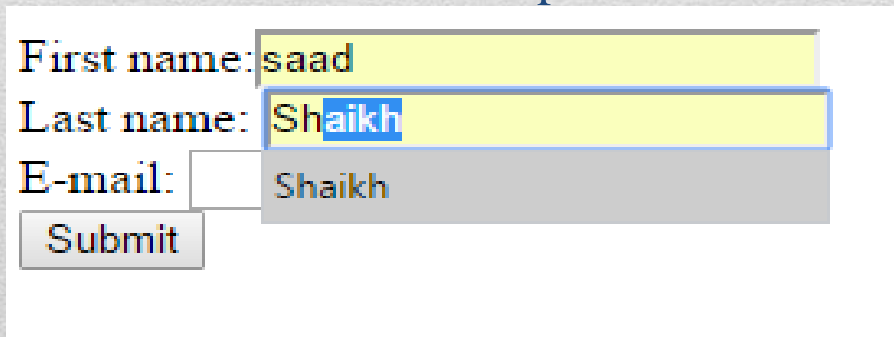
```
  First name:<input type="text" name="fname"><br>
```

```
  Last name: <input type="text" name="lname"><br>
```

```
  E-mail: <input type="email" name="email" autocomplete="on"><br>
```

```
  <input type="submit">
```

```
</form>
```



The screenshot shows a web form with the following fields and values:

- First name: saad
- Last name: Shaikh
- E-mail: Shaikh
- Submit button

The form is styled with a light gray background and a white border. The input fields are white with a light gray border. The text labels are in a dark blue font. The submit button is a gray rectangle with the word "Submit" in white text.

The autofocus Attribute

- It specifies that an `<input>` element should automatically get focus when the page loads.
- Example:

First name: `<input type="text" name="fname" autofocus>`

- The above code let the "First name" input field automatically get focus when the page loads.
-

The Placeholder Attribute

- The placeholder attribute specifies a hint that describes the expected value of an input field.
- Example

```
<form>
```

```
<input type="text" name="fname" placeholder="First  
name"><br>
```

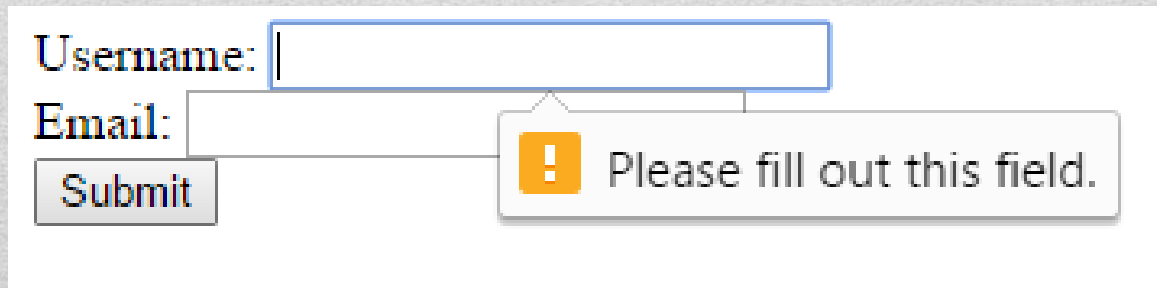
```
<input type="text" name="lname" placeholder="Last  
name"><br>
```

```
<input type="submit" value="Submit">  
</form>
```

The required Attribute

- When present, it specifies that an input field must be filled out before submitting the form.
- The required attribute works with the following input types: text, search, url, tel, email, password, date pickers, number, checkbox, radio, and file.
- Example:

Username: `<input type="text" name="username" required>`



A screenshot of a web form with two input fields: 'Username:' and 'Email:'. The 'Username:' field is empty and has a blue border. The 'Email:' field is also empty. Below the 'Email:' field is a 'Submit' button. A yellow warning icon with an exclamation mark is positioned between the 'Email:' field and the 'Submit' button. A message box with a yellow background and a grey border contains the text 'Please fill out this field.' with a line pointing to the 'Email:' field.

HTML **<fieldset>** Tag

- The `<fieldset>` tag is used to group related elements in a form.
 - The `<fieldset>` tag draws a box around the related elements.
 - The `<legend>` tag defines a caption for the `<fieldset>` element.
-

EXAMPLE

<form>

<fieldset>

<legend>Information:</legend>

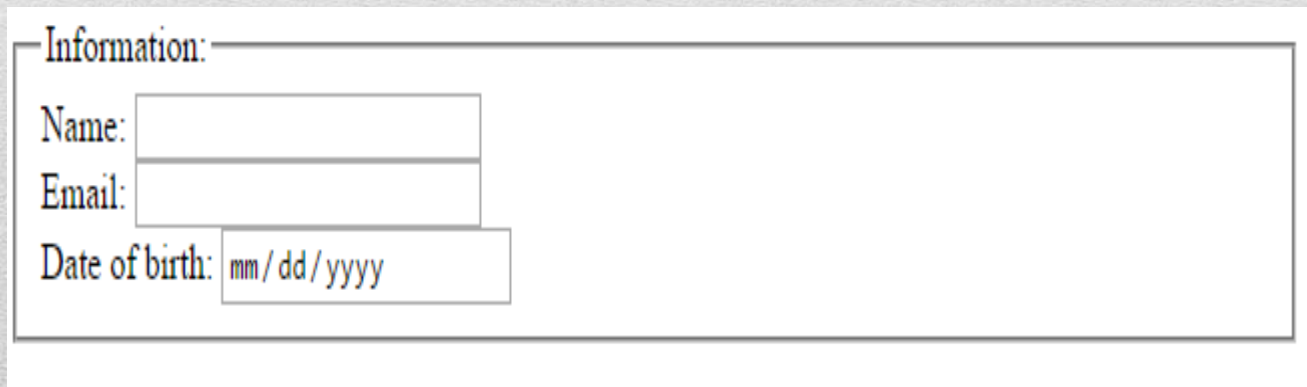
Name: <input type="text">

Email: <input type="email">

Date of birth: <input type="date">

</fieldset>

</form>



Information:

Name:

Email:

Date of birth:

Registration Form

User id:

Password:

Name:

Address:

Country:

ZIP CODE:

Email:

Sex: ☐ Male ☐ Female

Language: ☒ English ☐ Non English

About:

Sample Form

Html5 Audio & Video

- HTML5 features, include native audio and video support without the need for Flash.
- The HTML5 `<audio>` and `<video>` tags make it simple to add media to a website. You need to set **src** attribute to identify the media source and include a **controls** attribute so the user can play and pause the media.

Note: Only MP3, WAV, and Ogg audio are supported by the newest HTML5 standard.

Html5 Audio

- The HTML5 <audio> element specifies a standard way to embed audio in a web page.

- **Example:**

```
<audio controls>
```

```
  <source src="audio.ogg" type="audio/ogg">
```

```
  <source src="audio.mp3" type="audio/mpeg">
```

```
</audio>
```

- The <source> tag is used to specify multiple media resources for media elements, such as <video> and <audio>.The <source> tag allows you to specify alternative video/audio files which the browser may choose from, based on its media type or codec support.
-

Audio Attributes

Attribute	Description
autoplay	The audio will automatically begin to play back as soon as it can do so without stopping to finish loading the data.
autobuffer	The audio will automatically begin buffering even if it's not set to automatically play.
controls	If this attribute is present, it will allow the user to control audio playback, including volume, seeking, and pause/resume playback.
loop	This will allow audio automatically seek back to the start after reaching at the end.
preload	This attribute specifies that the audio will be loaded at page load, and ready to run. Ignored if autoplay is present.

HTML5 Video

- To show a video in HTML, use the **<video>** element

Example

- `<video width="320" height="240" controls>`
 `<source src="movie.mp4" type="video/mp4">`
 `<source src="movie.ogg" type="video/ogg">`

Your browser does not support the video tag.

`</video>`

Video Attributes

Attributes	Description
autoplay	Specifies that the browser will start playing the video as soon as it is ready.
muted	Allows to mute the video initially.
controls	Allows displaying the controls of the video.
loop	Specifies that the browser should repeat playing the existing video once.
preload	Specifies whether the video should be loaded or not when the page is loaded.