Form 1

Name: [your name]

Email: [your email]

Password: [   ]

Phone Number: [   ]

Gender: Male: ⦿ Female: ⦿ Other: ⦿

language [Select language ▾]

Zip Code: [   ]

About: [Write about yourself...]

Register

Form 2

👤 Name

✉ Email ID

📞 Phone

🔒 Set Password

REGISTER

HTML Forms

- Primary element of a web page
- HTML Forms are required, when you want to collect some data from the site visitor.
- For example, during user registration you would like to collect information such as name, email address, credit card etc
- HTML forms contain **form elements**.

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

Form Attributes

The HTML <form> tag is used to create an HTML form and it has following syntax:

<form action="Script URL" method="GET|POST">
form elements like input, textarea etc.
</form>

Attribute	Description
action	Backend script ready to process your passed data.
method	Method to be used to upload data. The most frequently used are GET and POST methods.
target	Specify the target window or frame where the result of the script will be displayed. It takes values like _blank, _self, _parent etc.

HTML Forms - The Input Element

- The most important form element is the <input> element.

- The <input> element is used to select user information.

- An <input> element can vary in many ways, depending on the type attribute. An <input> element can be of type text field, checkbox, password, radio button, submit button, and more.

The most common input types are described below.

Text Fields

<input type="text"> defines a one-line input field that a user can enter text into:

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

First name: [   ]

Last name: [   ]

Attributes

Following is the list of attributes for <input> tag for creating text field.

Attribute	Description
type	Indicates the type of input control and for text input control it will be set totext.
name	Used to give a name to the control which is sent to the server to be recognized and get the value.
value	This can be used to provide an initial value inside the control.
size	Allows to specify the width of the text-input control in terms of characters.
maxlength	Allows to specify the maximum number of characters a user can enter into the text box.

Password Field

<input type="password"> defines a password field:

```
<form>
Password: <input type="password" name="pwd">
</form>
```

Password: [   ]

Note: The characters in a password field are masked (shown as asterisks or circles).

Multiple-Line Text Input Controls-textarea

```
<!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>
```
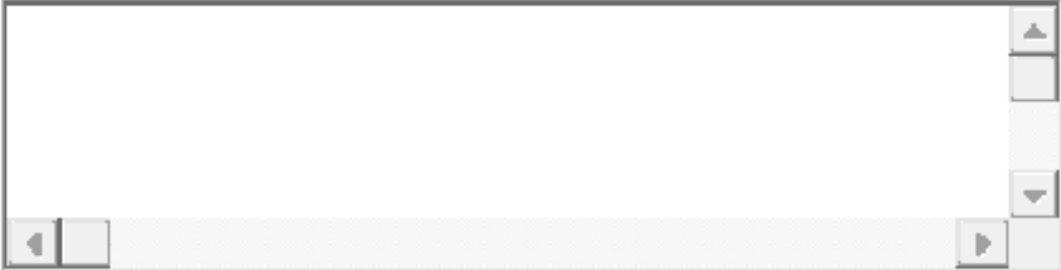
Description

Radio Buttons

- <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">Male <br>
  <input type="radio" name="gender" value="female">Female
  </form>
```

○ Male
○ Female

Radio Buttons Attributes

Attribute	Description
type	Indicates the type of input control and for checkbox input control it will be set to radio.
name	Used to give a name to the control which is sent to the server to be recognized and get the value.
value	The value that will be used if the radio box is selected.
checked	Set to *checked* if you want to select it by default.

Checkboxes

<input type="checkbox"> defines a checkbox. Checkboxes let a user select ZERO or MORE options of a limited number of choices.

Example:

<form>
<input type="checkbox" name="vehicle" value="Bike">I have a bike
<input type="checkbox" name="vehicle" value="Car">I have a car
</form>

☐ I have a bike
☐ I have a car

Checkboxes **Attributes**

Attribute	Description
type	Indicates the type of input control and for checkbox input control it will be set to checkbox.
name	Used to give a name to the control which is sent to the server to be recognized and get the value.
value	The value that will be used if the checkbox is selected.
checked	Set to *checked* if you want to select it by default.

The <select> Element

```html
<html>
<head>
 <title>Select Box Control</title>
 </head>
 <body>
 <form>
<select name="dropdown" size=3  multiple>
 <option value="Maths" selected>Maths</option>
 <option value="Physics">Physics</option>
 <option value="Chemistry">Chemistry</option>
<option value="Biology" label="xyz">Biology</option>
 </select>
</form>
</body>
</html>
```
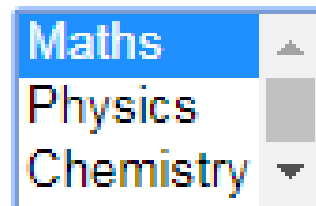
The \<select\> Element

Also called drop down box which provides option to list down various options

Attribute	Description
name	Used to give a name to the control which is sent to the server to be recognized and get the value.
size	This can be used to present a scrolling list box.
multiple	If set to "multiple" then allows a user to select multiple items from the menu.

Following is the list of important attributes of \<option\> tag —

value	The value that will be used if an option in the select box box is selected.
selected	Specifies that this option should be the initially selected value when the page loads.
label	An alternative way of labeling options

File upload control

- If you want to allow a user to upload a file to your web site, you will need to use a file upload box, also known as a file select box.
- Example

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

<input type="submit"> defines a submit button.

A submit button is used to send form data to a server. The data is sent to the page specified in the form's action attribute. The file defined in the action attribute usually does something with the received input:

<form name="input" action="html_form_action.asp" method="get">
Username: <input type="text" name="user">
<input type="submit" value="Submit">
</form>

Username: [   ] Submit

If you type some characters in the text field above, and click the "Submit" button, the browser will send your input to a page called "html_form_action.asp". The page will show you the received input.

Definition and Usage

The <button> tag defines a clickable button.

Inside a <button> element you can put content, like text or images. This is the difference between this element and buttons created with the <input> element.

Tip: Always specify the type attribute for a <button> element. Different browsers use different default types for the <button> element.

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

button

```
<!DOCTYPE html>
<html>
<head>
<title>File Upload Box</title>
</head>
<body>
<form>
<input type="submit" name="submit" value="Submit" />
<input type="reset" name="reset"  value="Reset" />
<input type="button" name="ok" value="OK"  />
<input type="image" name="imagebutton" src="g://smiley.gif" />
</form>
</body>
</html>
```

Label Tag

- It is considered better to have label in form. As it makes the code parser/browser/user friendly.
- If you click on the label tag, it will focus on the text control. To do so, you need to have for attribute in label tag that must be same as id attribute of input tag.
- It is more worthy with touchscreens.

```
<form>
    <label for="firstname">First Name: </label> <br/>
        <input type="text" id="firstname" name="firstname"/>

<br/>
    <label for="lastname">Last Name: </label>
        <input type="text" id="lastname" name="lastname"/>
 <br/>
 </form>
```

HTML 5 Email Field Control

- The email field in new in HTML 5. It validates the text for correct email address. You must use @ and . in this field.

```html
<form>
    <label for="email">Email: </label>
        <input type="email" id="email" name="email"/>
<br/>
</form>
```

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

<form action="demo_form.asp" method="get">
First name: <input type="text" name="fname"><br>
Last name: <input type="text" name="lname"><br>
<button type="submit" value="Submit">Submit</button>
<button type="reset" value="Reset">Reset</button>
</form>

</body>
</html>
```

First name: [   ]

Last name: [   ]

[Submit] [Reset]

<fieldset>

- Group related elements in a form:

<html>

<body>

<form>

 <fieldset>

 <legend>Personal:</legend>

 Name: <input type="text">

 Email: <input type="text">

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

 </fieldset>

 <fieldset>

 <legend>Official:</legend>

 Empno: <input type="text">

 Post: <input type="text">

 salary: <input type="text">

 </fieldset>

</form>

</body>

</html>
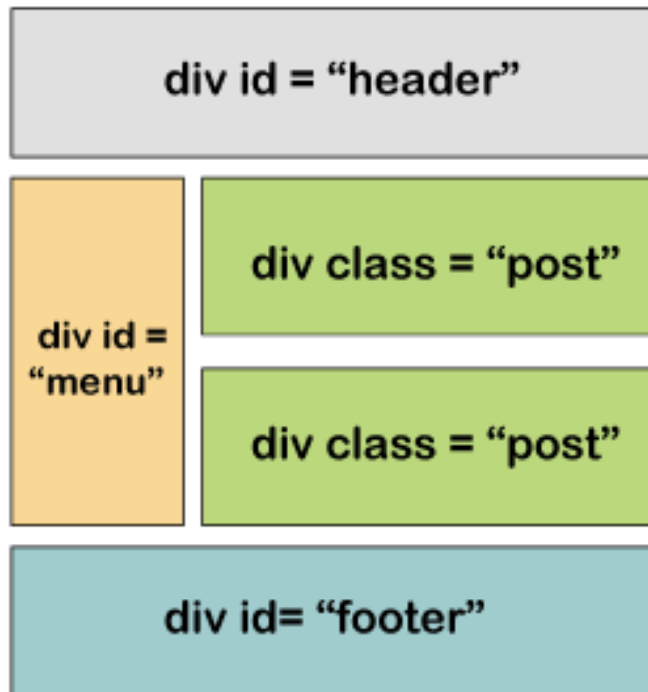
different input types used in HTML:

- <input type="button">
- <input type="checkbox">
- <input type="color">
- <input type="date">
- <input type="email">
- <input type="file">
- <input type="hidden">
- <input type="image">
- <input type="month">
- <input type="number">
- <input type="password">
- <input type="radio">
- <input type="range">
- <input type="reset">
- <input type="search">
- <input type="submit">
- <input type="tel">
- <input type="text">
- <input type="time">
- <input type="url">
- <input type="week">

- Attribute   Description
- Disabled   Specifies that an input field should be disabled
- Max   Specifies the maximum value for an input field
- Maxlength Specifies the maximum number of character for an input field
- Min   Specifies the minimum value for an input field
- Required   Specifies that an input field is required (must be filled out)
- Size   Specifies the width (in characters) of an input field
- Step   Specifies the legal number intervals for an input field
- Value   Specifies the default value for an input field
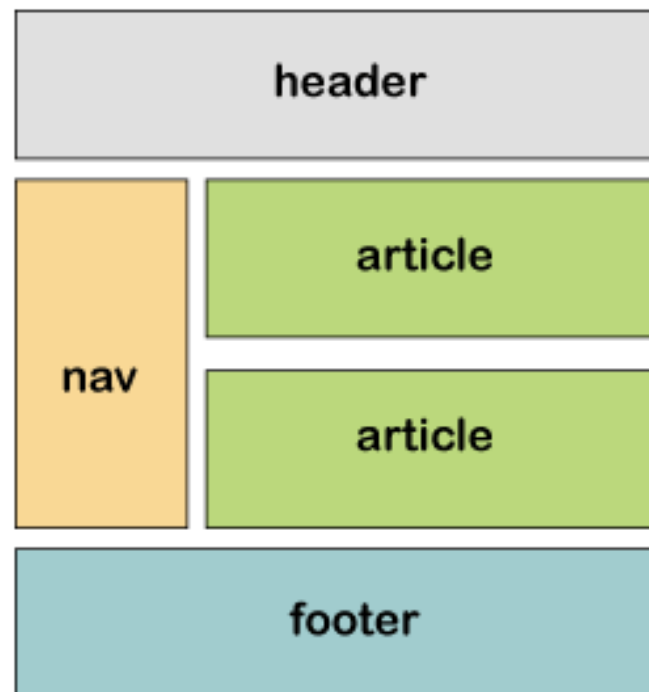
Html4 Structure

div id = "header"

| div id = "menu" | div class = "post" |
| | div class = "post" |

div id= "footer"

VS

Html5 Structure

header

| nav | article |
| | article |

footer

HTML5 Document

- The following tags have been introduced for better structure —

- **section** — This tag represents a generic document or application section. It can be used together with h1-h6 to indicate the document structure.

- **article** — This tag represents an independent piece of content of a document, such as a blog entry or newspaper article.

- **aside** — This tag represents a piece of content that is only slightly related to the rest of the page.

- **header** — This tag represents the header of a section.

- **footer** — This tag represents a footer for a section and can contain information about the author, copyright information, et cetera.

- **nav** — This tag represents a section of the document intended for navigation.

- **dialog** — This tag can be used to mark up a conversation.

- **figure** — This tag can be used to associate a caption together with some embedded content, such as a graphic or video.

HTML	HTML5
It didn't support audio and video without the use of flash player support.	It supports audio and video controls with the use of <audio> and <video> tags.
It uses cookies to store temporary data.	It uses SQL databases and application cache to store offline data.
Does not allow JavaScript to run in browser.	Allows JavaScript to run in background. This is possible due to JS Web worker API in HTML5.
It does not allow drag and drop effects.	It allows drag and drop effects.
Not possible to draw shapes like circle, rectangle, triangle etc.	HTML5 allows to draw shapes like circle, rectangle, triangle etc.
It works with all old browsers.	It supported by all new browser like Firefox, Mozilla, Chrome, Safari, etc.
Older version of HTML are less mobile-friendly.	HTML5 language is more mobile-friendly.
Elements like nav, header were not present.	New element for web structure like nav, header, footer etc.
Vector graphics is possible in HTML with the help of various technologies such as VML, Silver-light, Flash, etc.	Vector graphics is additionally an integral a part of HTML5 like SVG and canvas.

HTML – EMBED MULTIMEDIA

- Sometimes you need to add music or video into your web page.
- The easiest way to add video or sound to your web site is to include the special HTML tag called <embed>.
- You can also include a <noembed> tag for the browsers which don't recognize the <embed> tag.
- <noembed> to display a single JPG image if browser does not support <embed> tag.
- Supported Video Types :
- .swf files - are the file types created by Macromedia's Flash program.
- .wmv files - are Microsoft's Window's Media Video file types.
- .mov files - are Apple's Quick Time Movie format.
- .mpeg files - are movie files created by the Moving Pictures Expert Group.

HTML – EMBED MULTIMEDIA

```html
<!DOCTYPE html>
<html>
<head>
<title>HTML embed Tag</title>
</head>
<body>
<embed src="/html/yourfile.mid" width="100%" height="60" >
  <noembed><img src="yourimage.gif" alt="Alternative Media" > </noembed>
</embed>
</body>
</html>
```

Background Audio

- You can use HTML <bgsound> tag to play a soundtrack in the background of your webpage.

- This tag is supported by Internet Explorer only and most of the other browsers ignore this tag.

Background Audio

```
<!DOCTYPE html>
<html>
<head>
<title>HTML embed Tag</title>
</head>
<body>
<bgsound src="/html/yourfile.mid">
  <noembed><img src="yourimage.gif" ></noembed>
</bgsound>
</body>
</html>
```

<video> Element

```
<html>
<body>

<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>

</body>
</html>
```

<audio> Element

<body>

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

</body>
</html>

Absolute classes registration

Name: [   ] *

E-mail: [   ] *

Time: [   ]

Classes: [   ]

Gender: ○ Female ○ Male *

Select: | Android ▲ |
| Java |
| C# |
| Data Base ▼ |

Agree: ☐ *

[Submit]