


### *Registration Form*


Name

Father's Name

Email Id

DOB  

Gender Male ☐ Female ☐

Area of Interest  

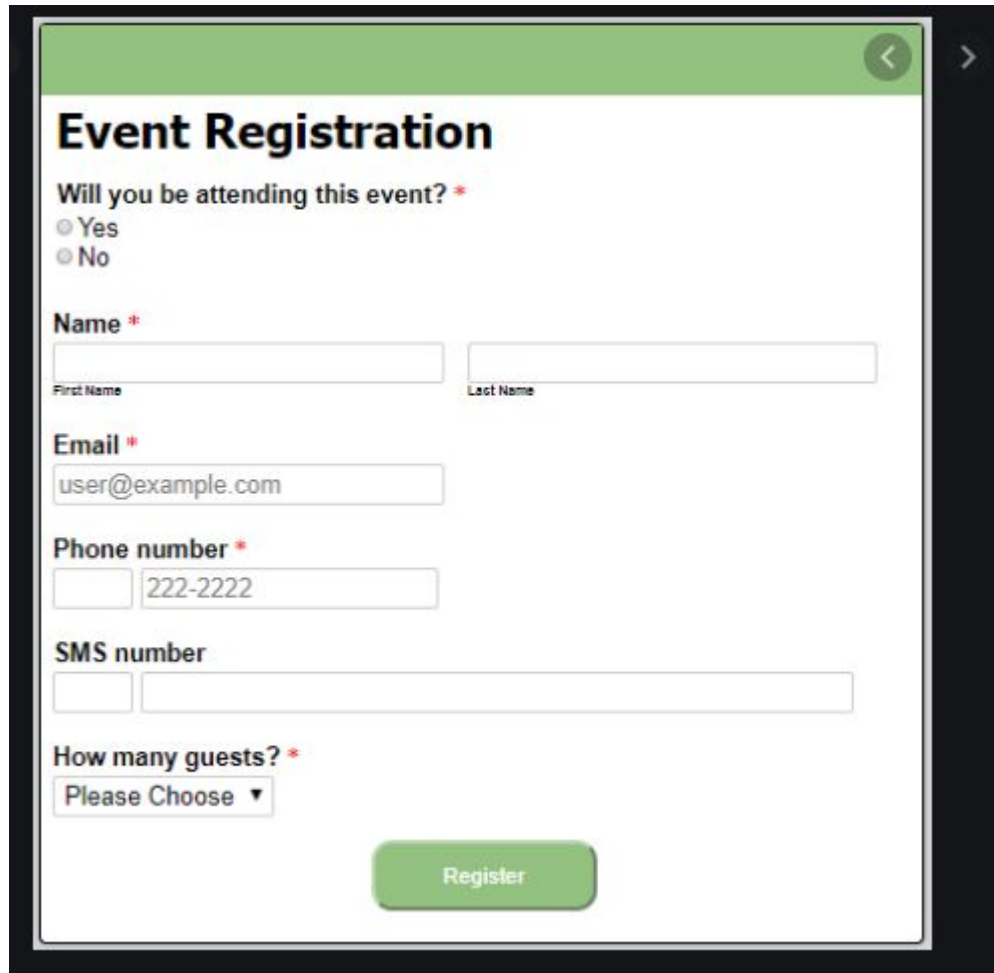
Hobbies Music ☐ Dance ☐ Books ☐

# FORMS

# Introduction

- HTML forms are used to collect user input in a web page
- A form is collection of form fields
- Form fields are elements that allows the visitor to provide information in different ways like text boxes, drop-down menus or radio buttons, check boxes, etc...
- When the visitor clicks a submit button, the content of the form is usually sent to a program that runs on the server

# Sample Example of Form in event registration Page

A sample event registration form with a green header bar containing back and forward navigation arrows. The form is titled "Event Registration" and includes fields for attendance confirmation, name, email, phone number, SMS number, and number of guests, all with red asterisks indicating required fields. A green "Register" button is at the bottom.

**Event Registration**

Will you be attending this event? \*

☐ Yes  
☐ No

**Name \***

First Name

Last Name

**Email \***

**Phone number \***

**SMS number**

**How many guests? \***

**Register**

# PHP/ASP/CGI/Python SCRIPTS

- When a form is submitted, a **program is needed in web server** that can receive the information, process it and respond to user.
- Such programs are sometimes referred as **Server side scripts**
- Server side scripting language examples
  - ✓ **PHP (Hypertext Preprocessor)**
  - ✓ **ASP (Active Server Pages)**
  - ✓ **PYTHON**
  - ✓ **CGI (Common Gateway Interface)**

# <form> Element

- ❑ **<form>** element defines a HTML form
- ❑ When a form is submitted, all fields on the form are sent
- ❑ <form> tag tells the browser where **the form starts and ends.**
- ❑ can **add all kinds of HTML tags between the <form> and </form> tags**
- ❑ **Example:**
  - <form>**
  - ..... Form elements**
  - </form>**

# Form Tag Attributes

## ❑ Form tag Attributes

`action="address "`

`method="post" or method="get "`

- The address is the `url` of the script the content should be sent to.
- The post and get methods are simply two different methods for submitting data to the script.

# HTML FORM attributes

- **<action>**
  - defines the action to be performed when the form is submitted.
  - If the action attribute is omitted, the action is set to the current page.
- **<target>**
  - open in a new browser tab, a frame, or in the current window
  - form target=“\_self”, “\_blank”, “\_top”, “\_parent”
- **<method>**
  - HTTP methods
    - Get --- used while submitting the form with non sensitive data
    - Post --- used while submitting the form with sensitive data

# HTML Form Attributes

## GET Method

- the submitted form data will be **visible** in the page address field (eg.:  
/action\_page.php?firstname=Mickey
- Appends form-data into the URL in name/value pairs
- The length of a URL is limited (about 3000 characters)
- Never use GET to send sensitive data! (will be visible in the URL)
- Useful for form submissions where a user wants to bookmark the result
- GET is better for non-secure data

## POST method

- the submitted form data will **not be visible** in the page address field
- Send as separate query string
- POST has no size limitations
- can be used to send large amounts of data
- Form submissions with POST cannot be bookmarked
- POST is better for secure data



# Different ways of reading Input from user using form tags

- Text field
- Password field
- Hidden field
- Text area
- Check box
- Radio button
- Drop-down menu
- Submit button
- Reset button
- Image button
- Etc..

# Input Types

- `<input type="button">`
- `<input type="checkbox">`
- `<input type="color">`
- `<input type="date">`
- `<input type="email">`
- `<input type="number">`
- `<input type="password">`
- `<input type="radio">`
- `<input type="file">`
- `<input type="hidden">`
- `<input type="image">`
- `<input type="month">`
- `<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">`
- `<input type="datetime-local">`

# Form Elements

## □ Input Element

<input> element can be displayed in several ways, depending on the type attribute

- <**textarea**> element defines a multi-line input
- <**button**> element defines a clickable **button**
- <**fieldset**> element is used to group related data in a form.
- <**legend**> element defines a caption for the <fieldset> element.

# <input> Element - text

- The <input> element has many variations, depending on the **type** attribute
- Input Type =Text

```
<form action="" >  
  First name: <br>  
  <input type="text" id="fname" name="fname"><br>  
  Last name: <br>  
  <input type="text" id="lname" name="lname"><br><br>  
  <input type="submit" value="Submit">  
</form>
```

First name:

Last name:

# Input type = “text”

- Text fields allow the user to input text

## SETTINGS:

Below is a listing of valid settings for text fields:

HTML	EXPLANATION	EXAMPLE
<code>text</code> <code>size=</code> <code>maxlength=</code> <code>name=</code> <code>value=</code> <code>align=</code> <code>tabindex=</code>	One line text field Characters shown. Max characters allowed. Name of the field. Initial value in the field. Alignment of the field. Tab order of the field.	<input type="text"/>

# PASSWORD FIELD

- ❑ Password fields are similar to text fields
- ❑ Password fields contents are displayed as dots on the screen.
- ❑ To prevent others from reading the password on the screen.

```
Password:<br>
```


```
<input type="password" id="pwd" name="pwd"><br><br>
```

Password:

# Input Type="password"

## SETTINGS:

Below is a listing of valid settings for password fields:

HTML	EXPLANATION	EXAMPLE
<code>password</code> <code>size=</code> <code>maxlength=</code> <code>name=</code> <code>value=</code> <code>align=</code> <code>tabindex=</code>	One line password field Characters shown. Max characters allowed. Name of the field. Initial value in the field. Alignment of the field. Tab order of the field.	

# CHECKBOX

- Check boxes are used to select one or more options from a set of alternatives

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

<h2>HTML Forms</h2>

<form action="" method="post">
<fieldset>
<legend> Hobbies </legend>
  <label> Choose your Hobbies: </label> <br>
  <input type="checkbox" id= "paint" name="paint" value="">
  <label >Painting</label><br>
  <input type="checkbox" id= "sketch" name="sketch" value="">
  <label >Sketching</label><br>
  <input type="checkbox" id= "music" name="music" value="">
  <label >Listening to Music</label><br>
  <input type="submit" value="Click Me" >
</fieldset>
</form>
</body>
</html>
```

## HTML Forms

Hobbies

Choose your Hobbies:

☐ Painting

☐ Sketching

☐ Listening to Music



# Input type= “checkbox”

## SETTINGS:

Below is a listing of valid settings for check boxes:

HTML	EXPLANATION	EXAMPLE
<code>checkbox</code> <code>name=</code> <code>value=</code> <code>align=</code> <code>tabindex=</code> <code>checked</code>	Choose one or more options Name of the field. Value that is submitted if checked. Alignment of the field. Tab order of the field. Default check this field.	<input type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>

# RADIO BUTTON

- Radio buttons **allows user select ONLY ONE** of a limited number of **choices** or just one - option from a set of alternatives.

## HTML Forms

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

<h2>HTML Forms</h2>

<form action="" method="post">
<fieldset>
<legend> Gender </legend>
  <label> Choose Gender: </label> <br>
  <input type="radio" id= "male" name="gen" value="">
  <label >Male</label><br>
  <input type="radio" id= "female" name="gen" value="">
  <label >Female</label><br>
  <input type="radio" id= "others" name="gen" value="">
  <label >Others</label><br>
  <input type="submit" value="Click Me" >
</fieldset>
</form>
</body>
</html>
```

Gender

Choose Gender:

☒ Male


☒ Female

☐ Others

# Input type = “radiobutton”

## SETTINGS:

Below is a listing of valid settings for radio buttons:

HTML	EXPLANATION	EXAMPLE
<code>radio</code> <code>name=</code> <code>value=</code> <code>align=</code> <code>tabindex=</code> <code>checked</code>	Choose one - and only one - option Name of the group. Value that is submitted if checked. Alignment of the field. Tab order of the field. Default check this field.	


# TEXT AREA

- Text areas are text fields that **can read multi line text**
- Unlike most other form fields, **text areas are not defined with an `<input>` tag**
- `<textarea>` tag where text area to start
- `</textarea>` tag where text area end
- Everything written between these tags will be presented in the text area box

# TEXT AREA

## SETTINGS:

Below is a listing of valid settings for text areas:

HTML	EXPLANATION	EXAMPLE
<code>textarea</code> <code>rows=</code> <code>cols=</code> <code>name=</code> <code>tabindex=</code>  <code>wrap=</code> <code>off</code> <code>virtual</code>  <code>physical</code>	Text area - several lines Rows in the field. Columns in the field. Name of the field. Tab order of the field.  Turns off linebreaking Shows linebreaking, but sends text as entered. Inserts linebreaks when needed and even sends it.	

# Textarea example

```
<form action="">  
  <textarea name="message" rows="6" cols="50">The cat was playing in the  
garden.</textarea>  
  <br>  
  <input type="submit">  
</form>
```

The cat was playing in the garden.

Submit

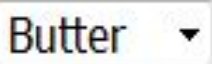
# DROP DOWN MENU

- Drop-down menus are probably the most flexible objects you can add to your forms
- Depending on your settings, drop-down menus can serve the same purpose as radio buttons (one selection only) or check boxes (multiple selections allowed)
- The advantage of a drop-down menu, compared to radio buttons or check boxes, is that it takes up less space

# Drop Down Menu

## SETTINGS:

Below is a listing of valid settings for drop-down menus:

HTML	EXPLANATION	EXAMPLE
<code>select</code> <code>  name=</code> <code>  size=</code> <code>  multiple=</code>	Drop-down menu Name of the field. Visible items in list. Allows multiple choices if yes.	
<code>option</code> <code>  selected</code> <code>  value=</code>	Individual items in the menu. Default select the item. Value to send if selected.	



# DROP DOWN MENU

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

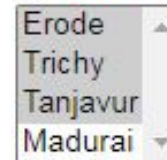
<h2>HTML Forms</h2>

<form action="" method="post" >
<label for="city">Choose a city:</label><br>

<select name="city" size="3" multiple>
<option>Erode</option>
<option>Trichy</option>
<option>Tanjavur</option>
<option selected>Madurai</option>
|
</select>
</form>
</body>
</html>
```

## HTML Forms

Choose a city:



Erode	▲
Trichy	
Tanjavur	
Madurai	▼

# HTML FORMS-<datalist>

- specifies a list of pre-defined options for an <input> element.

```
<!DOCTYPE html>
```

```
<html>
```

```
<body>
```

```
<h2>The datalist Element</h2>
```

```
<p>The datalist element specifies a list of pre-defined options for an input element.</p>
```

```
<form action="">
```

```
  <input list="programs" name="program">
```

```
  <datalist id="programs">
```

```
    <option value="C">
```

```
    <option value="C++">
```

```
    <option value="Java">
```

```
    <option value="Python">
```

```
    <option value="PHP">
```

```
  </datalist>
```

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

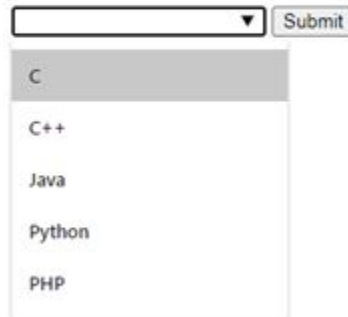
```
</form>
```

```
</body>
```

```
</html>
```

## The datalist Element

The datalist element specifies a list of pre-defined options for an input element.




The image shows a browser rendering of the HTML code. It displays a form with a dropdown menu (input type="text" with a list attribute) and a 'Submit' button. The dropdown menu is open, showing a list of options: C, C++, Java, Python, and PHP. The option 'C' is currently selected and highlighted.

# SUBMIT BUTTON

- When a visitor clicks a submit button, the form data is sent to the address specified in the action setting of the <form> tag.

## SETTINGS:

Below is a listing of valid settings for submit buttons:

HTML	EXPLANATION	EXAMPLE
<code>submit</code> <code>name=</code> <code>value=</code> <code>align=</code> <code>tabindex=</code>	Submit button Name of the button. Text written on the button. Alignment of the button. Tab order of the button.	

# Submit button

```
<form action="receive.php">  
  <input type="radio" id="g" name="gender" value="m">  
  Male <br>  
  <input type="radio" id="g" name="gender" value="f">  
  FeMale <br>  
  <input type="radio" id="g" name="gender" value="o">  
  other <br>  
  <input type="submit" value="Submit">  
</form>
```

☐ Male  
☐ FeMale  
☐ other

# <fieldset> and <legend> Elements

- <fieldset>--- used to group related data in a form
- <legend>--- defines a caption for the <fieldset> element

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

<h2>HTML Forms</h2>

<form action="" method="post">
<fieldset>
<legend> Hobbies </legend>
  <label> Choose your Hobbies: </label> <br>
  <input type="checkbox" id= "paint" name="paint" value="">
    <label >Painting</label><br>
  <input type="checkbox" id= "sketch" name="sketch" value="">
    <label >Sketching</label><br>
  <input type="checkbox" id= "music" name="music" value="">
    <label >Listening to Music</label><br>
  <input type="submit" value="Click Me" >
</fieldset>
</form>
</body>
</html>
```

## HTML Forms

Hobbies

Choose your Hobbies:

☐ Painting

☐ Sketching

☐ Listening to Music

# More Input Types

- `<input type="number">`
- `<input type="button">`
- `<input type="color">`
- `<input type="range">`
- `<input type="file">`
- `<input type="email">`
- `<input type="url">`
- `<input type="hidden">`
- `<input type="image">`
- `<input type="reset">`
- `<input type="search">`
- `<input type="date">`
- `<input type="month">`
- `<input type="time">`
- `<input type="week">`
- `<input type="datetime-local">`

# Input type

- `<input type="number">`
- `<input type="button">`
- `<input type="color">`
- `<input type="range">`
- `<input type="file">`

# Form Examples

```
<!DOCTYPE html>
<html>
<body>
<h2>HTML Forms</h2>
<form action="">
  <label for="Phonenum">First name:</label> <br><br>
  <input type="number" id="Phonenum" name="Phonenum" value=""> <br><br>

  Enter Age(1 to 18):
  <input type="number" id="age" name="age" value="" min="1" max="18"> <br>
<br>

  Volume:
  <input type="range" id="volume" name="volume" value="" min="0" max="50">
<br><br>

  Choose color:
  <input type="color" id="color" name="color" value="" min="0" max="50">
<br><br>

  Choose file:
  <input type="file" id="f" name="f" value="" min="0" max="50"> <br><br>

  <input type="button" value="Click Me!">
</form>
</body>
```

## HTML Forms

First name:

Enter Age(1 to 18):

Volume:

Choose color:

Choose file:  No file chosen



# Input type

- `<input type="email">`
- `<input type="reset">`-
- `<input type="image">`

# Forms example

```
<!DOCTYPE html>
<html>
<body>
<h2>HTML Forms</h2>
<form action="">

  Enter Email:
  <input type="email" id="mail" name="mail" value="" > <br><br>

  Link:
  <input type="url" id="myurl" name="myurl" value=""> <br><br>

  <input type="button" value="Click Me!">
  <input type="reset" value="Reset">
</form>
</body>
</html>
```

## HTML Forms

Enter Email:

Link:

# Examples

```
<!DOCTYPE html>
<html>
<body>
<h2>HTML Forms</h2>
<form action="">
```

Search Here:

```
<input type="text" id="txt" name="txt" value="" > <br><br>
```

```
<input type="image" src="img_submit.gif" value="Click Me!">
</form>
</body>
</html>
```

## HTML Forms

Search Here:



# Input type

- `<input type="date">`
- `<input type="month">`
- `<input type="time">`
- `<input type="week">`
- `<input type="datetime-local">`

# Forms Examples

```
<html>
<body>
<h2>HTML Forms</h2>
<form action="">
  | Date:
  <input type="date" id="dat" name="dat" value="" > <br><br>

  Date before 20 century:
  <input type="date" id="dat" name="dat" value="" max="2000-12-31"> <br><br>


  Month:
  <input type="month" id="mo" name="mo" value="" > <br><br>


  Week:
  <input type="week" id="we" name="we" value="" > <br><br>


  Time:
  <input type="time" id="ti" name="ti" value="" > <br><br>


  <input type="button" value="Click Me!">
</form>
</body>
</html>
```

## HTML Forms

Date:  

Date before 20 century:  

Month:  

Week:  

Time:  

# Attributes of Input Element

Attribute	Description
checked	Specifies that an input field should be pre-selected when the page loads (for type="checkbox" or type="radio")
disabled	Specifies that an input field should be disabled
max	Specifies the maximum value for an input field
maxlength	Specifies the maximum number of characters for an input field
min	Specifies the minimum value for an input field
pattern	Specifies a regular expression to check the input value against
readonly	Specifies that an input field is read only (cannot be changed)
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

Thank you

# Attributes - Example

```
<!DOCTYPE html>
<html>
<body>
<h2>HTML Forms</h2>
<form action="">
  Name:
  <input type="text" id="dat" name="dat" value="" disabled> <br><br>

  Age:
  <input type="number" id="dat" name="dat" value="" required> <br><br>
  <input type="submit" value="Click Me!">
</form>
</body>
</html>
```



The screenshot shows a web browser window with the title "HTML Forms". It contains two form fields. The first field is labeled "Name:" and is a text input that is disabled (grayed out). The second field is labeled "Age:" and is a number input that is required. Below the "Age:" field, there is a validation message: "Please fill out this field." The message is displayed in a yellow box with a red exclamation mark icon. A "Click Me!" button is visible below the "Age:" field.

# Additional Attributes in Input element

- **Placeholder**

To display the default value as gray color in form field

- **Size**

Maximum letters to be visible

- **Maxlength**

Maximum acceptable length

- **min and max**

Specifies minimum and maximum value of input field

- **pattern**

Specifies regular expression to check the input values



# Additional Attributes in Input element

- **Checked:**

Specifies input field should be pre selected

- **required**

Used to make a field mandatory

- **Disabled**

To disable a particular form elements

- **Readonly**

Specifies input field is read only

# Additional Attributes in Input element

## ❑ **Multiple**

Specifies more than one selection on input type

- **Autofocus**

Element automatically get focus when page loads

- **Autocomplete**

Specifies auto complete field on or off

# Attributes of Input Element-Examples

```
<body>

<h1>The select multiple attribute</h1>

<p>The multiple attribute specifies that multiple options can be selected at once:</p>


<form action="/action_page.php">
  <label for="fr">Choose a fruit:</label>
  <select name="fr" id="fr" multiple>
    <option value="Apple">Apple</option>
    <option value="Orange" selected>Orange</option>
    <option value="Banana">Banana</option>
    <option value="Jackfruit">Jack fruit</option>
  </select>
  <br><br>
  <input type="submit" value="Submit">
</form>

<p>Hold down the Ctrl (windows) or Command (Mac) button to select multiple options.</p>
```

## The select multiple attribute

The multiple attribute specifies that multiple options can be selected at once:

Choose a fruit:



Submit

Hold down the Ctrl (windows) or Command (Mac) button to select multiple options.

# Attributes of Input Element-

- Multiple
- Placeholder
- Pattern

# Attributes of Input Element-Examples



```
<!DOCTYPE html>
<html>
<body>
<h2>HTML Forms</h2>
<form action="">
  Name:
  <input type="text" id="nam" name="nam" value="" >      <br><br>

  Age:
  <input type="text" id="age" name="age" value="" pattern="[0-9]{2}"> <br><br>

  <input type="submit" value="Click Me!">
</form>
</body>
</html>
```

## HTML Forms

Name:

Age:

 Please match the requested format.

# Additional Attributes in Input element

- **Required-** to indicate mandatory field
- **Autofocus-** the element should automatically get focus when the page loads
- **Autocomplete-** specifies whether a form or an input field should have autocomplete on or off
- **tabindex** -tabindex attribute specifies the tab order of an element

# Attribute- autofocus -example

```
<!DOCTYPE html>
<html>
<body>
<h2>HTML Forms</h2>
<form action="">
  Name:
  <input type="text" id="nam" name="nam" value="" autofocus autocomplete="on" >
  <br><br>

  Age:
  <input type="number" id="age" name="age" value="" required> <br><br>
  <input type="submit" value="Click Me!">
</form>
</body>
</html>
```

## HTML Forms

Name:

Age:

# Attribute- tabindex -example

```
<!DOCTYPE html>
<html>
<body>
<h2>HTML Forms</h2>
<form action="">
  Name:
  <input type="text" id="nam" name="nam" value="" autofocus autocomplete="on"
tabindex="1">    <br><br>

  Age:
  <input type="number" id="age" name="age" value="" required tabindex="3"> <br><br>

  Email:
  <input type="email" id="age" name="age" value="" tabindex="2"> <br><br>
  <input type="submit" value="Click Me!">
</form>
</body>
</html>
```

## HTML Forms

Name:

Age:

Email:



**Thank you**