

UI-BASICS

DATA – HTML FORMS

# HTML FORMS

An **HTML form** is used **to collect user input**. The user input is most often sent to a server for processing.

```
<form>
  ...
  Form Elements here
  ...
</form>
```

The **<form>** element is a container for different types of input elements, such as: text fields, checkboxes, radio buttons, submit buttons, etc.

A contact form with the following fields and labels:

- Name**: Add your name
- Email**: Enter a Valid Email
- Phone**: Add a Phone Number
- Website**: Your Website
- Priority**: Low (dropdown menu), Priority Level
- Type**: Website Update (dropdown menu), Type of Contact
- Message**: Type Your Message

A **Submit** button is located at the bottom right.

A login form with the following fields and elements:

- Username**: Type your username
- Password**: Type your password
- Forgot password?** link
- LOGIN** button
- Or Sign Up Using** section with Facebook, Twitter, and Google icons
- Have not account yet?** link
- SIGN UP** button

A sign up form with the following fields and elements:

- Sign Up** header
- Please fill in this form to create an account!** instruction
- First Name** and **Last Name** fields
- Email** field
- Password** field
- Confirm Password** field
- ☐ I accept the [Terms of Use & Privacy Policy](#).
- Sign Up** button
- Already have an account? [Login here.](#)** link at the bottom

## FORM ELEMENTS

The HTML **<form>** element can contain one or more of the following form elements:

- **<input>**
- **<label>**
- **<select>**
- **<textarea>**
- **<button>**
- **<fieldset>**
- **<legend>**
- **<datalist>**
- **<output>**
- **<option>**
- **<optgroup>**

## FORM ELEMENTS - `<INPUT>`

One of the most used form element is the `<input>` element.

- `<input type="button">`
- `<input type="checkbox">`
- `<input type="color">`
- `<input type="date">`
- `<input type="datetime-local">`
- `<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">`

**NOTE :** The default value of the type attribute is **"text"**.

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE - TEXT

It defines a **single-line text input field**

```
label {  
  display: block;  
}  
input {  
  width: 200px;  
  height: 28px;  
  margin-bottom: 10px;  
}
```

```
<form>  
  <label for="fname">First name:</label>  
  <input type="text" id="fname" name="fname" placeholder="Your First Name">  
  
  <label for="lname">Last name:</label>  
  <input type="text" id="lname" name="lname" placeholder="Your Last Name">  
</form>
```

First name:

Last name:

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE - PASSWORD

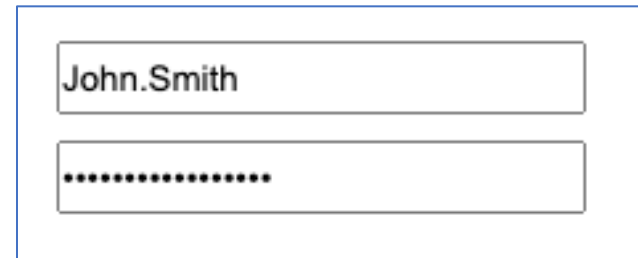
It defines a **password field**

```
input {  
  width: 200px;  
  height: 28px;  
  margin-bottom: 10px;  
  display: block;  
}
```

```
<form>  
  <input type="text" id="uname" name="uname" placeholder="Username">  
  <input type="password" id="pwd" name="pwd" placeholder="Password">  
</form>
```



A diagram of a form containing two input fields. The first field is a text input with the placeholder text "Username". The second field is a password input with the placeholder text "Password".



A diagram of a form containing two input fields. The first field is a text input with the value "John.Smith". The second field is a password input with masked characters represented by dots.

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

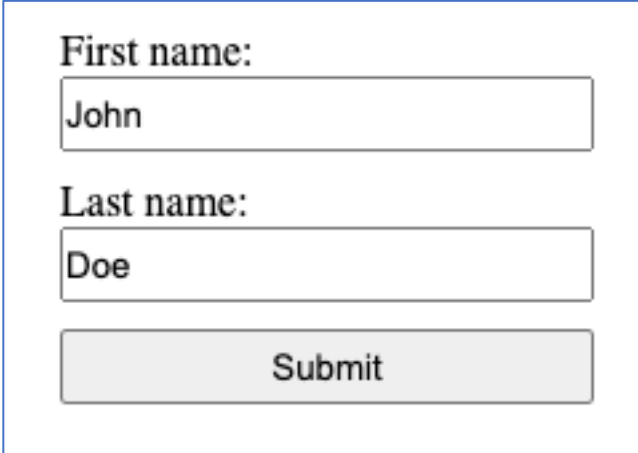
## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE - SUBMIT

It defines a button for **submitting** form data to a **form-handler**.

```
input {  
  width: 200px;  
  height: 28px;  
  margin-bottom: 10px;  
  display: block;  
}
```

```
<form>  
  <label for="fname">First name:</label>  
  <input type="text" id="fname" name="fname" value="John">  
  
  <label for="lname">Last name:</label>  
  <input type="text" id="lname" name="lname" value="Doe">  
  
  <input type="submit" value="Submit">  
</form>
```



First name:  
John

Last name:  
Doe

Submit

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE - RESET

It defines a **reset button** that will reset all form values to their default values

```
input {  
  width: 200px;  
  height: 28px;  
  margin-bottom: 10px;  
  display: block;  
}
```

```
<form>  
  <label for="fname">First name:</label>  
  <input type="text" id="fname" name="fname" value="John">  
  
  <label for="lname">Last name:</label>  
  <input type="text" id="lname" name="lname" value="Doe">  
  
  <input type="submit" value="Submit">  
  <input type="reset">  
</form>
```

First name:  
John

Last name:  
Doe

Submit

Reset

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`



# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE - RADIO

- It defines a **radio button**.
- Radio buttons let a user **select ONLY ONE** of a limited number of choices

```
<form>
  <input type="radio" id="male" name="gender" value="male">
  <label for="male">Male</label>

  <input type="radio" id="female" name="gender" value="female">
  <label for="female">Female</label>

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

☒ Male ☐ Female ☐ Other

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE - CHECKBOX

- It defines defines a **checkbox**.
- Checkboxes let a user **select ZERO or MORE** options of a limited number of choices.

```
<form>  
  <input type="checkbox" id="vehicle1" name="vehicle1" value="Bike">  
  <label for="vehicle1"> I have a bike</label><br>  
  
  <input type="checkbox" id="vehicle2" name="vehicle2" value="Car">  
  <label for="vehicle2"> I have a car</label><br>  
  
  <input type="checkbox" id="vehicle3" name="vehicle3" value="Boat">  
  <label for="vehicle3"> I have a boat</label>  
</form>
```

☐ I have a bike  
☐ I have a car  
☐ I have a boat

☒ I have a bike  
☒ I have a car  
☐ I have a boat

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE - BUTTON

- It defines defines a **button**.

```
input[type="button"] {  
  width: 150px;  
  height: 30px;  
  margin: 20px 0;  
  font-size: 18px;  
}
```

```
<input type="button" onclick="alert('Hello World!')" value="Click Me!">
```

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

A rectangular button with a light gray background and a thin black border. The text "Click Me!" is centered on the button in a black, sans-serif font. The button is enclosed within a larger rectangular frame with a thin blue border.

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

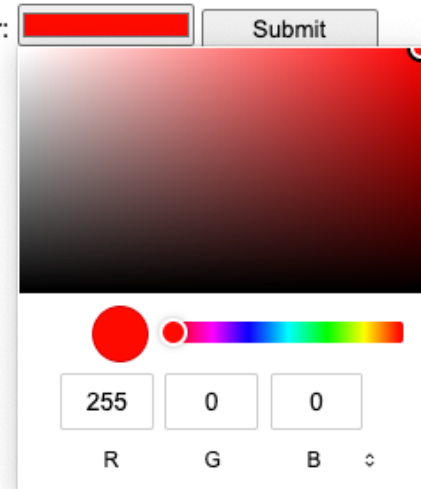
### INPUT TYPE - COLOR

- It is used for input fields that should contain a color.

Select your favorite color:

```
<form>
  <label for="favcolor">Select your favorite color:</label>
  <input type="color" id="favcolor" name="favcolor" value="#ff0000">
  <input type="submit" value="Submit">
</form>
```

Select your favorite color:

255 0 0  
R G B ↕

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE - DATE

- It is used for input fields that should contain a date.
- You can also use the **min** and **max** attributes to add restrictions to dates

Birthday:



```
<form>
  <label for="birthday">Birthday:</label>
  <input type="date" id="birthday" name="birthday">
</form>
```

```
<label for="datemin">Enter a date after 2000-01-01:</label>
<input type="date" id="datemin" name="datemin" min="2000-01-02" max="2019-12-31">
```

Birthday:



- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE – DATETIME-LOCAL

- It specifies a date and time input field, with no time zone.

```
<form>
  <label for="birthdaytime">Birthday (date and time):</label>
  <input type="datetime-local" id="birthdaytime" name="birthdaytime">
</form>
```

Birthday (date and time):

Birthday (date and time):

September 2020 ▾ ↑ ↓

							09	20
M	T	W	T	F	S	S	10	21
31	1	2	3	4	5	6	11	22
7	8	9	10	11	12	13	12	23
14	15	16	17	18	19	20	13	24
21	22	23	24	25	26	27	14	25
28	29	30	1	2	3	4	15	26
5	6	7	8	9	10	11		

Today

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE – EMAIL

- It 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.

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

```
<form>
  <label for="email">Enter your email:</label>
  <input type="email" id="email" name="email">
  <input type="submit" value="Submit">
</form>
```

Enter your email:

Enter your email:

⚠ Please include an '@' in the email address. 'john' is missing an '@'.

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE – FILE

- It defines a file-select field and a "Browse" button for file uploads.

```
<form>
  <label for="myfile">Select a file:</label>
  <input type="file" id="myfile" name="myfile">
</form>
```

Select a file:  No file chosen



Click, and choose file

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`



# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE – MONTH

- It allows the user to select a month and year.

Birthday (month and year):

Birthday (month and year):

2019

2020

Jan

Feb

Mar

Apr

May

Jun

Jul

Aug

Sept

Oct

Nov

Dec

This month

```
<form>
  <label for="bdaymonth">Birthday (month and year):</label>
  <input type="month" id="bdaymonth" name="bdaymonth">
</form>
```

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE – NUMBER

- It defines a **numeric** input field.
- You can also set restrictions on what numbers are accepted.

```
<form>  
  <label for="quantity">Quantity (between 1 and 5):</label>  
  <input type="number" id="quantity" name="quantity" min="1" max="5">  
</form>
```

Quantity (between 1 and 5): 5

```
<label for="quantity">Quantity:</label>  
<input type="number" id="quantity" name="quantity" min="0" max="100" step="10" value="30">
```

Quantity: 30

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE – RANGE

- It defines a control for entering a number whose exact value is not important (like a slider control)
- Default range is **0 to 100**.

```
<form>  
  <label for="vol">Volume (between 0 and 50):</label>  
  <input type="range" id="vol" name="vol" min="0" max="50">  
</form>
```

Volume (between 0 and 50):



- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE – SEARCH

- It is used for search fields (a search field behaves like a regular text field).

```
<form>
  <label for="gsearch">Search Google:</label>
  <input type="search" id="gsearch" name="gsearch">
</form>
```

Search Google:

Search Google:

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`


## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE – TEL

- It is used for input fields that should contain a telephone number.

Enter your phone number:

Enter your phone number:

 Please match the format requested.

```
<form>
  <label for="phone">Enter your phone number:</label>
  <input type="tel" id="phone" name="phone" pattern="[0-9]{3}-[0-9]{2}-[0-9]{3}" placeholder="123-45-678">
</form>
```

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE – TIME

- It allows the user to select a time (no time zone).

Select a time: -- : --



Select a time: -- : --



10

29

11

30

12

31

13

32

14

33

15

34

16

35

```
<form>
  <label for="appt">Select a time:</label>
  <input type="time" id="appt" name="appt">
</form>
```

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE – URL

- It is used for input fields that should contain a URL address.
- Depending on browser support, the url field can be automatically validated when submitted.

```
<form>
  <label for="homepage">Add your homepage:</label>
  <input type="url" id="homepage" name="homepage">
  <input type="submit" value="Submit">
</form>
```

Add your homepage:

Submit

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<INPUT>`

### INPUT TYPE – WEEK

- It allows the user to select a week and year.

```
<form>
  <label for="week">Select a week:</label>
  <input type="week" id="week" name="week">
</form>
```

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

Select a week: Week --, ----



Select a week: Week --, ----



September 2020 ▾



Week	M	T	W	T	F	S	S
36	31	1	2	3	4	5	6
37	7	8	9	10	11	12	13
38	14	15	16	17	18	19	20
39	21	22	23	24	25	26	27
40	28	29	30	1	2	3	4
41	5	6	7	8	9	10	11

This week

Select a week: Week 37, 2020





## FORM ELEMENTS - `<LABEL>`

- The `<label>` element defines a label for several form elements.
- The `<label>` element is useful **for screen-reader users**, because the screen-reader will read out loud the label when the user focus on the input element.
- The `<label>` element also help users **who have difficulty clicking on very small regions** (such as radio buttons or checkboxes) - because when the user clicks the text within the `<label>` element, it toggles the radio button/checkbox.
- The **for** attribute of the `<label>` tag should be equal to the **id** attribute of the `<input>` element to bind them together.

```
<form>
  <input type="radio" id="male" name="gender" value="male">
  <label for="male">Male</label>

  <input type="radio" id="female" name="gender" value="female">
  <label for="female">Female</label>

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

☒ Male ☐ Female ☐ Other

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<SELECT>`

The `<select>` element defines a drop-down list.

```
<form>
  <label for="cars">Choose a car:</label>
  <select id="cars" name="cars">
    <option value="volvo">Volvo</option>
    <option value="saab">Saab</option>
    <option value="fiat">Fiat</option>
    <option value="audi">Audi</option>
  </select>
  <input type="submit">
</form>
```

Choose a car:

Choose a car:

- ✓ Volvo
- Saab
- Fiat
- Audi

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - `<SELECT>`

- The `<option>` elements defines an option that can be selected.
- **By default**, the first item in the drop-down list is selected.
- To define a pre-selected option, add the **selected** attribute to the option

```
<form>
  <label for="cars">Choose a car:</label>
  <select id="cars" name="cars">
    <option value="volvo">Volvo</option>
    <option value="saab">Saab</option>
    <option value="fiat">Fiat</option>
    <option value="audi" selected>Audi</option>
  </select>
  <input type="submit">
</form>
```

Choose a car:

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

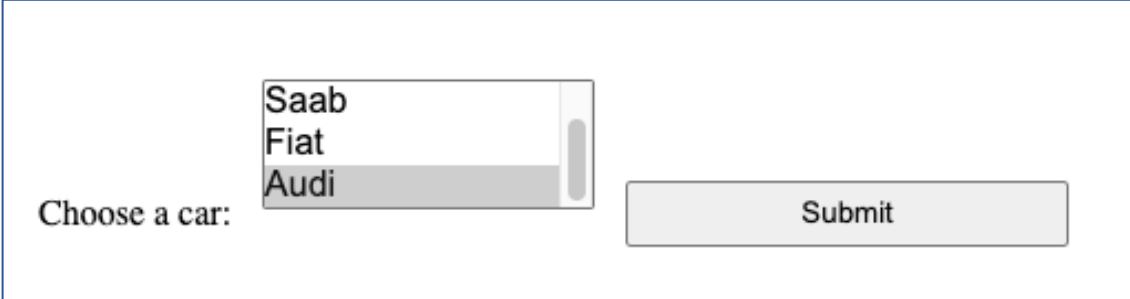
## FORM ELEMENTS - `<SELECT>`

Use the **size** attribute to specify the number of visible values

Use the **multiple** attribute to allow the user to select more than one value

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

```
<form>
  <label for="cars">Choose a car:</label>
  <select id="cars" name="cars" size="3" multiple>
    <option value="volvo">Volvo</option>
    <option value="saab">Saab</option>
    <option value="fiat">Fiat</option>
    <option value="audi" selected>Audi</option>
  </select>
  <input type="submit">
</form>
```



Choose a car:

- Saab
- Fiat
- Audi

Submit

# HTML FORMS

## FORM ELEMENTS - `<TEXTAREA>`

The `<textarea>` element defines a multi-line input field (a text area)

- The **rows** attribute specifies the visible number of lines in a text area (**height**).
- The **cols** attribute specifies the visible width of a text area (**width**).

```
<form>
  <textarea name="message" rows="10" cols="30" placeholder="Your message here"></textarea>
  <input type="submit">
</form>
```



- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

**NOTE :** You can also define the size of the text area by using CSS **width** , **height** properties as well.

# HTML FORMS

## FORM ELEMENTS - `<BUTTON>`

The `<button>` element defines a clickable button

```
<button type="button" onclick="alert('Hello World!')">Click Me!</button>
```



- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

**NOTE :** Always specify the type attribute for the button element. Different browsers may use different default types for the button element.

# HTML FORMS

## FORM ELEMENTS - `<FIELDSET>` & `<LEGEND>`

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

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

```
<form>
  <fieldset>
    <legend>Person:</legend>
    <label for="fname">First name:</label><br>
    <input type="text" id="fname" name="fname" value="John"><br>
    <label for="lname">Last name:</label><br>
    <input type="text" id="lname" name="lname" value="Doe"><br><br>
    <input type="submit" value="Submit">
  </fieldset>
</form>
```

Person:

First name:

Last name:

# HTML FORMS

## FORM ELEMENTS - <FIELDSET> & <LEGEND>

Contact Us

Personal Details

Name \*

Email \*

Message

If you don't have a company, skip the next section.

Company Details

Business Name

Phone Number

Website URL

Topic

Purchases

Message

SEND

Name

First Name

Last Name

Sports

Do you enjoy basketball?

☐ Yes

☐ No

Do you enjoy baseball?

☐ Yes

☐ No

Submit Query

## Fieldset Demonstration

Your Personal Information!

Name:

Address:

City:

State:

Zip Code:

Email:

Date of birth:

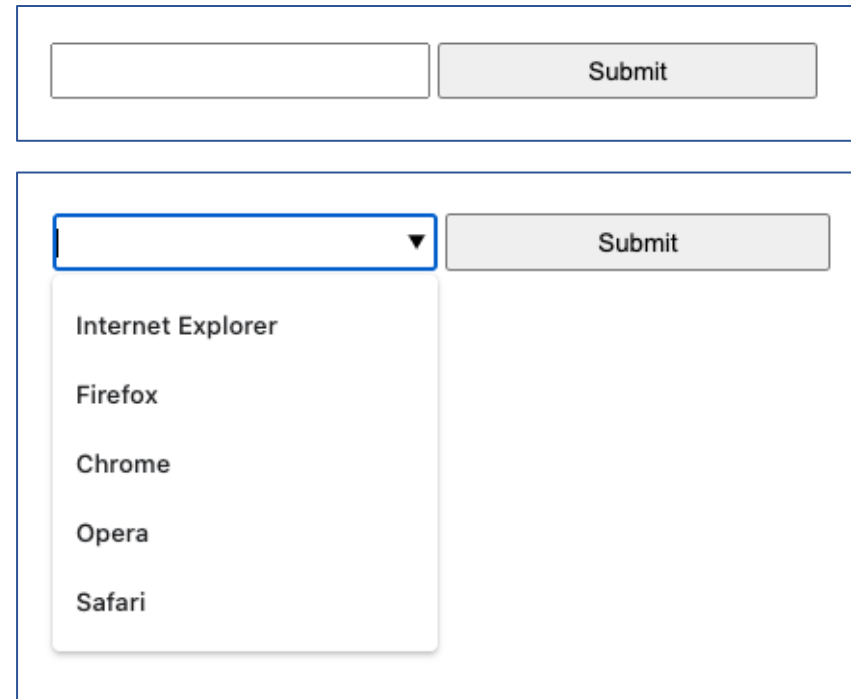
- <input>
- <label>
- <select>
- <textarea>
- <button>
- <fieldset>
- <legend>
- <datalist>
- <output>
- <option>
- <optgroup>



## FORM ELEMENTS - `<datalist>`

- The `<datalist>` element specifies a list of pre-defined options for an `<input>` element.
- Users will see a drop-down list of the pre-defined options as they input data.
- The `list` attribute of the `<input>` element, must refer to the `id` attribute of the `<datalist>` element.

```
<form>
  <input list="browsers">
  <datalist id="browsers">
    <option value="Internet Explorer">
    <option value="Firefox">
    <option value="Chrome">
    <option value="Opera">
    <option value="Safari">
  </datalist>
  <input type="submit">
</form>
```



- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ELEMENTS - **<OUTPUT>**

The **<output>** element represents the result of a calculation (like one performed by a script).

- **<input>**
- **<label>**
- **<select>**
- **<textarea>**
- **<button>**
- **<fieldset>**
- **<legend>**
- **<datalist>**
- **<output>**
- **<option>**
- **<optgroup>**

```
<form oninput="x.value=parseInt(num1.value) + parseInt(num2.value)">
  <input type="number" id="a" name="num1" value="50">
  +
  <input type="number" id="b" name="num2" value="50">
  =
  <output name="x" for="a b" value="100"></output>
</form>
```

+  = 90

## FORM ELEMENTS - `<OPTION>`

- The `<option>` tag defines an option in a select list.
- `<option>` elements go inside a [<select>](#), [<optgroup>](#), or [<datalist>](#) element.

```
<form>
  <label for="cars">Choose a car:</label>

  <select id="cars">
    <option value="volvo">Volvo</option>
    <option value="saab">Saab</option>
    <option value="opel">Opel</option>
    <option value="audi">Audi</option>
  </select>
</form>
```



**NOTE :** The `<option>` tag can be used without any attributes, but you usually need the **value** attribute, which indicates what is sent to the server on form submission.

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

## FORM ELEMENTS - `<OPTGROUP>`

- The `<optgroup>` tag is used to group related options in a `<select>` element (drop-down list).
- If you have a long list of options, groups of related options are easier to handle for a user.

```
<form>
  <label for="cars">Choose a car:</label>

  <select name="cars" id="cars">
    <optgroup label="Swedish Cars">
      <option value="volvo">Volvo</option>
      <option value="saab">Saab</option>
    </optgroup>
    <optgroup label="German Cars">
      <option value="mercedes">Mercedes</option>
      <option value="audi">Audi</option>
      <option value="bmw">BMW</option>
    </optgroup>
  </select>
</form>
```

Choose a car:

- `<input>`
- `<label>`
- `<select>`
- `<textarea>`
- `<button>`
- `<fieldset>`
- `<legend>`
- `<datalist>`
- `<output>`
- `<option>`
- `<optgroup>`

# HTML FORMS

## FORM ATTRIBUTES

- action
- target
- method
- autocomplete
- novalidate

- action
- target
- method
- autocomplete
- novalidate

```
<form action="" target="" method="" autocomplete="" novalidate="">
  ...
  Form Elements here
  ...
</form>
```

# HTML FORMS

## FORM ATTRIBUTES - **action**

- The **action** attribute defines **the action to be performed** when the form is submitted.
- Usually, the form data is sent to a file on the server when the user clicks on the submit button.

- **action**
- **target**
- **method**
- **autocomplete**
- **novalidate**

```
<form action="/action_page.php">  
  <label for="fname">First name:</label>  
  <input type="text" id="fname" name="fname" value="John">  
  
  <label for="lname">Last name:</label>  
  <input type="text" id="lname" name="lname" value="Doe">  
  
  <input type="submit" value="Submit">  
</form>
```

FORM ATTRIBUTES - target

The **target** attribute specifies **where to display the response** that is received after submitting the form.

- action
- target
- method
- autocomplete
- novalidate

Value	Description
<code>_blank</code>	The response is displayed <b>in a new window or tab</b>
<code>_self</code>	The response is displayed <b>in the current window. - by default</b>
<code>_parent</code>	The response is displayed <b>in the parent frame</b>
<code>_top</code>	The response is displayed <b>in the full body of the window</b>

```
<form action="/action_page.php" target="_blank">

  <label for="fname">First name:</label>
  <input type="text" id="fname" name="fname" value="John">

  <label for="lname">Last name:</label>
  <input type="text" id="lname" name="lname" value="Doe">

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

# HTML FORMS

## FORM ATTRIBUTES - **method**

- The **method** attribute specifies **the HTTP method** to use used when submitting the form data.
- The form-data can be sent as URL variables (with method="**get**") or as HTTP post transaction (with method="**post**").
- The **default** HTTP method when submitting form data is **GET**.

- action
- target
- **method**
- autocomplete
- novalidate

```
<form action="/action_page.php" target="_blank" method="get">

  <label for="fname">First name:</label>
  <input type="text" id="fname" name="fname" value="John">

  <label for="lname">Last name:</label>
  <input type="text" id="lname" name="lname" value="Doe">

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

- get - **by default**
- post



# HTML FORMS

## FORM ATTRIBUTES - **method**

```
<form action="/action_page.php" target="_blank" method="get">

  <label for="fname">First name:</label>
  <input type="text" id="fname" name="fname" value="John">

  <label for="lname">Last name:</label>
  <input type="text" id="lname" name="lname" value="Doe">

  <input type="submit" value="Submit">

</form>
```

First name:

John

Last name:

Doe

Submit

📄 127.0.0.1:5500/action\_page.php?fname=John&lname=Doe

- action
- target
- **method**
- autocomplete
- novalidate

### Method = “GET”

- Appends the form data to the URL, in name/value pairs
- **NEVER use GET to send sensitive data!**  
**(the submitted form data is visible in the URL!)**
- The length of a URL is limited (2048 characters)
- **GET is good for non-secure data**, like query strings in Google

# HTML FORMS

## FORM ATTRIBUTES - **method**

```
<form action="/action_page.php" target="_blank" method="post">

  <label for="fname">First name:</label>
  <input type="text" id="fname" name="fname" value="John">

  <label for="lname">Last name:</label>
  <input type="text" id="lname" name="lname" value="Doe">

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

First name:

Last name:

127.0.0.1:5500/action\_page.php

- action
- target
- **method**
- autocomplete
- novalidate

### Method = “POST”

- Appends the form data inside the body of the HTTP request  
**(the submitted form data is not shown in the URL)**
- POST has no size limitations, and can be used to send large amounts of data.

# HTML FORMS

## FORM ATTRIBUTES - autocomplete

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

- action
- target
- method
- **autocomplete**
- novalidate

```
<form action="/action_page.php" target="_blank" method="post" autocomplete="off">

  <label for="fname">First name:</label>
  <input type="text" id="fname" name="fname" value="John">

  <label for="lname">Last name:</label>
  <input type="text" id="lname" name="lname" value="Doe">

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

- on - **by default**
- off

# HTML FORMS

## FORM ATTRIBUTES - **novalidate**

- The **novalidate** attribute is a **boolean** attribute.
- **When present**, it specifies that the **form-data (input)** should not be validated when submitted.

- action
- target
- method
- autocomplete
- **novalidate**


```
<form action="/action_page.php" target="_blank" method="post" autocomplete="off" >

  <label for="email">Email :</label>
  <input type="email" id="email" name="email">

  <label for="pwd">Password:</label>
  <input type="password" id="pwd" name="pwd">

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

Email :

 Please include an '@' in the email address. 'john' is missing an '@'.

```
<form action="/action_page.php" target="_blank" method="post" autocomplete="off" novalidate>

  <label for="email">Email :</label>
  <input type="email" id="email" name="email">

  <label for="pwd">Password:</label>
  <input type="password" id="pwd" name="pwd">

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

Email :

Password:

## HTML INPUT ATTRIBUTES

- value
- readonly
- disabled
- size
- maxlength
- min & max
- multiple
- pattern
- placeholder
- required
- step
- autofocus
- height & width
- list
- autocomplete