



Front-end Development

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Login

Username
Type your username

Password
Type your password

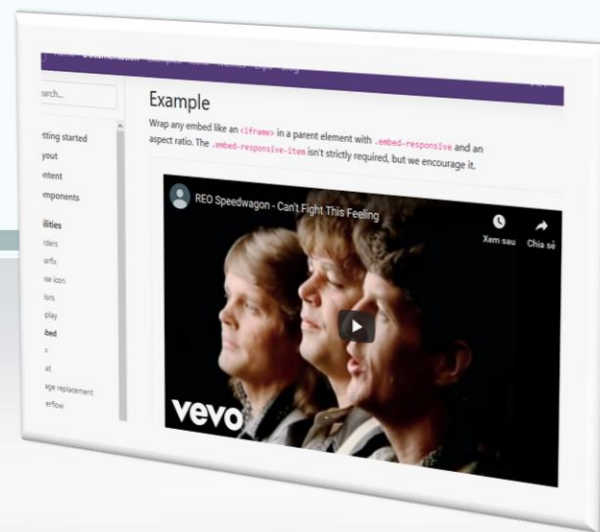
[Forgot password?](#)

LOGIN

Or Sign Up Using

[f](#) [t](#) [G](#)

Have not account yet?
SIGN UP



HTML Form and Frame

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LOGIN

Email

Password 

[Forgot password?](#)

[Log In](#)

Don't have an account? [Signup](#)

1. HTML Form

Entering User Data from a Web Page

What is a HTML Form?

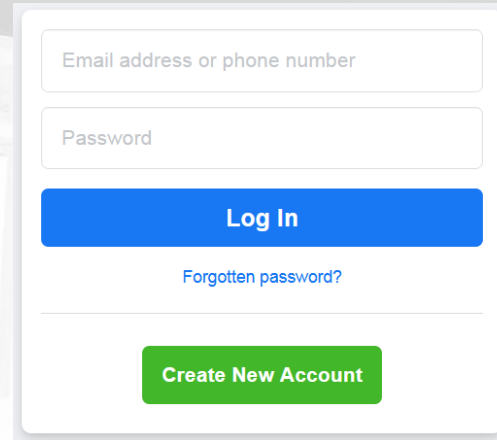
- The **primary method for gathering data** from site visitors

- HTML Form can contain:

- Text fields for the user to type
- Buttons for interactions like
“Register”, “Login”, “Search”
- Menus, Sliders, etc.

- Check Google, Yahoo! Search, Bing

Google search field is a simple Text field



The image shows a login form overlay on a background of a desk with a lamp, a notebook, and a pen. The form is white with a light gray border. It contains two text input fields: the first is labeled 'Email address or phone number' and the second is labeled 'Password'. Below these fields is a blue button labeled 'Log In'. Underneath the 'Log In' button is a link labeled 'Forgotten password?'. At the bottom of the form is a green button labeled 'Create New Account'.

How to Create a HTML Form?

- Create a form block with `<form></form>`
 - The “**action**” attribute tells where the form data should be sent
 - The “**method**” attribute tells how the form data should be sent – via **GET** or **POST** request
 - The “**enctype**” attribute specifies how the form-data should be encoded when submitting it to the server. (**Note:** It can be used only if method="post")
 - ✓ application/x-www-form-urlencoded: Default
 - ✓ multipart/form-data: is used if a file will be uploaded through the form

- Example:

```
<form name="myForm" method="post" action="path/to/some-script.php">  
    ...  
</form>
```

HTTP GET and POST method

GET Method	POST Method
Appends form-data into the URL in name/value pairs	Appends form-data inside the body of the HTTP request
The length of a URL is limited	Has no size limitations
Useful for form submissions where a user wants to bookmark the result	Form submissions with POST cannot be bookmarked
Never use GET to send sensitive data! (will be visible in the URL)	

GET is better for non-secure data, like query strings in Google

HTTP GET Method

- When you submit a form, the URL will appear in the browser address bar like the following:
Domain_name?name=value[&name_n=value_n]

- The data is appended to the URL as a series of **name/value** pairs. After the URL web address has ended, we include **a question mark (?)** followed by the name/value pairs, **each one separated** by an **ampersand (&)**.

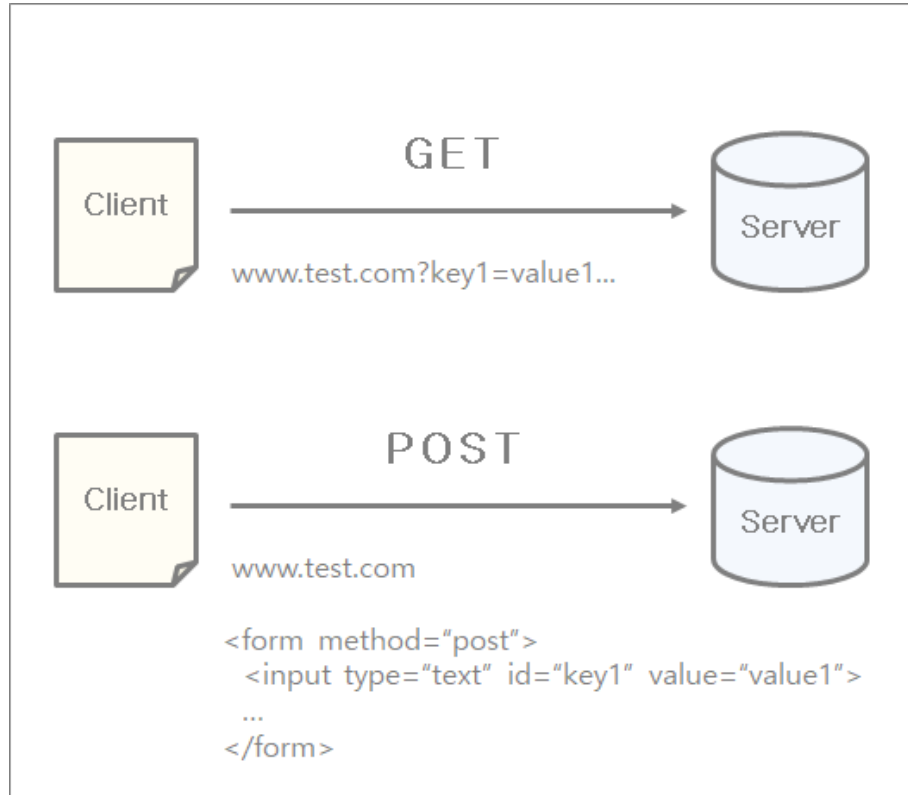
HTTP POST Method

If a form is sent using this method, the data is appended to the body of the HTTP request.

```
POST / HTTP/2.0
Host: foo.com
Content-Type: application/x-www-form-urlencoded
Content-Length: 13

say=Hi&to=Mom
```

HTTP GET and POST method





Email address

Password

Example textarea

Text Fields

Text Fields

- **Single-line** text input field:

```
<input type="text" name="Name" value="Default value" maxlength="100" />
```

- **Multi-line** text input field (**textarea**):

```
<textarea name="Content" cols="30" rows="10">  
    This is a multi-line text field  
</textarea>
```

- **Password** input – a text field which masks the entered text with * signs

```
<input type="password" name="pass" />
```

Text Fields

- The “**name**” attribute is used to reference elements in the JavaScript language, or to **reference form data after a form is submitted**
- **Note:** Only form elements with a name attribute will have their values passed when submitting a form

Buttons

- **Reset** button – brings the form to its initial state

```
<input type="reset" name="resetBtn" value="Reset the form" />
```

- **Submit** button:

```
<input type="submit" value="Send" />
```

- **Ordinary** button – no default action, used with JavaScript

```
<input type="button" value="Click me" />
```

- **Image** button – acts like submit but image is displayed and click coordinates are sent

```
<input type="image" src="image.jpg" name="submitBtn" alt="Submit" />
```

Buttons

HTML5

- The **<button>** tag defines a button
- Inside a <button> element you **can put content**, like text or images

```
<button type="button">Click Me!</button>
```

- **Values of the type** attribute:
 - Button
 - Reset
 - Submit



Hobbies:

- ☒ Astrology
- ☐ Astronomy
- ☒ Cooking
- ☒ Dancing
- ☐ Numerology
- ☐ Painting
- ☒ Palmistry
- ☐ Photography
- ☐ Music

Marital Status:

- ☐ Single
- ☒ Married
- ☐ Widowed
- ☐ Divorced

Checkbox and Radio

Checkbox and Radio Button

- **Checkbox:**

```
<input type="checkbox" name="Hobby[]" value="Dancing" />  
<input type="checkbox" name="Hobby[]" value="Shopping" checked />
```

- **Radio button:**

Radio buttons can be grouped, allowing **only one** to be selected from a group:

```
<input type="radio" name="Title" value="Mr." />  
<input type="radio" name="Title" value="Ms." checked />
```

Hidden Field

- Hidden field **contains invisible data**

```
<input type="hidden" name="UserID" value="1" />
```

- Not shown to the user
- Used by **JavaScript** and **server-side** code

ViewState, SessionState in ASP.NET



Example select

1



Example multiple select

1

2

3

4



Select Fields

Select Fields

- **Dropdown** menu:

```
<select name="gender">
  <option value="Value 1" selected="selected">Male</option>
  <option value="Value 2">Female</option>
  <option value="Value 3">Other</option>
</select>
```

- **Multiple-choice** menu:

```
<select name="products" multiple="multiple">
  <option value="Keyboard">Keyboard</option>
  <option value="Mouse">Mouse</option>
  <option value="CPU" selected="selected">CPU</option>
  <option value="RAM">RAM</option>
</select>
```



Example file input

Choose File No file chosen



Drag&Drop files here

or

Browse Files

Upload Field

Upload field

- The **<input type="file">** defines a file-select field and a “Browse” button for file uploads.
- When the “**multiple**” Boolean attribute is specified, the file input allows the user to select more than one file.
- The **accept** attribute defines the file types the file input should accept.
 - accept =“.doc,.docx,.xml,application/msword,application/vnd.openxmlformats-officedocument.wordprocessingml.document”: Microsoft Word files
 - accept =“.jpg, .pdf, .jpeg, image/.png”
 - accept=“audio/*, video/*, image/*”
- E.g.

```
<input type="file" name="file" accept=".jpg, .jpeg, .png" />  
<input type="file" name="files" multiple accept="image/*,.pdf" />
```



Email address

We'll never share your email with anyone else.

Password

☐ Check me out

Submit

Label

Label

- Label is used to **associate an explanatory text to a form field** using the field's ID

```
<label for="fn">First Name</label>  
<input type="text" id="fn" />
```

- Clicking on a label **focuses** its associated field
 - Checkbox is **toggled**
 - Radio button is **checked**
- Label is both a **usability** and **accessibility** feature

A screenshot of a web browser window. The title bar says 'Title of the document'. The address bar shows 'https://www.w3docs.com'. The main content area displays a form with the heading 'Personal Information:'. Below the heading, there are four labels with corresponding input fields: 'Name:', 'Email:', 'Date of birth:', and 'Place of birth:'. Each label is followed by a white rectangular input box.

Fieldset

Fieldset

- Fieldset is used to **enclose a group** of related form fields:

```
<form method="Post" action="process.php">
  <fieldset>
    <legend>Client Details</legend>
    <input type="text" name="Name" />
    <input type="text" name="Phone" />
  </fieldset>
  <fieldset>
    <legend>Order Details</legend>
    <input type="text" name="Quantity" />
    <textarea cols="40" rows="10" name="Remarks"></textarea>
  </fieldset>
</form>
```

- The **<legend>** is the fieldset's title



The figure shows three vertically stacked spinboxes. Each spinbox consists of a rectangular display area and a control button with up and down arrows on the right. The top spinbox displays the value '63', the middle one displays '255', and the bottom one displays '127'.

Slider and Spinbox

Range and Spinbox

- Restrict users to enter only numbers
 - Additional attributes **min**, **max** and **step** and **value**
 - Become **Spinbox** or **Slider**, depending on the input type

```
<input type="range" min="0" max="100" />
```

```
<input type="number" min="0" max="100" />
```

- Have some **differences** on **different browsers**



First name Last name Username

Mark Otto @

City State

Choose...

☐ Agree to terms and conditions

Submit form

Please fill out this field.

HTML5 Attributes and Validation

Field Attributes from HTML 5

- **Required**

The field is required to be filled/selected

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

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

- **Placeholder**

The attribute specifies a hint that describes the expected value of its field

```
<input type="text" name="username" placeholder="Your text (a short hint)">
```

- **Autofocus**

The field becomes on focus on page load

```
<input type="text" name="UserName" autofocus="autofocus" />
```

Input Field with Validation

- **Email** – provides a simple validation for email
 - Can be passed a pattern for validation
 - In a mobile device brings the email keyboard

```
<input type="email" required="true" pattern="^[^ @]*@[^ @].[^ @]"/>
```

- **URL** – has validation for url
 - In a mobile device brings the url keyboard

```
<input type="url" required="true" />
```

- **Telephone**

In a mobile device brings the numeric keyboard

```
<input type="tel" required="true" />
```

Value List of Type Attribute of <input> Tag

- Text
- Email
- Password
- Hidden
- Checkbox
- Radio
- File
- Button
- Date
- Datetime-local
- Submit

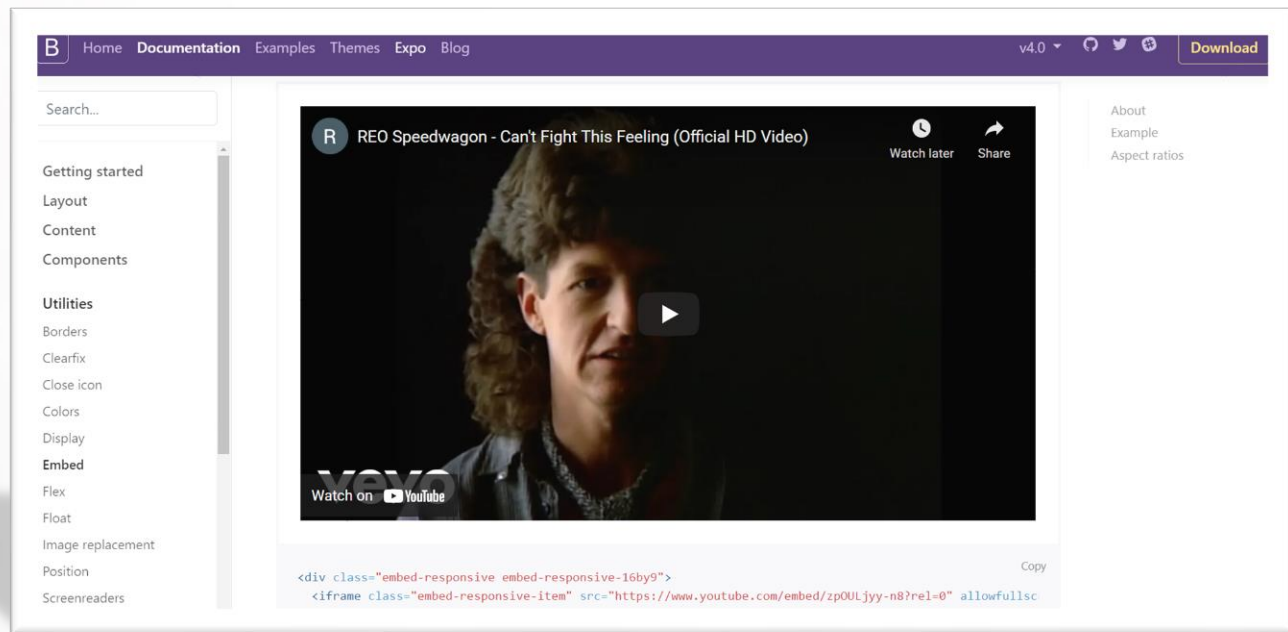
- Reset
- Number
- Tel
- Color
- Url
- Range
- Search
- Image
- Month
- Time
- Week

View more: https://www.w3schools.com/tags/att_input_type.asp

Common attributes of <input> Tag

Source: https://www.w3schools.com/tags/tag_input.asp

Attribute	Value	Description
checked	checked	Specifies that an <input> element should be pre-selected when the page loads (for type="checkbox" or type="radio")
maxlength	number	Specifies the maximum number of characters allowed in an <input> element
minlength	number	Specifies the minimum number of characters required in an <input> element
name	text	Specifies the name of an <input> element
placeholder	text	Specifies a short hint that describes the expected value of an <input> element
readonly	readonly	Specifies that an input field is read-only
required	required	Specifies that an input field must be filled out before submitting the form
type	...	Specifies the type <input> element to display
value	text	Specifies the value of an <input> element



2. HTML inline Frame

<iframe>

Inline Frame

<iframe>

Inline frame provides a way to **show one website inside another website.**

```
<iframe  
  src="https://vnexpress.net"  
  width="600"  
  height="400"  
  frameborder="yes"  
  scrolling="yes"  
></iframe>
```

Inline Frame

Embed Google Map

The image shows a Google Maps interface on a mobile device. The main screen displays the location of Eastern International University, with a search bar at the top containing the text "EIU, Nam Kỳ Khởi Nghĩa, Hòa Phú". Below the search bar is a photo of the university building. The university's name "Eastern International University" is prominently displayed, followed by its address "Đại học Quốc tế Miền Đông" and a 4.5-star rating with 223 reviews. At the bottom of the main screen, there are several icons: "Directions", "Save", "Nearby", "Send to your phone", and "Share". The "Share" icon is highlighted with a red box and the number 2.

Overlaid on the main screen is a "Share" dialog box. The dialog box has a title "Share" and a close button. It contains a "Send a link" section with an "Embed a map" option highlighted by a red box and the number 3. Below this, the "Medium" section shows the HTML code for embedding the map: `<iframe src="https://www.google.com/maps/embed?pb=!1m18!1m12" data-bbox="388 375 615 395">`. A "COPY HTML" button is located to the right of the code, highlighted by a red box and the number 4. The dialog box also features a map preview showing the university location, with a "View larger map" link. At the bottom of the dialog box, there is a link to the "terms of service".

Inline Frame

Embed YouTube Video

The image shows a YouTube video player interface. A share menu is open, displaying various sharing options. The 'Embed' option, represented by a code icon (<>), is highlighted with a red box and the number '2'. Below the share menu, the video title 'SON TÙNG M-TP | MUỘN RỒI MÀ SAO CÒN | OFFICIAL MUSIC VIDEO' is visible, along with the view count '72,884,359 views' and the premiere date 'Premiered Apr 29, 2021'. At the bottom, the 'SHARE' button is also highlighted with a red box and the number '1'.

Share

Embed WhatsApp Facebook Twitter Email 카카오톡

2

https://youtu.be/xypzmu5mMPY COPY

Start at 0:03

#1 ON TRENDING FOR MUSIC

SON TÙNG M-TP | MUỘN RỒI MÀ SAO CÒN | OFFICIAL MUSIC VIDEO

72,884,359 views • Premiered Apr 29, 2021

2M 56K 1 SHARE SAVE

Inline Frame

Embed YouTube Video

The screenshot shows a YouTube video player interface. The video title is "SƠN TÙNG M-TP | MUÔN RỒI MÃ SAO CÒN | OFFICIAL MUSIC VIDEO". The video player shows a man sitting on a large, curved, orange structure against a blue sky. The text "muôn rồi mã sao còn" is overlaid on the video. Below the video, there is a "Watch on YouTube" button and a "MTP OFFICIAL" logo.

An "Embed Video" dialog box is open on the right side of the video player. It contains the following HTML code for embedding the video:

```
<iframe width="560" height="315"
src="https://www.youtube.com/embed
/xypzmu5mMPY" title="YouTube video
player" frameborder="0"
allow="accelerometer; autoplay;
clipboard-write; encrypted-media;
gyroscope; picture-in-picture"
allowfullscreen></iframe>
```

Below the code, there is a checkbox labeled "Start at 0:03" which is currently unchecked. Under the "EMBED OPTIONS" section, there is a checkbox labeled "Show player controls." which is currently checked. A "COPY" button is located at the bottom right of the dialog box.

At the bottom of the video player, there is a section for "TRENDING FOR MUSIC" with the video title "SƠN TÙNG M-TP | MUÔN RỒI MÃ SAO CÒN | OFFICIAL MUSIC VIDEO". It shows 72,884,359 views and premiered on Apr 29, 2021. There are also buttons for "LIKE", "DISLIKE", "SHARE", "SAVE", and a menu icon.




Summary

Exercise

Write the HTML tags of the Lani & Dani webpage.





Q&A