



# Web Programming

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**Login**

Username  
Type your username

Password  
Type your password

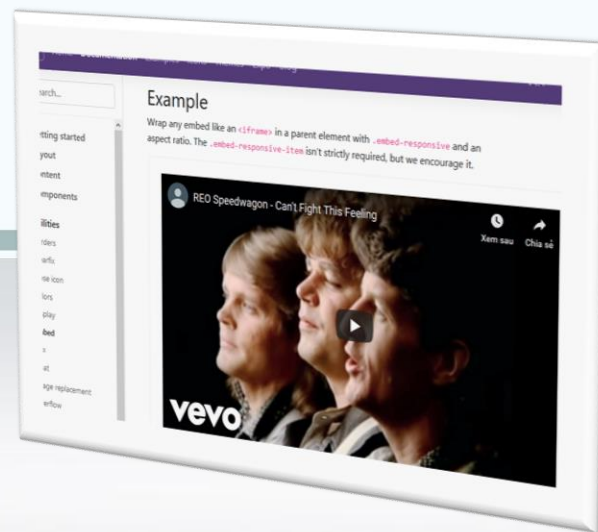
[Forgot password?](#)

**LOGIN**

Or Sign Up Using

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

Have not account yet?  
**SIGN UP**



# HTML Form and Frame

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Employee ☒ ☐ Hire

### Apply as a Employee

First Name \*

Last Name \*

Email \*

Phone \*

Password \*

Confirm Password \*

☒ Male ☐ Female

Please select your Security Question \*

Enter Your Answer \*

Login Register

# 1. HTML Form

Entering User Data from a Web Page

# What is a HTML Form?

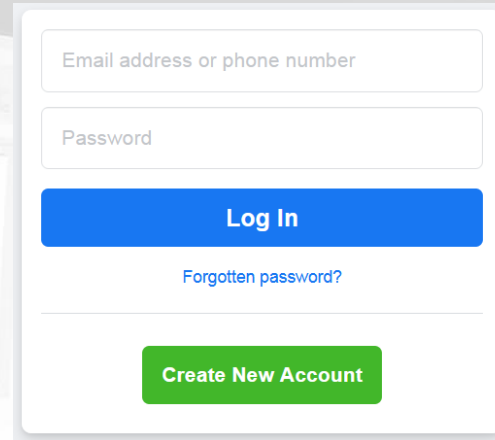
- The **primary method for gathering data** from site visitors

- 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



Email address or phone number

Password

Log In

[Forgotten password?](#)

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 <b>URL</b> in <b>name/value</b> pairs	Appends form-data inside the body of the HTTP request
The length of a URL is <b>limited</b>	Has no size limitations
Useful for form submissions where a user wants to <b>bookmark</b> the result	Form submissions with POST cannot be bookmarked
<b>Never use GET to send sensitive data!</b> (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<sub>n</sub>=value<sub>n</sub>]**

- 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 (&)**.



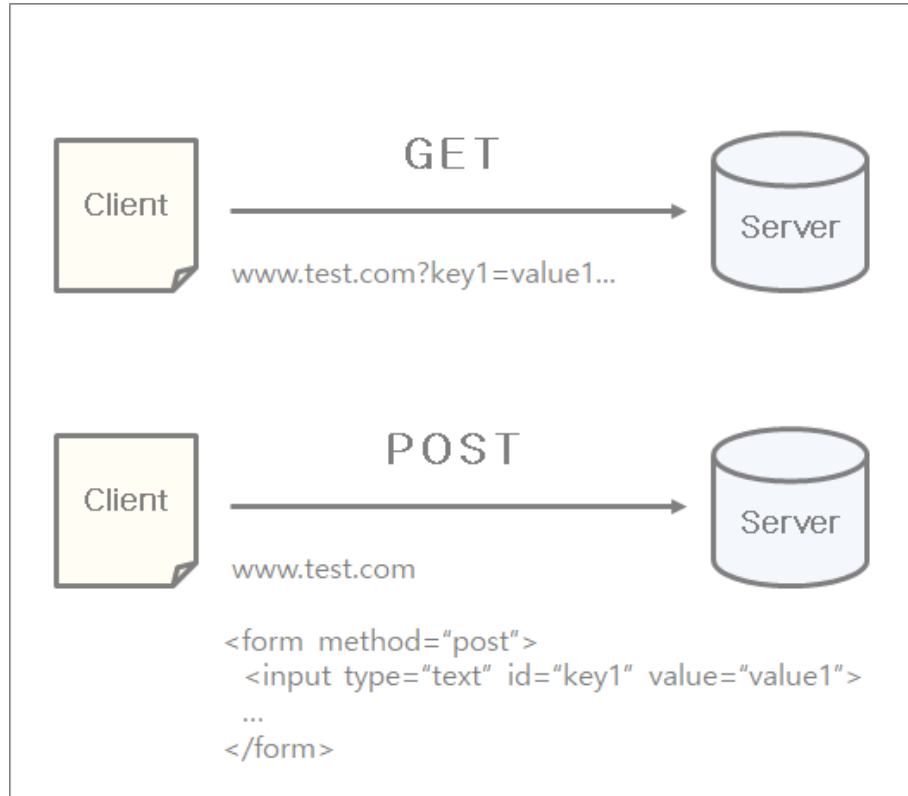
# HTTP POST Method

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, .jpg/ 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





Web browser window showing a document titled "Title of the document" and the URL <https://www.w3docs.com>.

**Personal Information:**

Name:

Email:

Date of birth:

Place of birth:

# 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 displays three spinboxes, each with a numerical value and up/down arrow buttons. The top spinbox shows the value 63. The middle spinbox shows the value 255. The bottom spinbox shows the value 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
- Submit

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

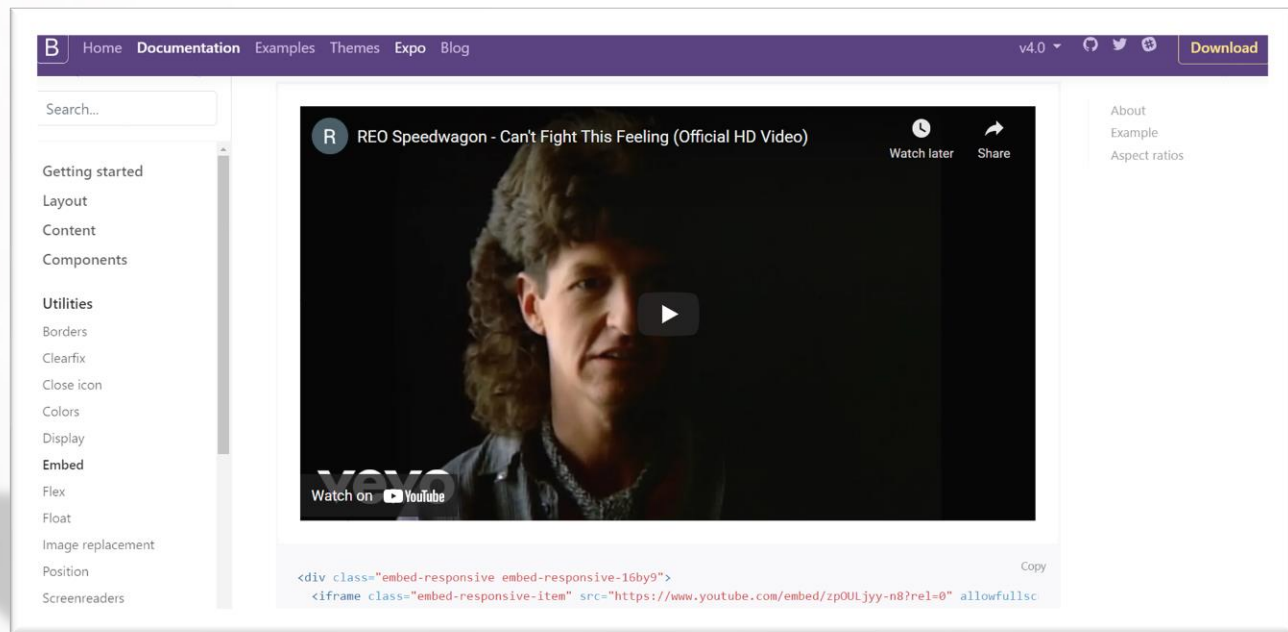
**View more:** [https://www.w3schools.com/tags/att\\_input\\_type.asp](https://www.w3schools.com/tags/att_input_type.asp)



# Common attributes of <input> Tag

Source: [https://www.w3schools.com/tags/tag\\_input.asp](https://www.w3schools.com/tags/tag_input.asp)

Attribute	Value	Description
checked	checked	Specifies that an <input> element should be <b>pre-selected</b> when the page loads (for type="checkbox" or type="radio")
maxlength	number	Specifies the <b>maximum number of characters</b> 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 with a search bar at the top containing "EIU, Nam Kỳ Khởi Nghĩa, Hòa Phú". Below the search bar is a photo of the Eastern International University campus. The main content area displays the university's name, address ("Đại học Quốc tế Miền Đông", "Nam Kỳ Khởi Nghĩa, Định Hoà, Thủ Dầu Một, Bình Dương, Vietnam"), a 4.5-star rating with 223 reviews, and a "Share" button highlighted with a red box and the number 2. The "Share" dialog box is open, showing the "Embed a map" option selected with a red box and the number 3. The dialog displays the HTML embed code: `<iframe src="https://www.google.com/maps/embed?pb=11m18!1m12" data-bbox="380 365 615 395"></iframe>`, with a "COPY HTML" button highlighted with a red box and the number 4. The map in the dialog shows the university location, with a red circle and text "Đại học Quốc tế Miền Đông" overlaid. The background map shows the surrounding area, including "Caffe Chats EIU Campus" and "Bidv - Atm".

Eastern International University  
Đại học Quốc tế Miền Đông  
4.5 ★★★★★ 223 reviews  
University

Directions Save Nearby Send to your phone Share

Nam Kỳ Khởi Nghĩa, Định Hoà, Thủ Dầu Một, Bình Dương, Vietnam  
Closed today  
eiu.edu.vn  
+84 274 2220 341  
3M38+6F Thủ Dầu Một, Bình Dương, Vietnam

Share

Send a link Embed a map

Medium `<iframe src="https://www.google.com/maps/embed?pb=11m18!1m12" data-bbox="380 365 615 395"></iframe>` COPY HTML

Eastern International University  
Nam Kỳ Khởi Nghĩa, Định Hoà, Thủ Dầu Một, Bình Dương  
4.5 ★★★★★ 223 reviews  
View larger map

Đại học Quốc tế Miền Đông

Map data ©2021 Terms of Use Report a map error

By embedding this map, you agree 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: Embed (highlighted with a red box and labeled '2'), WhatsApp, Facebook, Twitter, Email, and 카카오톡 (KakaoTalk). Below the options, a URL is shown: <https://youtu.be/xypzmu5mMPY>, with a 'COPY' button. At the bottom of the menu, there is a checkbox for 'Start at 0:03'. The background video is titled 'SON TÙNG M-TP | MUỘN RỒI MÀ SAO CÒN | OFFICIAL MUSIC VIDEO' and has 72,884,359 views. The video player controls show the video is at 0:03 / 4:48. The 'SHARE' button at the bottom of the video player is also highlighted with a red box and labeled '1'.

# 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 "MUSIC VIDEO" and "muôn rồi mã sao còn" are overlaid on the video. Below the video, it says "SƠN TÙNG M-TP" and "OFFICIAL".

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, it shows "#1 ON TRENDING FOR MUSIC", "SƠN TÙNG M-TP | MUÔN RỒI MÃ SAO CÒN | OFFICIAL MUSIC VIDEO", "72,884,359 views • Premiered Apr 29, 2021", and icons for "2M" likes, "56K" comments, "SHARE", and "SAVE".



# Summary

# Exercise

Write the HTML tags of the Lani & Dani webpage.







**Q&A**