

# OIM3690 - Web Technologies



# HTML Forms

# HTML Forms

- Form in HTML allows users to input and submit **data** to a server.
  - It also can be used in conjunction with other technologies such as Python to process the data and create dynamic web pages.
  - Can you identify instances of forms used on websites that you often visit?
- Form components:
  - `<form>` : the main container and its attributes: `action` , `method` , ...
  - Input controls: to collect data, including text fields, checkboxes, radio buttons.
  - `<label>` : to provide a text description for form controls.
  - `<select>` , `<textarea>` , `<button>` , ...
  - and many other form controls.

# Form Example

```
<form method="post" action="https://oim-apis.up.railway.app/form2">  
  <input  
    type="text"  
    name="name"  
    placeholder="Enter your full name here..."  
  />  
  <button type="submit">Send</button>  
</form>
```

# form Attributes

- **action**
  - It defines where the data gets sent
  - It must be a valid relative or absolute URL, for example:
    - `<form action="https://www.google.com">`
    - `<form action="/process-form">`
    - `<form action="mailto:email-address">`
- **method**
  - It describes how form's data is sent to server
  - The most common ones are the **GET** method and the **POST** method.
    - Compare **GET** vs. **POST**
  - We will use **"POST"** to send form data.

## <input>

- Text line: `<input type="text" />`
- Password: `<input type="password" />`
- Radio buttons: `<input type="radio" />`
- Check boxes: `<input type="checkbox" />`
- Files: `<input type="file" />`
- Hidden data: `<input type="hidden" />`
- and **many more ...**

# <input> attributes

- `type` : type of the input
- `name` : name of the input
  - submitted with the form as part of a name/value pair.
  - is a ***required*** attribute.
- other attributes (dependent on type of):
  - `maxlength`
  - `placeholder`
  - `value`
  - `checked`
  - ...

# `<input>` Type: `"text"` / `"password"`

- Example

```
<form>
  <label for="username">Username:</label>
  <input
    type="text"
    id="username"
    name="username"
    maxlength="100"
    placeholder="Username"
  />
</form>
```

Username:	<input type="text" value="Username"/>
Password:	<input type="password" value="Password"/>

- Try `type="password"`



## `<input>` Type: "radio"

- Example:

```
<form>
<div>
  Gender:
  <label>Male
  <input type="radio" name="gender" value="male" />
  </label>
  <label>Female
  <input type="radio" name="gender" value="female" />
  </label>
</div>
</form>
```

Gender: Male ☐ Female ☐

## <input> Type: "checkbox"

- Example:

```
<div>What product(s) do you own?</div>
<div>
<input type="checkbox" id="smartphone" name="products" value="smartphone" />
<label for="smartphone">Smartphone</label>
</div>
<div>
<input type="checkbox" id="desktop" name="products" value="desktop"/>
<label for="desktop">Desktop computer</label>
</div>
<div>
<input type="checkbox" id="laptop" name="products" value="laptop"
checked />
<label for="laptop">Laptop computer</label>
</div>
```

What product(s) do you own?

- ☐ Smartphone
- ☐ Desktop computer
- ☒ Laptop computer

## `<input>` `type:` `"submit"` / `"reset"`

- Example:

```
<input type="submit" value="Submit" />  
<input type="reset" value="Reset" />
```

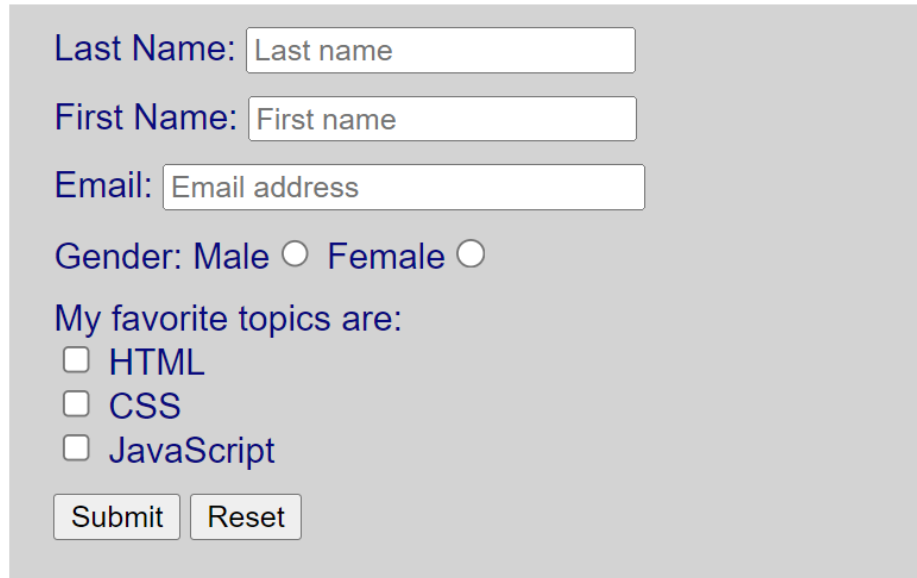
- These two `<input>` s are standard buttons.
- The `type` value should not be changed.

Submit Reset

# Exercise: *ex09.html*

- Create a form that looks like what is shown below:

## Exercise 09 - HTML Form



Last Name:

First Name:

Email:

Gender: Male ☐ Female ☐

My favorite topics are:

☐ HTML

☐ CSS

☐ JavaScript

- `set action="https://oim-apis.up.railway.app/form2"`

# More Form Controls

- `<select>`
  - provides a menu of options
  - `<option>`
- `<textarea>`
  - allows user to enter multi-line plain-text
  - good for a comment on a review or feedback form.
- `<button>`
  - creates a clickable button
  - if there's only one `<button>` inside the `<form>`, that button will be treated as the "submit" button.

# <select>

- Example:

```
<div>
<div>
  <label for="state-select">Which state do you live in?</label>
</div>
<div>
  <select name="state" id="state-select">
    <option value="">-- Please select your state --</option>
    <option value="ME">Maine</option>
    <option value="MA">Massachusetts</option>
    <option value="NH">New Hampshire</option>
  </select>
</div>
</div>
```

Which state do you live in?

-- Please select your state --	▼
-- Please select your state --	
Maine	
Massachusetts	▶
New Hampshire	

# <textarea>

- Example:

```
<div>
<div>
  <label for="comments">Leave a Reply:</label>
</div>
<div>
  <textarea
    id="comments"
    name="comments"
    rows="5"
    cols="25"
    placeholder="Enter your comment here..."
  ></textarea>
</div>
</div>
```

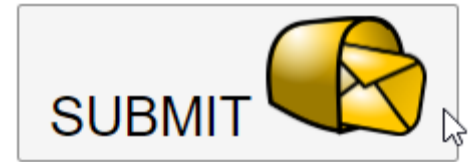
Leave a Reply:

Enter your comment here...

## <button>

- Use a `<button>` element if you want to
  - create a custom button
  - customize the behavior using JavaScript
- Example:

```
<button type="submit">  
    SUBMIT   
</button>
```





## Exercise: *ex09.html* (cont.)

- Add a drop-down menu.
- Add a text area for comments.
- Add two icon buttons.
- Add styles
  - make it look like the form in next slide
- set `action="https://oim-apis.up.railway.app/form2"`
- Update ***sitemap.html*** and **commit/push** to GitHub.

# Exercie 09 - HTML Form

Last Name:

First Name:

Email:



Gender: Male ☐ Female ☐

My favorite topics are:

- ☐ HTML
- ☐ CSS
- ☐ JavaScript

Which grade do you expect to receive?

Leave a comment:



A

A-

B+

B

B-

C+

# Questions?

