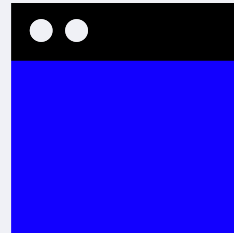**Code Academy**

Mindaugas Paškevičius

HTML forms

1 LYGIS

2021

Šiandien išmoksite

01 Susipažinsite su Formomis ir pagrindiniais jų elementais.

02 Išmoksite išsiųsti formą.

HTML forms

What's HTML form?

–   User input data and interact with the website.

–   The data from website is sent to the server/backend.

–   Forms can have multiple widgets: select boxes, buttons, checkboxes, or radio buttons.

HTML forms <tags>

- `<form>` – parent wrapper for all form.

- `<label>` – name for input.

- `<input>` – to fill in data (text, number).

- `<textarea>` – place for inputting longer text, usually a message.

- `<button>` – an action button to send the form to the server.

HTML forms <form>

`<form>` – all HTML forms starts with main wrapper.

Attributes:

- Action: location URL, endpoint where data will be sent;
- Method: defines HTTP method to send the data (POST or GET).

! Important it's strictly forbidden to nest a form into another form.

```
<form action="/my-handling-form-page" method="post">

</form>
```

HTML contact form example

```html
<form action="/my-handling-form-page" method="post">
  <div>
    <label for="name">Name:</label>
    <input type="text" id="name" name="user_name">
  </div>
  <div>
    <label for="mail">E-mail:</label>
    <input type="email" id="mail" name="user_mail">
  </div>
  <div>
    <label for="msg">Message:</label>
    <textarea id="msg" name="user_message"></textarea>
  </div>
</form>
```

HTML contact form example

`<div>` – are used to have three different block elements that will go below each other.

`<label>` attribute "*for*" – is used to link a `<label>` to a form widget (e. g. input)

`<input>` attribute "*type*" – **! Important**, it defines how input element behaves.

! Important an `<input>` *tag doesn't need a closing tag.*

HTML form <input>

`<input>` attribute "*type*" – **! Important**, it defines how input element behaves.

– `type="text"` (accepts any kind of string)

```
1 | <input type="text" id="comment" name="comment" value="I'm a text field">
```

HTML form <input>

- `type="email"` (accepts emails)
    - If we want to insert several emails in input additional attribute "multiple".

```
<input type="email" id="email" name="email" multiple>
```

HTML form <input>

– `type="password"` (used for inputting passwords)

  – Accepts texts, but the characters are hidden for security reasons.

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

HTML form <input>

- `type="search"` (for searching)
  - Usually have 'x' in the corner to clean input if incorrect search text was entered.

```
<input type="search" id="search" name="search">
```

HTML form \<input\>

– `type="url"` (for entering URL address)

  – Allows to submit the form if only a correct URL was entered.

```
<input type="url" id="url" name="url">
```

HTML \<textarea\>

`<textarea></textarea>` – similar like `<input>`, this tag is also for inputting information, but for multiline text.

Attributes:

- Rows – setting the numbers of rows of textare, describes height;
- Cols – setting the cumber of columns of textarea, describes width.

! Important – style="resize: none" important if you don't want a textarea to be resizable.

```
<textarea cols="30" rows="10"></textarea>
```

HTML forms drop-downs

– `<select>` – allows user to select from several options.

  – `<option>`

```
<select id="simple" name="simple">
  <option>Banana</option>
  <option>Cherry</option>
  <option>Lemon</option>
</select>
```

HTML forms drop-downs

- `<select>` – main wrapper.
  - `<option>` – children of select.
- Allows client to select one option from several possible.

```html
<select id="simple" name="simple">
  <option>Banana</option>
  <option>Cherry</option>
  <option>Lemon</option>
</select>
```

HTML forms drop-downs

- `<optgroup>` – to set different selection groups.

- Attribute [selected] – to preselect a value.

- Attribute [multiple] – to select several options, goes in `<select>` tag.

```html
<select id="groups" name="groups">
  <optgroup label="fruits">
    <option>Banana</option>
    <option selected>Cherry</option>
    <option>Lemon</option>
  </optgroup>
  <optgroup label="vegetables">
    <option>Carrot</option>
    <option>Eggplant</option>
    <option>Potato</option>
  </optgroup>
</select>
```

HTML forms drop-downs <datalist> new!

- New additional to HTML5 `<datalist>` tag.
- Allows to show the users possible options once they start typing input text.
- Not fully supported in all browsers.

```html
<label for="myFruit">What's your favorite fruit?</label>
<input type="text" name="myFruit" id="myFruit" list="mySuggestion">
<datalist id="mySuggestion">
  <option>Apple</option>
  <option>Banana</option>
  <option>Blackberry</option>
  <option>Blueberry</option>
  <option>Lemon</option>
  <option>Lychee</option>
  <option>Peach</option>
  <option>Pear</option>
</datalist>
```

HTML forms checkable items

– Radio buttons.

– Check boxes.

! Important *if checkable item is not checked and form is submitted nothing is sent to the server, compared to the simple input, where we always send the input name at least.*

HTML form checkbox

– To make a checkbox input, `type="checkbox"` must be provided.

```
<input type="checkbox" checked id="carrots" name="carrots" value="carrots">
```

HTML form radio button

– To make a radio button, `type="radio"` must be provided.

! Important *If several radio button inputs has the same [name] attribute, only one checkbox can be marked.*

```
<input type="radio" checked id="soup" name="meal">
```

HTML form Numbers

– `type="number"`, for creating an `<input>` that accepts only the numbers.

– Constraining the value with attributes [min], [max].

– Stepper [step] – change value by 1 or 2, or 3.

```
<input type="number" name="age" id="age" min="1" max="10" step="2">
```

HTML form Slider

– `type="range"`, allows to create a slider, when exact value is not important.

```
<input type="range" name="beans" id="beans" min="0" max="500" step="10">
```

HTML form data and time picker

- `type="datetime-local", type="month", type="time", type="week"`

```html
<input type="datetime-local" name="datetime" id="datetime">

<input type="month" name="month" id="month">

<input type="time" name="time" id="time">

<input type="week" name="week" id="week">
```

HTML form Color picker

– a color widget allows user to pick up a color, `type="color"`

```
<input type="color" name="color" id="color">
```

HTML form file picker

– a color widget allows user to upload files, `type="file"`

```
<input type="file" name="file" id="file" accept="image/*" multiple>
```

HTML form progress bar

– a progress bar widget allows user to see the progress.

– `<progress></progress>`

– Setting [max], [min] as percentage.

```
<progress max="100" value="75">75/100</progress>
```

HTML \<button>\</button>

Allows for the client to **SEND** data to the server.

Accepts 3 types:

– Submit – for submitting a form, sending data;

– Reset – resets all forms inputs;

– Button – *does nothing!*

```html
<div class="button">
  <button type="submit">Send your message</button>
</div>
```

HTML <label>

`<label>` is clickable if attribute `for="name"` has the same value as `<input>` `id="name"`

Example:

```
<label for="taste_1">I like cherry</label>
<input type="checkbox" id="taste_1" name="taste_cherry" value="1">
```

HTML default values for \<input> and \<textarea>

`<textarea></textarea>` – to set default value as child text.

```
<textarea>by default this element is filled with this text</textarea>
```

`<input>` – to set attribute value="default text"

```
<input type="text" value="by default this element is filled with this text" />
```

HTML default values with placeholder

`<textarea></textarea>` – accepts attribute "placeholder" to set initial value.

`<input>` – accepts attribute "placeholder" to set initial value.

Try it out!

HTML form attributes

Common attributes for all form's widgets:

– Autofocus – sets the input or other widget as starting point, on page reload;

– Disabled – sets the widget disabled, if we want to prevent client entering the data;

– Required – is this attribute is set we must enter data in input.

```html
<section>
    <p> <button disabled="true" type="submit">Validate the payment</button> </p>
</section>
```

HTML sending forms

In addition, every form's `<input>` has to include "name" attribute.

– "name" describes for the **browser** which name to give for each data.

– "name" for **server** describes what's data name.

```html
<div>
    <label for="name">Name:</label>
    <input type="text" id="name" name="user_name" />
<div>
```

Building a form

New widgets:

– `<abbr>` – abbreviation;

– `<fieldset>` – grouping related elements;

– `<legend>` – defines a title of the fieldset.

Payment form

Required fields are followed by *.

Contact information

Title
○ Mister
○ Miss

Name: *

E-mail: *

Password: *

Payment information

Card type: Visa

Card number: *

Expiration date: *
formatted as mm/yy

Validate the payment

Užduotis nr. 2

- Connecting your form to a *Formspree* (https://formspree.io/f/xgedpbzp)