

avionschool

Lesson 4.0 Forms

BATCH 4

NOVEMBER 21, 2020

Pitch

What is a form?

TRADITIONALLY

'Form' refers to a printed document that contains spaces for you to fill in info.

IN HTML

Allows you to **collect info from visitors of your website.**

How forms work

VOTE FOR YOUR FAVORITE JAZZ
MUSICIAN OF ALL TIME

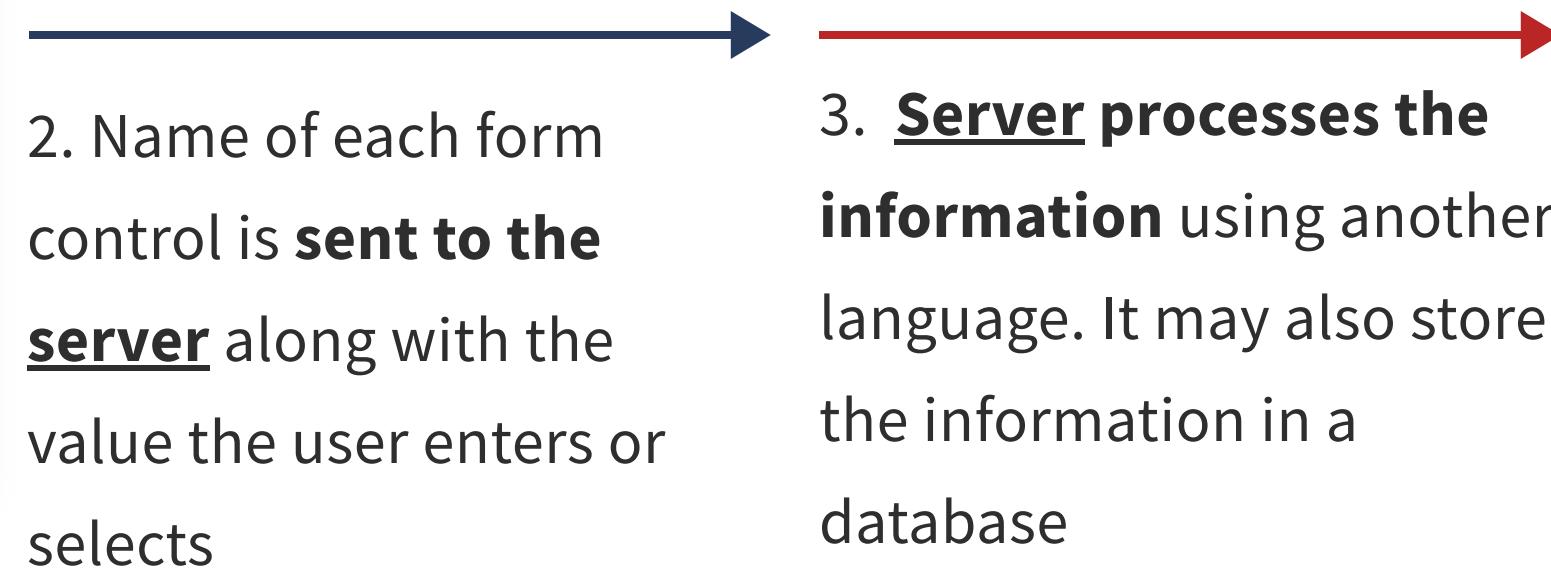
Username:

I vote for:

- Ella Fitzgerald
- Herbie Hancock
- John Coltrane
- Miles Davis
- Thelonious Monk

SUBMIT

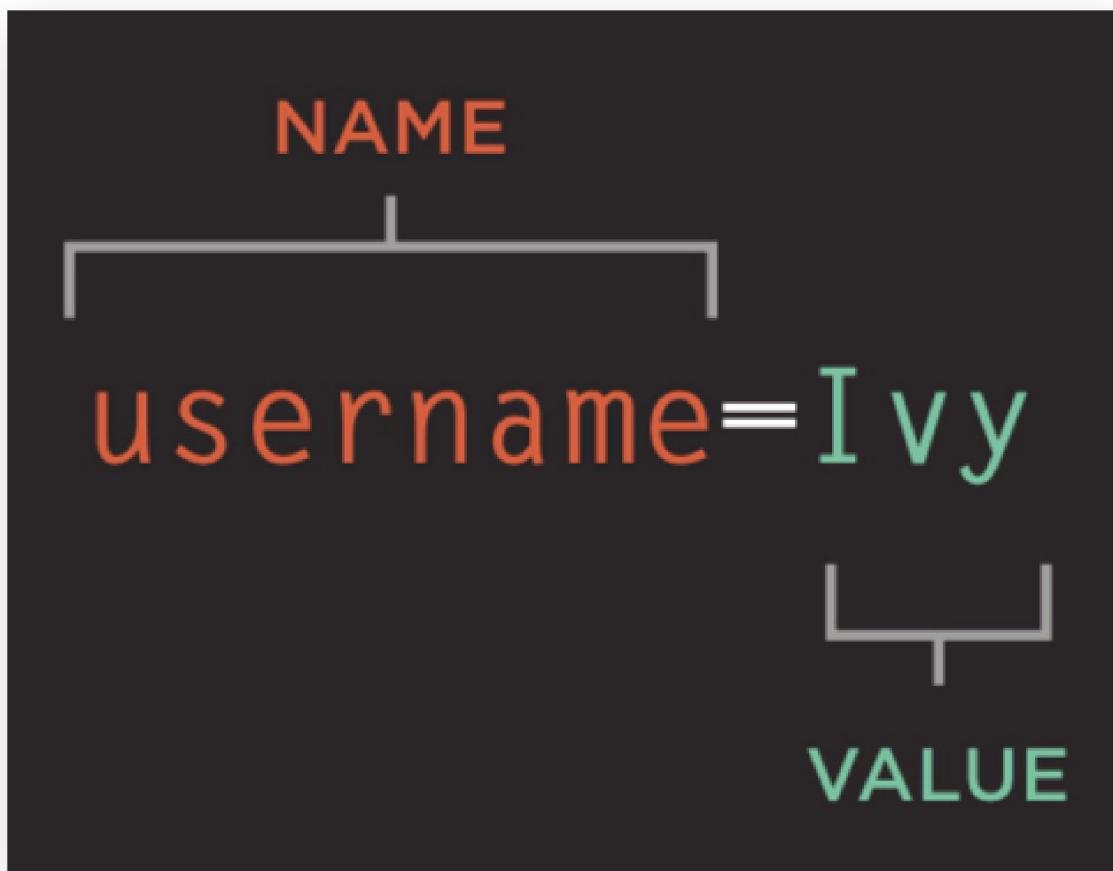
1. **User fills in a form** then
presses a button to submit the
information to the server

- 
- The diagram illustrates the process of form submission. It starts with a grey box containing a web form. An arrow points from the right side of the box to the left, labeled '2. Name of each form control is sent to the server'. Another arrow points from the right side of the text to the right, labeled '3. Server processes the information using another language. It may also store the information in a database'. A final arrow points from the right side of the text to the right, labeled '4. Server creates a new page to send back to the browser based on the information received'.
2. Name of each form control is **sent to the server** along with the value the user enters or selects
 3. **Server processes the information** using another language. It may also store the information in a database
 4. **Server creates a new page** to send back to the browser based on the information received

Thank you, Ivy!
You voted for Herbie Hancock.

How forms work

NAMES AND VALUES



- A form may have several form controls, each gathering different information.
- The server needs to know which piece of inputted data corresponds with which form element.
 - We differentiate this through **names** and **values**
 - **Name** is the specific **data** it is collecting.
 - **Value** is the **input** of the user.

Form structure

```
1 <form action="http://www.example.com/subscribe.php" method="get">
2   <p>This is where the form controls will appear.</p>
3 </form>
```

<FORM>

- Form controls live inside a `<form>` element.
- Should always carry the `action` attribute and will usually have a `method` and `id` attribute too.

ACTION

- Its value is the **URL for the page on the server** that will receive the information in the form when it is submitted.

Form structure

```
1 <form action="http://www.example.com/subscribe.php" method="get">
2   <p>This is where the form controls will appear.</p>
3 </form>
```

METHOD

1. **get** method: the values from the form are added to the end of the URL specified in the **action** attribute.
 - short forms (search boxes)
 - retrieving data from web server
2. **post** method: the values are sent in what are known as HTTP headers.
 - allows users to upload a file
 - long forms
 - sensitive data

Form structure

<INPUT>

- The <input> element is used to create several different form controls.
- The value of the type attribute determines what kind of input they will be creating.

Type	Description
<input type="text">	Defines a single-line text input field
<input type="radio">	Defines a radio button (for selecting one of many choices)
<input type="submit">	Defines a submit button (for submitting the form)

Form controls - Adding Text

TEXT INPUT

Used for a single line of text such as email addresses and names.

Displayed by browser	HTML markup required
Name: <input type="text"/>	<pre><!doctype html> <html> <head> <meta charset="UTF-8"> <title>Title of the web page </title> </head> <body> <form> ⑨ <label>Name: <input type="text" name="name" size="20"> ⑪ </label> </form> </body> </html></pre>

Form controls - Adding Text

PASSWORD INPUT

Like a single line text box but it masks the characters entered.

Displayed by browser	HTML markup required
PIN Number: <input type="password"/>	<pre><!doctype html> <html> <head> <meta charset="UTF-8"> <title>Title of the web page </title> </head> <body> <form> ⑨ <label for="password">PIN Number: </label> ⑩ <input type="password" name="pin" id="password" size="5"> </form> </body> </html></pre>

Form controls - Adding Text

TEXT AREA (MULTI-LINE)

Used for a single line of text such as email addresses and names.

Displayed by browser	HTML markup required
<p>Notes:</p> <p>More notes:</p> <p>Please note: If no <code>rows</code> or <code>cols</code> attribute values are specified, the default values of <code>2</code> and <code>20</code> will be used for <code>rows</code> and <code>cols</code> respectively. The size of the <code>textarea</code> can also be defined in CSS using <code>height</code> and <code>width</code>.</p>	<pre><!doctype html> <html> <head> <meta charset="UTF-8"> <title>Title of the web page </title> </head> <body> <form> <label for="feedback1">Notes: </label> <textarea name="feedback1" id="feedback1" rows="5" cols="20"> Textareas can have default text, and the rows and cols attributes define their size </textarea> <label for="feedback2">More notes: </label> <textarea name="feedback2" id="feedback2"> </textarea> </form> </body> </html></pre>

Form controls - Making choices

RADIO BUTTONS

For use when a user must select one of a number of options.

Displayed by browser	HTML markup required
<ul style="list-style-type: none"><input checked="" type="radio"/> Morning<input type="radio"/> Afternoon<input type="radio"/> Evening	<pre>... <form> ... <input type="radio" name="delivery" id="amDelivery" value="am" checked> <label for="amDelivery">Morning</label> <input type="radio" name="delivery" id="pmDelivery" value="pm"> <label for="pmDelivery">Afternoon</label> <input type="radio" name="delivery" id="eveDelivery" value="eve"> <label for="eveDelivery">Evening</label> ... </form> ...</pre>

Form controls - Making choices

CHECKBOXES

When a user can select and unselect one or more options.

Displayed by browser	HTML markup required
Drink: <input checked="" type="checkbox"/> Coffee <input checked="" type="checkbox"/> Cappuccino <input type="checkbox"/> Chocolate	<pre>... <form> ... Drink:
 <input type="checkbox" name="drink" id="coffee" value="coffee" checked> <label for="coffee">Coffee</label> <input type="checkbox" name="drink" id="cappuccino" value="cappuccino" checked> <label for="cappuccino">Cappuccino</label> <input type="checkbox" name="drink" id="chocolate" value="chocolate"> <label for="chocolate">Chocolate</label> ... </form> ...</pre>

Form controls - Making choices

DROP-DOWN BOXES

When a user must pick one of a number of options from a list.

Displayed by browser	HTML markup required
Topping: <input type="button" value="Chocolate ▾"/>	<pre>... <form> ... <label for="topping">Topping:</label>
 <select name="Topping" id="topping"> <option value="cinnamon">Cinnamon</option> <option value="chocolate" selected>Chocolate</option> <option value="vanilla">Vanilla</option> </select> ... </form> ...</pre>

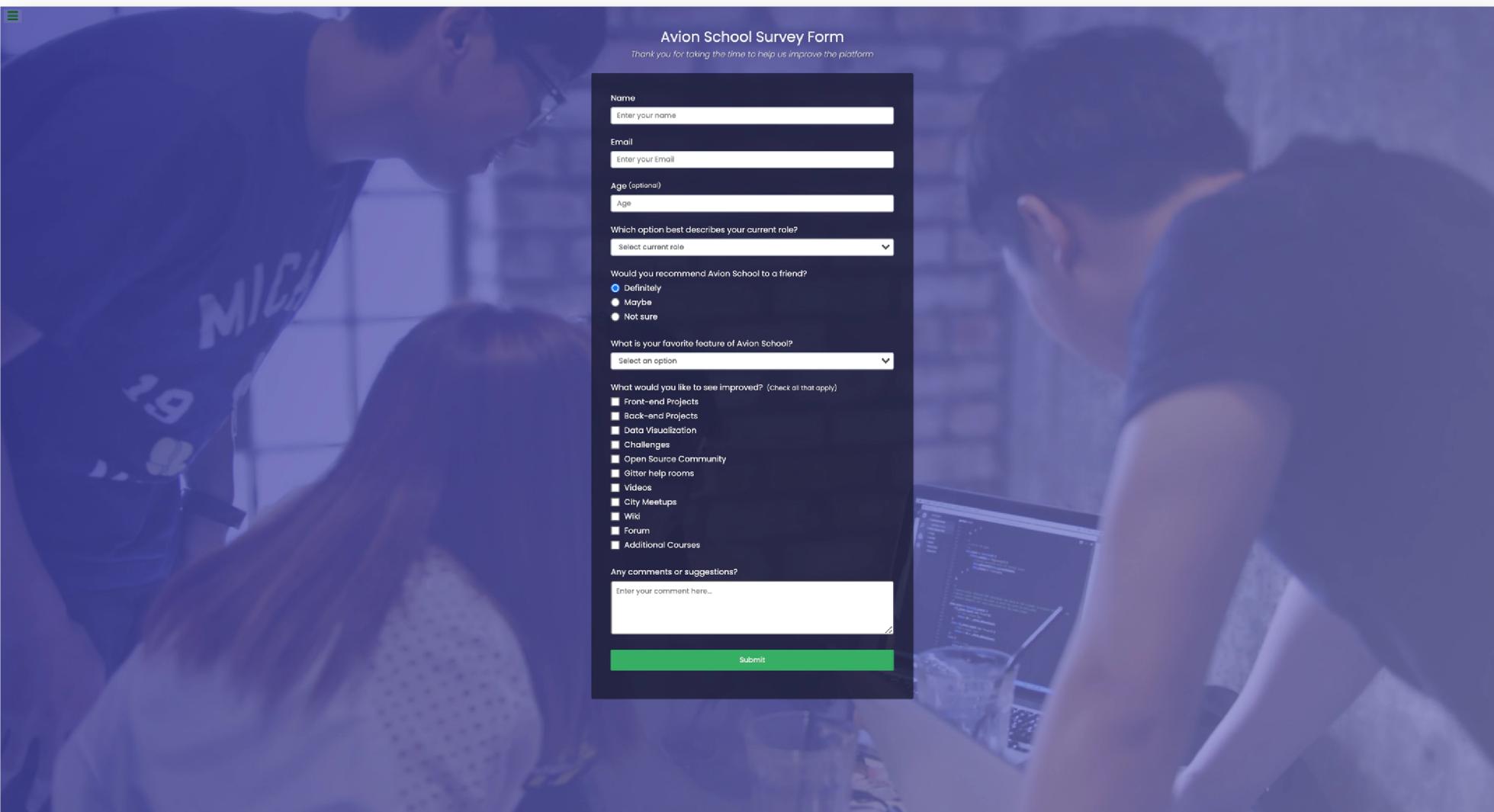
Form controls - Submitting forms

SUBMIT BUTTONS

To submit data from your form to another web page.

Displayed by browser	HTML markup required
First Name: <input type="text"/> Last Name: <input type="text"/> Send	<!doctype html> <html> <head> <meta charset="UTF-8"> <title>Title of the web page </title> </head> <body> <form> <label for="firstname">First Name: </label> <input type="text" name="firstName" id="firstname"> <label for="lastname">Last Name: </label> <input type="text" name="lastName" id="lastname"> 13 <input type="submit" name="button" value="Send"> </form> </body> </html>

Activity Survey Form



Avion School Survey Form
Thank you for taking the time to help us improve the platform

Name

Email

Age (optional)

Which option best describes your current role?

Would you recommend Avion School to a friend?
 Definitely
 Maybe
 Not sure

What is your favorite feature of Avion School?

What would you like to see improved? (Check all that apply)

Front-end Projects
 Back-end Projects
 Data Visualization
 Challenges
 Open Source Community
 Gitter help rooms
 Videos
 City Meetups
 Wiki
 Forum
 Additional Courses

Any comments or suggestions?

Submit

User Stories

User Story #1: As a user, I want to see a title with `id="title"` in H1 sized text.

User Story #2: As a user, I want to see a short explanation with `id="description"` in P sized text.

User Story #3: As a user, I want to see a form with `id="survey-form"`.

User Story #4: As a user, I want to be required to enter my name in a field with `id="name"`. (Inside form element)

User Story #5: As a user, I want to be required to enter an email in a field with `id="email"`. (Inside form element)

User Story #6: As a user, I want to see a `validation error` if I enter an email that is not formatted correctly.

User Story #7: As a user, I should be able to enter a number in a field with `id="number"`.

User Story #8: As a user, if I enter non-numbers in the number input, I want to see an HTML5 `validation error`.

User Story #9: As a user, if I enter numbers outside the range of the number input, which are defined by the min and max attributes, I will see an HTML5 `validation error`.

User Story #10: For the name, email, and number input fields inside the form I can see corresponding labels that describe the purpose of each field with the following ids: `id="name-label", id="email-label", and id="number-label"`.

User Stories

User Story #11: For the name, email, and number input fields, I want to see `placeholder text` that gives me a description or instructions for each field.

User Story #12: Inside the form element, I want a select an option from a dropdown that has a corresponding `id="dropdown"`.

User Story #13: Inside the form element, I want to select a field from one or more groups of radio buttons. Each group should be grouped using the `name attribute`.

User Story #14: Inside the form element, I want to select several fields from a series of checkboxes, each of which must have a value attribute.

User Story #15: Inside the form element, I want to see a `text-area` at the end for additional comments.

User Story #16: Inside the form element, I want to see a button with `id="submit"` to submit all my inputs.

User Story #17: I can submit my inputs to the address bar.