



HTML Forms

COMP1017

Web Design & Fundamentals I



Why Forms?

Almost every website has some type of form, whether it's a:

- contact form
- search
- email subscription
- and so many more...

These are all examples of forms. Forms allow the user to interact with a website/application to send a message, get a quote, sign-up, etc.



Defining Forms

All HTML forms must start with the form element `<form>`.

The form tag `<form></form>`:

- ❑ Defines a form
- ❑ Optional attributes but it's best to set the following two attributes:
 - ❑ `action`: defines where the submitted data will be sent,
 - ❑ `method`: defines which http request method is used (GET or POST)



Form Elements

All HTML forms contain form elements, which are different types of input elements such as:

- ❑ input
- ❑ Textarea
- ❑ Label
- ❑ Checkbox
- ❑ Radio buttons
- ❑ Fieldset
- ❑ Submit
- ❑ Button
- ❑ Legend
- ❑ Select
- ❑ Option
- ❑ Optgroup
- ❑ Datalist (new to HTML5)
- ❑ Output (new to HTML5)



Form Elements

The input `<input/>` is the **most important** form element. It can be displayed in multiple ways pending on the **type attribute** and the value it is given.

```
<input type= "text" name= "firstname" />
```

```
<input type= "email" name= "email" />
```

```
<input type= "radio" name= "puppy" value="husky" />
```

```
<input type= "radio" name= "puppy" value="lab" />
```

The type attribute defines and controls the way input element behaves

Input Types

All forms will contain at least 1 form element, which will have a minimum of 1 input *type attribute*

- | | | |
|-----------------------------------|---------------------------------|--|
| <input type="checkbox"/> text | <input type="checkbox"/> button | <input type="checkbox"/> file |
| <input type="checkbox"/> email | <input type="checkbox"/> reset | <input type="checkbox"/> hidden |
| <input type="checkbox"/> password | <input type="checkbox"/> number | <input type="checkbox"/> image |
| <input type="checkbox"/> checkbox | <input type="checkbox"/> tel | <input type="checkbox"/> month |
| <input type="checkbox"/> submit | <input type="checkbox"/> url | <input type="checkbox"/> week |
| <input type="checkbox"/> radio | <input type="checkbox"/> search | <input type="checkbox"/> And so many more... |
| <input type="checkbox"/> range | <input type="checkbox"/> time | |
| <input type="checkbox"/> min | <input type="checkbox"/> color | |
| <input type="checkbox"/> max | <input type="checkbox"/> date | |

If an input doesn't have *type* attribute, the input will default to type: text



Form Attributes

The **input** element is powerful and complex and can use a combination of different type and attributes. We we will be using **name**, **type**, **value** and **placeholder** attributes.

- | | |
|--------------------------------------|---|
| <input type="checkbox"/> name | <input type="checkbox"/> Name: used to specify a name for the input field. |
| <input type="checkbox"/> type | <input type="checkbox"/> Type: defines and controls the input field behaviour |
| <input type="checkbox"/> value | <input type="checkbox"/> Value: specifies what the input field values are. (used especially with radio and checkboxes) |
| <input type="checkbox"/> placeholder | <input type="checkbox"/> Placeholder: describes/hints at the expected value for the field |
| <input type="checkbox"/> disabled | <input type="checkbox"/> Disabled: disables a form field |
| <input type="checkbox"/> required | <input type="checkbox"/> Required: The user must complete the field before submitting. |

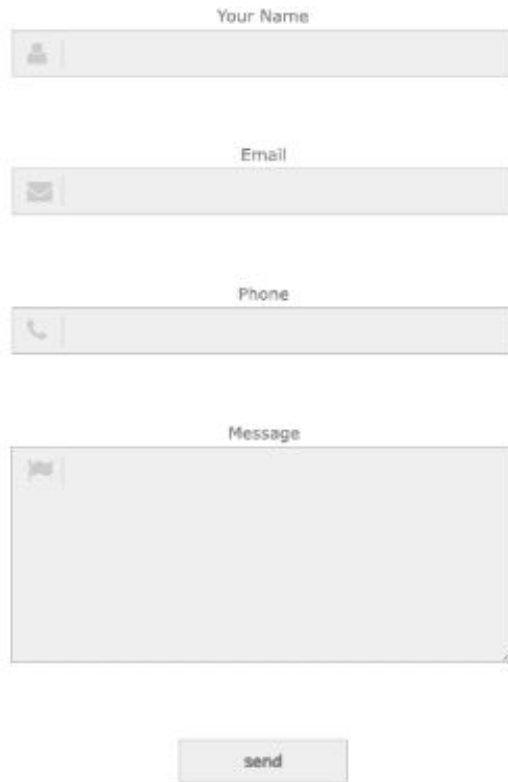


Laying out Forms

Let's say for example you are given a psd mockup with a form, how are you going to layout the form in HTML?

Let's start by evaluating what form fields are in the mockup and go from there.

What fields are you given?



The image shows a PSD mockup of a contact form. It consists of the following elements:

- Your Name:** A text input field with a person icon on the left.
- Email:** A text input field with an envelope icon on the left.
- Phone:** A text input field with a telephone handset icon on the left.
- Message:** A large text area with a speech bubble icon on the left.
- send:** A rectangular button at the bottom right.

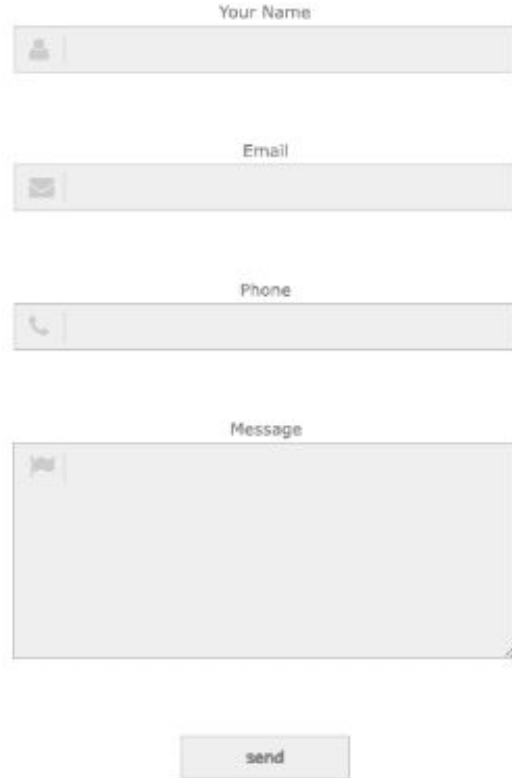


Laying out Forms

What fields are you given?

- ☐ Label
- ☐ Name
- ☐ Email
- ☐ Phone
- ☐ Message
- ☐ Submit

What type of form elements are these?



Your Name

Email

Phone

Message

send

Laying out Forms

What type of form elements are these?

- ❑ Label `<label for= "name">Your Name</label>`
- ❑ Name `<input type= "text" name= "name" />`
- ❑ Email `<input type= "email" name= "email" />`
- ❑ Phone `<input type= "text" name= "phone" />`
- ❑ Message - `<textarea name= "message" ></textarea>`
- ❑ Submit `<input type= "submit" name= "submit" value= "send" />`

Your Name

Email

Phone

Message

send

Laying out Forms

Remember that when we are starting to code an form we start with the form element `<form></form>`.

```
<form id= "contact-form" action= "" method= "POST">
```

```
<!-- form elements here -->
```

```
</form>
```

This will start our form, next we can add in all of our form elements

Your Name

Email

Phone

Message

send

Laying out Forms `<input>`

```
<form id= "contact-form" action= "" method= "POST">  
  <label>Your Name</label>  
  <input id= "name" type= "text" name= "name" />  
</form>
```

Wait, what do you notice about the `<label>` and the `<input>` tag?

They are inline elements, which mean they will sit side-by-side.

Let's continue to laying out the rest of your form elements.

Your Name

Email

Phone

Message

send

Laying out Forms - <textarea>

You've laid out all of your input element up to the large message area. How do I add that? Do you remember the <textarea> element?

```
<form id= "contact-form" action= "" method= "POST">  
  <label>Your Name</label>  
  <textarea id= "message" name= "message"></textarea>  
</form>
```

Your Name

Email

Phone

Message

send



Laying out Forms - submit

We have our form built fields all built but we are missing one very important detail, the submit button. This can be written using an `<input>` element

```
<form id= "contact-form" action= "" method= "POST">  
  <input class= "submit" type= "submit" name= "submit" value= "submit" >  
</form>
```

Styling Forms

Styling Forms

Our form looks pretty sad, it needs some CSS styling applied!

Just like we can style an h1 element. We will be styling our form and its elements.

We can style our forms using attributes.

Wait... what.. how?

Your Name

Email

Phone

Message



Styling Forms

Let's start by styling our `<input>` elements. Looking at our psd, we can see that all of our `<input>` elements have the same styling! Let's go and style those elements!

In our HTML:

```
<form id= "contact-form" action= "" method= "POST">
  <label>Your Name</label>
  <input id= "name" type= "text" name= "name" />
</form>
```

In our CSS:

```
input{
    /** CSS goes here - go
    through your psd to find out
    what CSS declarations you will
    use. */
}
```

Your Name

Email

Phone

Message

Your Name

Email

Phone

Message

The form has gone from default styling to having some styling, however what I do notice is that my submit button looks like the other input fields. *why?*

That's because it is an `<input>` element. We can style this `<input>` one of two ways. We can either use a `class` and target the `<input>` or we can use its `type` attribute.

Styling with a class selector

HTML:

```
<form id= "contact-form" action= "" method= "POST">  
  <div class= "submit-button">  
    <input id= "submit" type= "submit" name= "submit" value= "Send" >  
  </div>  
</form>
```

CSS:

```
.submit-button input{  
  /** CSS goes here **/  
}
```

Styling with a type attribute

HTML:

```
<form id= "contact-form" action= "" method= "POST">
  <div class= "submit-button">
    <input id= "submit" type= "submit" name= "submit" value= "Send" >
  </div>
</form>
```

CSS:

```
input[type=submit]{
  /** CSS goes
  here **/
}
```



Styling with a textarea

HTML:

```
<form id= "contact-form" action= "" method= "POST">
  <div class= "message">
    <label for= "message">Message</label>
    <textarea id= "message" name= "message"></textarea>
  </div>
</form>
```

Textarea by default is horizontal and vertically expandable. We can change those by using the property **resize** or by adding **min** and **max width** or **height** to the textarea.

resize has the following values: **both** | **horizontal** | **vertical** | **none** | **inherit**

CSS:

```
.message textarea{
  /** CSS goes here **/
}
```

Taking what you just learned about forms, let's finish the exercise as a class.

In-Class Lab: Forms!



Sources

- ❏ Your notes and exercise
- ❏ This slide deck
- ❏ <https://developer.mozilla.org/en-US/docs/Learn/HTML/Forms>
- ❏ https://developer.mozilla.org/en-US/docs/Learn/HTML/Forms/Your_first_HTML_form
- ❏ https://developer.mozilla.org/en-US/docs/Learn/HTML/Forms/How_to_structure_an_HTML_form
- ❏ <https://css-tricks.com/almanac/properties/r/resize/>
- ❏ Google :)