



Forms



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User

Password

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Forms

- A HTML `<form>` element is a way of defining a form which is used to get user input
- They consist of different types of `input` elements:
 - text fields
 - checkboxes
 - radio buttons
 - submit buttons
- We specify the type of input element using the type attribute:

```
<form name="user_form">
  First name:<br>
  <input type="text" name="firstname">
  Last name:<br>
  <input type="text" name="lastname">
</form>
```

Reading forms in JavaScript

document.forms

When you have forms in your document, they can be found in a special document property called `document.forms`

This is a “named collection”, i.e. it's both named and ordered. We can use both the name or the number in the document to get the form.

```
document.forms.test // the form with name="test"  
document.forms["test"] // also the form with name="test"  
document.forms[0] // the first form in the document
```

form.elements

Each form has a field `form.elements` which has all of the elements in that form.
This is also a “named collection”

HTML

```
<form>
  <input type="text" name="fname">
  <input type="radio" name="age" value="10">
  <input type="radio" name="age" value="20">
</form>
```

JS

```
const form = document.forms[0];

// element with the name "fname"
form.elements.fname;
// shorter notation:
form.fname;

// since there are multiple elements with
the name "age", this returns a collection
const ages = form.elements.age;
```

Backreferences

Each form element stores a backreference to the form it came from, `element.form`

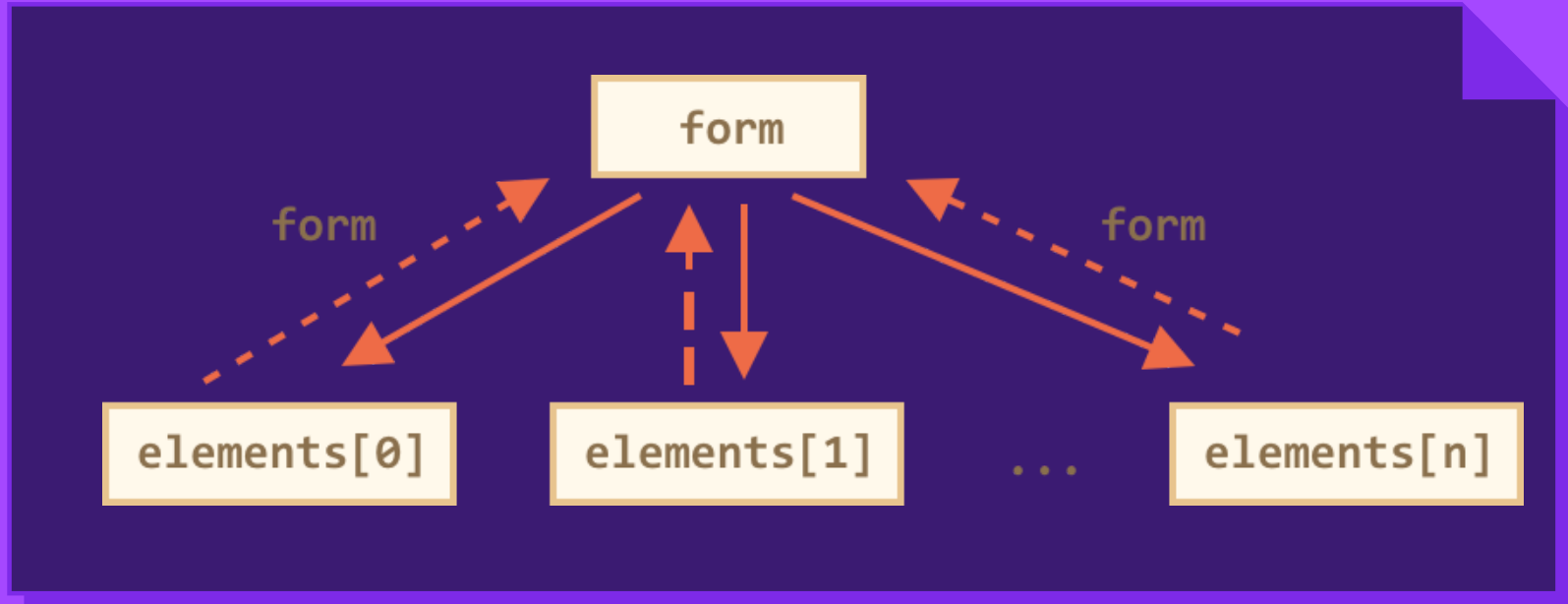


Image source: javascript.info

Backreferences

HTML

```
<form>  
  <input type="text" name="login">  
</form>
```

JS

```
const form = document.forms[0];  
const login = form.login;  
  
console.log(login.form)
```

What will this
console.log?



Form Values

To get the value of a form element:

```
// To get the text for an input element or textarea:  
input.value
```

```
// To get a boolean for a checkbox or radio button  
input.checked
```

```
// For a <select> tag  
select.options // the collection of <option>s  
select.value // the value of the currently selected option,  
select.selectedIndex // the index of the currently selected option
```


Submit Buttons and onsubmit

- `<input type="submit">` defines a button for submitting the form data to a `form-handler`
- Clicking a submit button triggers a "submit" event on the form
- We can listen to this event, and run form validation

```
form.addEventListener('submit', (event) => {  
  event.preventDefault();  
  // form validation can go here  
});
```



Forms Example

Create account form

NSW

Choose file

No file chosen

Submit

```
18  </style>
19  </head>
20  <body>
21    <div class="container">
22      <h1>Create account form</h1>
23      <form name="create_account">
24        <input placeholder="Username" type="text" name="name"/>
25        <input type="date" name="date"/>
26        <input type="password" name="password_1" placeholder="Please e
27        <input type="password" name="password_2" placeholder="Confirm
28        <select name="state">
29          <option value="NSW">NSW</option>
30          <option value="VIC">VIC</option>
31          <option value="QLD">QLD</option>
32        </select>
33        <input type="file" value="Upload a photo" name="photo"/>
34        <input type="submit" value="Submit"/>
35      </form>
36    </div>
37    <script src="form_example.js"></script>
38  </body>
39  </html>
```

```
1 let signupForm = document.forms.create_account;
2
3 signupForm.addEventListener('submit', (event) => {
4   event.preventDefault();
5
6   const username = signupForm.elements.name.value;
7   const date = signupForm.elements.date.value;
8   const password1 = signupForm.elements.password_1.value;
9   const password2 = signupForm.elements.password_2.value;
10  const photo = signupForm.elements.photo.value;
11  const state = signupForm.elements.state.value;
12
13  if (username === '' || date === '' || password1 === '' || password2 === '' || photo === '') {
14    alert('Please enter all fields')
15  } else if (password1 !== password2) {
16    alert('Passwords don\'t match');
17  } else {
18    alert(`${username} ${date} ${password1} ${password2} ${photo} ${state}`)
19  }
20
21  });
```

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Anna

15/09/2020

NSW

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