

The Register Application Example

Web Technologies



Lecture by
Dr Elahe Kani-Zabihi

```
<!doctype html>
<html>
  <head>
    <title>
      Web Technologies
    </title>
    <style>
      p {
        color: ■blue;
      }
    </style>
    <script>
      console.log("client-side");
    </script>
  </head>
  <body>
    <p>
      Welcome!
    </p>
  </body>
</html>
```


What we will cover

- Register application
 - HTML
 - JavaScript

The Register Application

Register for an Account

E-Mail: *

Mobile Phone: *

Country: *

Contact me by: ☒ Text ☐ Email ☐ Mobile phone ☐ Don't contact me

Terms of Service: ☐ I accept *

Comments: *

Register

Reset

Error Messages

Register for an Account

- Please enter an email address.
- Please enter a mobile phone number.
- Please select a country.
- You must agree to the terms of service.
- Please enter a comment.

E-Mail: *

Mobile Phone: *

Country: *

Contact me by: ☒ Text ☐ Email ☐ Mobile phone ☐ Don't contact me

Terms of Service: ☐ I accept *

Comments: *

HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1">
  <title>Registration</title>
  <link rel="stylesheet" href="register.css">
</head>
<body>
  <main>
    <h1>Register for an Account</h1>
    <form action="confirm.html" method="get">...
  </form>
  </main>
  <script src="register.js"></script>
</body>
</html>
```

Controls 1

```
<form action="confirm.html" method="get">
  <div>
    <label for="email_address">E-Mail:</label>
    <input type="text" name="email_address" id="email_address">
    <span>*</span>
  </div>
  <div>...
</div>
```

- `<input type="text" name="phone" id="phone">`
- `<select name="country" id="country">`
 - `<option value = "" > Select a Country </option>`
 - `<option> USA </option>`
 - `<option> Canada </option>`
 - `<option> Mexico </option>``</select>`

Controls 2

- `<input type="radio" name="contact" id="text" value="text" checked>Text`
- `<input type="checkbox" name="terms" id="terms" value="yes">I accept`
- `<textarea name="comments" id="comments" row="5" cols="40"></textarea>`
- `<input type="button" id="register" value="Register">`
- `<input type="button" id="reset_form" value="Reset">`

Event Handler

```
"use strict";
const $ = selector => document.querySelector(selector);
const displayErrorMsgs = msgs => { ...
}
const processEntries = () => { ...
};
const resetForm = () => { ...
};
document.addEventListener("DOMContentLoaded", () => {
  $("#register").addEventListener("click", processEntries);
  $("#reset_form").addEventListener("click", resetForm);
  $("#email_address").focus();
});
```

Display Error Messages

```
const displayErrorMsgs = msgs => {  
  const ul = document.createElement("ul");  
  ul.classList.add("messages");  
  for (let msg of msgs) {  
    const li = document.createElement("li");  
    const text = document.createTextNode(msg);  
    li.appendChild(text);  
    ul.appendChild(li);  
  }  
  const node = $("ul");  
  if (node == null) {  
    const form = $("form");  
    form.parentNode.insertBefore(ul, form);  
  } else {  
    node.parentNode.replaceChild(ul, node);  
  }  
}
```

Register for an Account

- Please enter an email address.
- Please enter a mobile phone number.
- Please select a country.
- You must agree to the terms of service.
- Please enter a comment.

E-Mail: *

Mobile Phone: *

Country: *

Register Button

```
const processEntries = () => {  
  const email = $("#email_address");  
  const phone = $("#phone");  
  const country = $("#country");  
  const terms = $("#terms");  
  const comments = $("#comments");  
  const msgs = [];  
  if (email.value == "") { ...  
  }  
  if (phone.value == "") { ...  
  }  
  if (country.value == "") { ...  
  }  
  if (terms.checked == false) { ...  
  }  
  if (comments.value == "") { ...  
  }  
  if (msgs.length == 0) { // no error messages ...  
  } else { ...  
  }  
};
```

Value Check

```
if (email.value == "") {  
    msgs[msgs.length] = "Please enter an email address.>";}  
if (phone.value == "") {  
    msgs[msgs.length] = "Please enter a mobile phone number.>"; }  
if (country.value == "") {  
    msgs[msgs.length] = "Please select a country.>";}  
if (terms.checked == false) {  
    msgs[msgs.length] = "You must agree to the terms of service.>"; }  
if (comments.value == "") {  
    msgs[msgs.length] = "Please enter a comment.>";}  
if (msgs.length == 0) { // no error messages  
    $("form").submit();  
} else {  
    displayErrorMsgs(msgs);}
```

Reset Button

```
const resetForm = () => {  
  $("form").reset();  
  $("ul").remove();  
  $("#email_address").focus();  
};  
document.addEventListener("DOMContentLoaded", () => {  
  $("#register").addEventListener("click", processEntries);  
  $("#reset_form").addEventListener("click", resetForm);  
  $("#email_address").focus();  
});
```

Try It Yourself

In this activity, you can practice creating the register web application. So,

1. Use the codes in slides 4 to 13 to create HTML and JavaScript codes
2. Use the CSS external file provided as part of the teaching materials for this session.