

Form Validation




Illustration of a user profile with brown hair and a yellow shirt.

Email

Password

Sign In

Cannot access your account?

in JavaScript

[With Working Code]

www.scribbler.live



Basic Setup

```
HTML
<form id="myForm">
  <input type="text" id="username" placeholder="Enter username" required>
  <input type="email" id="email" placeholder="Enter email" required>
  <input type="password" id="password" placeholder="Enter password" required>
  <button type="submit">Submit</button>
</form>
<div id="error"></div>
```

JavaScript Validation Script

```
document.getElementById('myForm').addEventListener('submit', function(event) {
  event.preventDefault();
  let errors = [];

  let username = document.getElementById('username').value;
  let email = document.getElementById('email').value;
  let password = document.getElementById('password').value;

  if (username.length < 3) {
    errors.push('Username must be at least 3 characters long.');
```

```
}

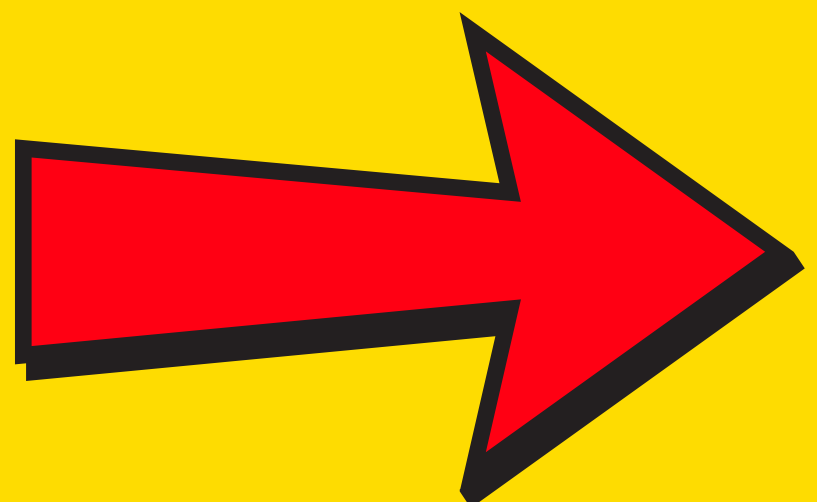
let emailPattern = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
if (!emailPattern.test(email)) {
  errors.push('Please enter a valid email address.');
```

```
}

if (password.length < 6) {
  errors.push('Password must be at least 6 characters long.');
```

```
}

if (errors.length > 0) {
  document.getElementById('error').innerHTML = errors.join('<br>');
} else {
  document.getElementById('error').innerHTML = 'Form submitted successfully!';
  // You can now submit the form data to the server
}
});
```



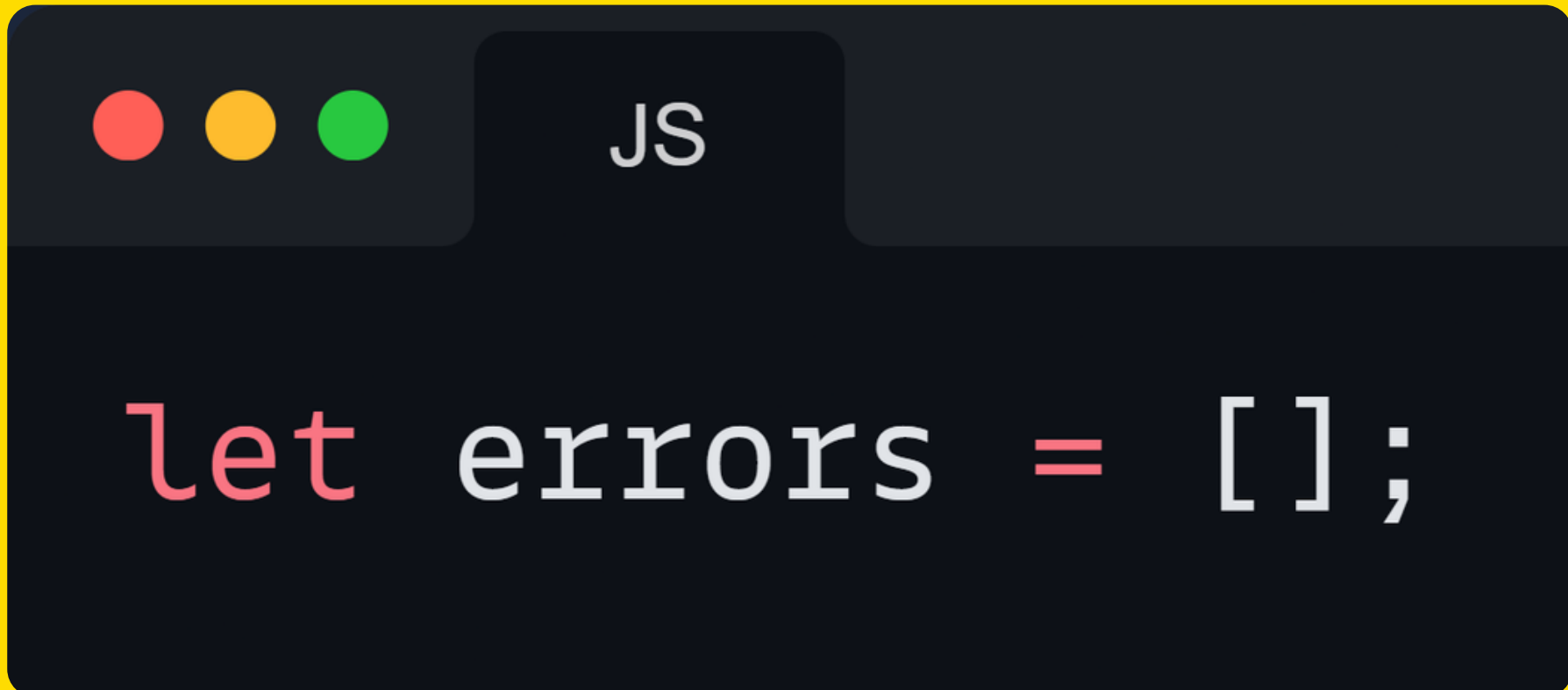
Intercepting Form Submission

```
document.getElementById('myForm')  
  .addEventListener('submit', function(event) {  
    event.preventDefault();  
  });
```

- The form's submission event is intercepted using `addEventListener`.
- `event.preventDefault()` stops the form from reloading the page, giving us control to perform validation checks before submission.



Initializing Error Collection



```
let errors = [];
```

- An empty array `errors` is initialized to collect any validation error messages as we process the form data.



Capturing User Input

JS

```
let username = document.getElementById('username').value;  
let email = document.getElementById('email').value;  
let password = document.getElementById('password').value;
```

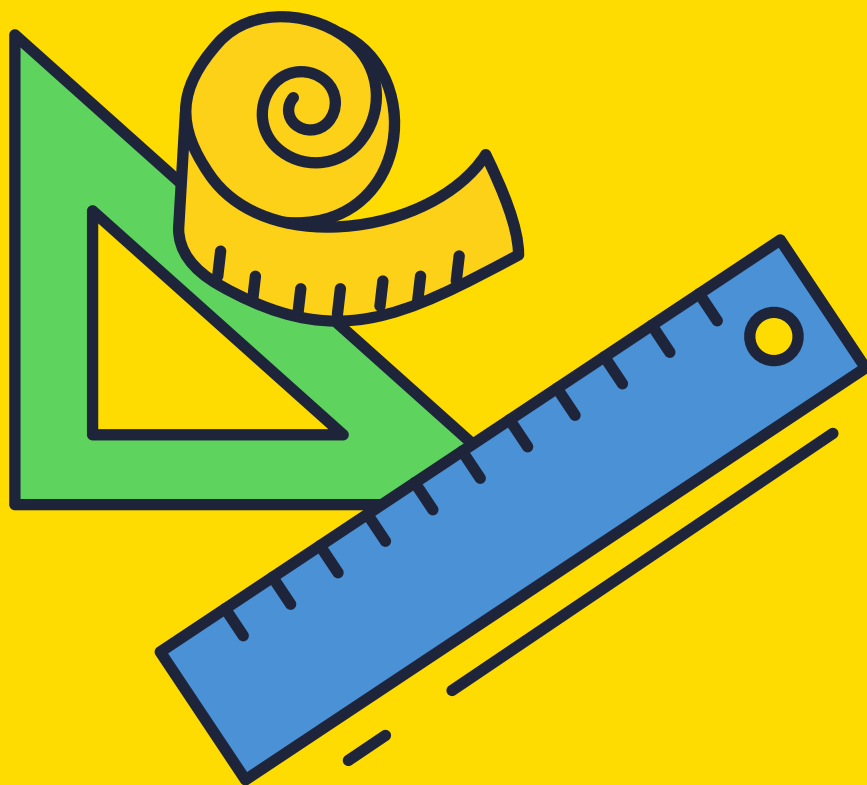
- The values of the username, email, and password fields are captured using `getElementById` and `.value`.



Validating Username Length

```
JS
if (username.length < 3) {
  errors.push('Username must be at least
              3 characters long.');
```

- Here, we ensure the username is at least 3 characters long.
- If not, an error message is added to the errors array.



Validating Email Format

```
JS
let emailPattern = /^[^\s@]+@[^\s@]+\.[^\s@]+$/;
if (!emailPattern.test(email)) {
  errors.push('Please enter a valid email address.');
```

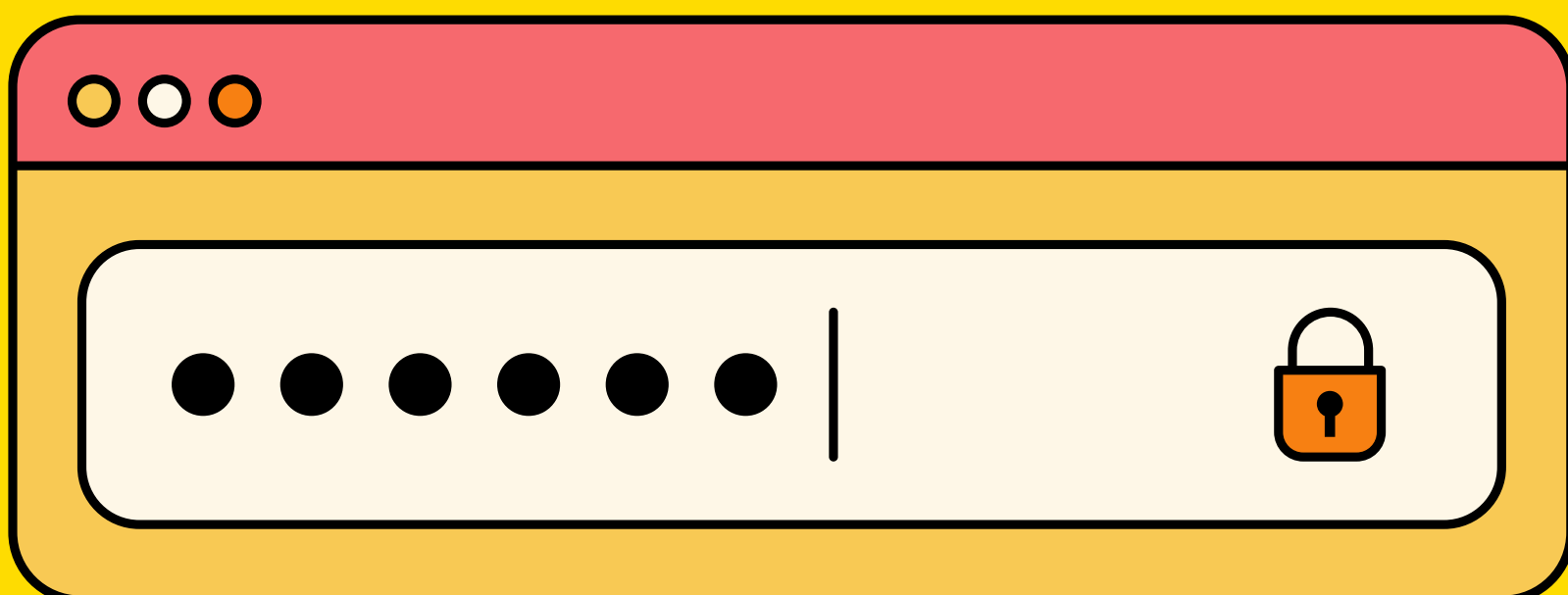
- A regular expression pattern is used to validate the email format.
- If the email doesn't match, an error message is added.



Validating Password Length

```
JS  
  
if (password.length < 6) {  
  errors.push('Password must be at  
              least 6 characters long.');}
```

- Similar to the username, we ensure the password is at least 6 characters long.
- Short passwords result in an error message.



Displaying Errors or Success Message

```
JS  
  
if (errors.length > 0) {  
    document.getElementById('error')  
        .innerHTML = errors.join('<br>');  
} else {  
    document.getElementById('error')  
        .innerHTML = 'Form submitted successfully!';  
}
```

- If any errors were collected, they are displayed in the #error div.
- Otherwise, a success message is shown, indicating the form passed all validations.



Submitting the Form

- Once all validations are complete and successful, the form is ready to be submitted to the server.
- This ensures that only valid data is sent.



Why Validate?

1

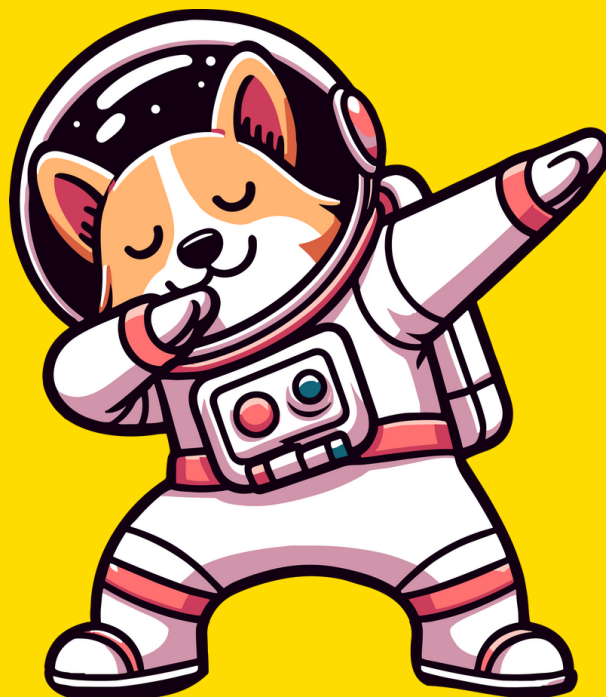
**IMPROVES USER
EXPERIENCE BY PROVIDING
IMMEDIATE FEEDBACK**

2

**REDUCES THE RISK OF INVALID
DATA ENTERING YOUR SYSTEM**

3

**TO ENSURE SECURITY AND
DATA INTEGRITY**



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make sure to practice these in scribbler.



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experiment JavaScript