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<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Login Form Validation</title>
  <style>
    .error { color: red; }
  </style>
</head>
<body>
  <h1>Sign In </h1>
  <form id="loginForm">
    <label for="email">Email:</label>
    <input type="text" id="email" name="email"><br>
    <label for="password">Password:</label>
    <input type="password" id="password" name="password"><br>
    <input type="button" value="Login (Functional)"
onclick="validateFunctional()">
    <input type="button" value="Login (OOP)" onclick="validateOOP()">
    <input type="button" value="Login (Procedural)"
onclick="validateProcedural()">
  </form>
  <p id="error" class="error"></p>

  <script>
    // Functional validation
    function validateEmailFunctional(email) {
      const pattern = /^[\\w\\.-]+@[\\w\\.-]+\\.\\w+$/;
      return pattern.test(email);
    }

    function validatePasswordFunctional(password) {
      return password.length > 8;
    }

    function validateFunctional() {
      const email = document.getElementById('email').value;
      const password = document.getElementById('password').value;
      const errorElement = document.getElementById('error');

      if (!email || !password) {
        errorElement.textContent = "Fields cannot be empty";
        return;
      }
    }
  </script>

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    }

    if (!validateEmailFunctional(email)) {
        errorElement.textContent = "Invalid email address";
        return;
    }

    if (!validatePasswordFunctional(password)) {
        errorElement.textContent = "Password must be more than 8
characters";
        return;
    }

    errorElement.textContent = "Validation successful";
}

// OOP validation
class Validator {
    static validateEmail(email) {
        const pattern = /^[\\w\\.\\-]+@[\\w\\.\\-]+\\.\\w+$/;
        return pattern.test(email);
    }

    static validatePassword(password) {
        return password.length > 8;
    }
}

class Login {
    constructor(email, password) {
        this.email = email;
        this.password = password;
    }

    validate() {
        const errorElement = document.getElementById('error');

        if (!this.email || !this.password) {
            errorElement.textContent = "Fields cannot be empty";
            return;
        }

        if (!Validator.validateEmail(this.email)) {

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        errorElement.textContent = "Invalid email address";
        return;
    }

    if (!Validator.validatePassword(this.password)) {
        errorElement.textContent = "Password must be more than 8
characters";
        return;
    }

    errorElement.textContent = "Validation successful";
}

function validateOOP() {
    const email = document.getElementById('email').value;
    const password = document.getElementById('password').value;
    const login = new Login(email, password);
    login.validate();
}

// Procedural validation
function validateEmailProcedural(email) {
    const pattern = /^[\\w\\.-]+@[\\w\\.-]+\\.\\w+$/;
    return pattern.test(email);
}

function validatePasswordProcedural(password) {
    return password.length > 8;
}

function validateProcedural() {
    const email = document.getElementById('email').value;
    const password = document.getElementById('password').value;
    const errorElement = document.getElementById('error');

    if (!email || !password) {
        errorElement.textContent = "Fields cannot be empty";
        return;
    }

    if (!validateEmailProcedural(email)) {
        errorElement.textContent = "Invalid email address";
    }
}

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        return;
    }

    if (!validatePasswordProcedural(password)) {
        errorElement.textContent = "Password must be more than 8
characters";
        return;
    }

    errorElement.textContent = "Validation successful";
}
</script>
</body>
</html>
```

Login Form Validation

File C:/Users/User/Documents/in.html

## Sign In

Email:

Password:

Fields cannot be empty



