

HTML

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<title>DOM Event Challenge</title>
<style>
body {
    font-family: Arial, sans-serif;
    margin: 40px;
    text-align: center;
    background-color: #f5f5f5;
}
form {
    background: white;
    padding: 20px;
    border-radius: 8px;
    display: inline-block;
    box-shadow: 0 0 10px rgba(0,0,0,0.1);
}

input, button {
    margin: 8px;
    padding: 8px;
    border-radius: 5px;
    border: 1px solid #ccc;
}
#message {
    margin-top: 20px;
    font-weight: bold;
    color: #333;
}
</style>
</head>
<body>
<h1>DOM Event Challenge</h1>
<form id="userForm">
<input type="text" id="name" placeholder="Enter your name" required><br>
<input type="email" id="email" placeholder="Enter your email" required><br>
<label>Favorite Color:</label>
<input type="color" id="favColor"><br>
<label>Birthday:</label>
<input type="date" id="birthday"><br>
<button type="submit">Submit</button>
</form>
<p id="message"></p>
<button id="changeBgBtn">Change Background Color</button>
<script src="dom_event.js"></script>
</body>
</html>
```

JS

```
document.getElementById("userForm").addEventListener("submit", function(event) {  
    event.preventDefault(); // Prevent form from reloading the page  
  
    const name = document.getElementById("name").value.trim();  
    const email = document.getElementById("email").value.trim();  
    const favColor = document.getElementById("favColor").value;  
    const birthday = document.getElementById("birthday").value;  
    const message = document.getElementById("message");  
  
    // Display a personalized message  
    if (name && email) {  
        message.innerHTML = `Hello <span style="color:${favColor}">${name}</span>! 🎉 <br>  
        Your email is <strong>${email}</strong> and your birthday is on <strong>${birthday} ||  
        'N/A'</strong>.`;  
    } else {  
        message.textContent = "Please fill out all required fields.";  
    }  
});  
  
// Random background color changer  
  
document.getElementById("changeBgBtn").addEventListener("click", function() {  
    const randomColor = "#" + Math.floor(Math.random() * 16777215).toString(16);  
    document.body.style.backgroundColor = randomColor;  
});
```