FULL STACK-1

AIM: Create a student registration form with HTML5 validation for name, email, and age inputs. Medium: Build a responsive banking UI with deposit/withdrawal buttons and balance display. Hard: Develop an admin dashboard with CSS Grid layout and dynamic theme switching.

1. Experiment-1

```
<!DOCTYPE html>
<html lang="en">
<head>
<meta charset="UTF-8" />
<meta name="viewport" content="width=device-width, initial-</pre>
scale=1.0"/>
<title>Student Registration Form</title>
</head>
<body>
<h2>Student Registration</h2>
<form>
 <label for="name">Name:</label>
 <input type="text" id="name" name="name" required pattern="[A-
Za-z ]+" /><br><br>
 <label for="email">Email:</label>
 <input type="email" id="email" name="email" required /><br><br></pr>
 <label for="age">Age:</label>
 <input type="number" id="age" name="age" required min="5"
max="100" /><br><br>
 <button type="submit">Register</button>
</form>
</body>
</html>
```

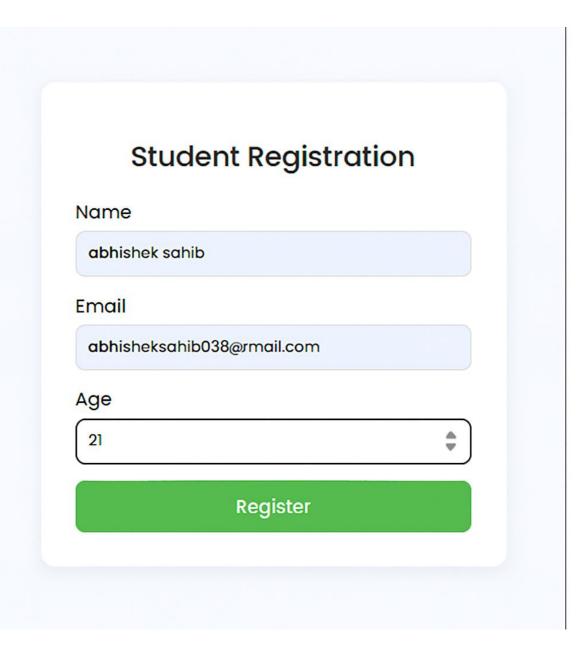


Figure 1: Experiment 1 Student registration
Output

2. Experiment 2

```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8"/>
 <meta name="viewport" content="width=device-width, initial-</pre>
scale=1.0"/>
 <title>Banking UI</title>
 k
href="https://fonts.googleapis.com/css2?family=Poppins&displa
y=swap" rel="stylesheet">
 <style>
  body {
  font-family: 'Poppins', sans-serif;
   background: #e6f0ff;
   margin: 0;
   display: flex;
  justify-content: center;
  align-items: center;
  height: 100vh;
  }
  .bank-container {
   background: white;
   padding: 30px;
   border-radius: 12px;
  box-shadow: 0 4px 20px rgba(0, 0, 0, 0.1);
   text-align: center;
   max-width: 400px;
  width: 100%;
```

```
}
 h2 {
  margin-bottom: 20px;
  .balance {
  font-size: 2.5rem;
  font-weight: bold;
  color: #333;
  margin-bottom: 30px;
 }
  .actions button {
  padding: 12px 20px;
  font-size: 1rem;
   margin: 5px;
   border: none;
  border-radius: 8px;
  cursor: pointer;
  transition: 0.2s ease;
 .actions button:nth-child(1) {
  background: #28a745;
  color: white;
 }
  .actions button:nth-child(2) {
  background: #dc3545;
  color: white;
 .actions button:hover {
  opacity: 0.9;
 }
</style>
</head>
<body>
 <div class="bank-container">
```

```
<h2>My Bank Account</h2>
 <div class="balance">$<span id="balance">1000</span></div>
 <div class="actions">
  <button onclick="deposit()">Deposit $100</button>
  <button onclick="withdraw()">Withdraw $100</button>
 </div>
</div>
<script>
 let balance = 1000;
 const balanceDisplay = document.getElementById("balance");
 function deposit() {
  balance += 100;
  balanceDisplay.textContent = balance;
 }
 function withdraw() {
  if (balance >= 100) {
   balance -= 100;
   balanceDisplay.textContent = balance;
  } else {
   alert("Insufficient funds!");
</script>
</body>
</html>
```

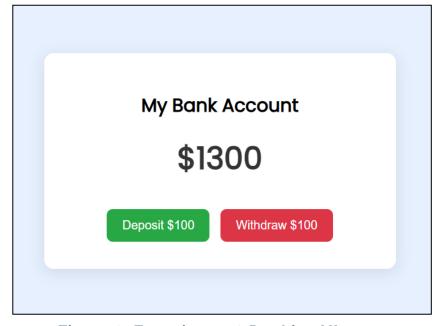


Figure 2: Experiment 2 Banking UI output

3. Experiment 3

```
<!DOCTYPE html>
<html lang="en">
<head>
 <meta charset="UTF-8"/>
 <meta name="viewport" content="width=device-width, initial-</pre>
scale=1.0"/>
 <title>Admin Dashboard</title>
 link
href="https://fonts.googleapis.com/css2?family=Inter:wght@400;6
00&display=swap" rel="stylesheet">
 <style>
 :root {
  --bg: #f9f9f9;
  --text: #222;
  --card: #fff;
  --primary: #007bff;
 [data-theme="dark"] {
  --bg: #121212;
  --text: #f0f0f0;
  --card: #1e1e1e;
  --primary: #4e9eff;
 }
 body {
  margin: 0;
  background-color: var(--bg);
  color: var(--text);
  font-family: 'Inter', sans-serif;
```

```
header {
background-color: var(--primary);
 color: white;
 padding: 1em 2em;
 display: flex;
justify-content: space-between;
 align-items: center;
.dashboard {
 display: grid;
grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));
 gap: 20px;
padding: 2em;
}
.card {
 background: var(--card);
 padding: 20px;
 border-radius: 12px;
box-shadow: 0 4px 12px rgba(0,0,0,0.1);
transition: background 0.3s;
}
.card h3 {
margin: 0 0 10px;
}
.toggle-theme {
 background: transparent;
 border: 2px solid white;
 color: white;
 padding: 6px 12px;
border-radius: 8px;
 cursor: pointer;
font-weight: 600;
.toggle-theme:hover {
```

```
background: rgba(255, 255, 255, 0.2);
 }
</style>
</head>
<body data-theme="light">
<header>
 <h1>Admin Dashboard</h1>
 <button class="toggle-theme" onclick="toggleTheme()">Toggle
Theme</button>
</header>
<main class="dashboard">
 <div class="card">
  <h3>Users</h3>
  1,245 active
 </div>
 <div class="card">
  <h3>Revenue</h3>
  $94,300
 </div>
 <div class="card">
  <h3>Tasks</h3>
  23 pending
 </div>
 <div class="card">
  <h3>Feedback</h3>
  87 new messages
 </div>
</main>
<script>
 function toggleTheme() {
  const current = document.body.getAttribute('data-theme');
  document.body.setAttribute('data-theme', current === 'dark'?
'light': 'dark');
 }
</script>
</body>
</html>
```

