

EXP-1

Create a student registration form with HTML5 validation for name, email, and age inputs:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <title>Student Registration Form</title>
  <meta name="viewport" content="width=device-width, initial-scale=1.0"/>
  <style>
    body { font-family: sans-serif; background: #f4f4fa; }
    form { max-width: 350px; margin: 2rem auto; background: #fff; padding: 1.5rem; border-
radius: 8px; box-shadow: 0 2px 8px #0001; }
    label, input { display: block; width: 100%; margin-bottom: 12px; }
    input[type="submit"] { background: #3560f6; color: #fff; border: none; border-radius:
4px; padding: 10px; cursor: pointer; }
    input[type="submit"]:hover { background: #233bb2; }
  </style>
</head>
<body>
  <form>
    <h2>Student Registration</h2>
    <label>Name
      <input type="text" name="name" required pattern="[A-Za-z]{3,}" title="Enter at least 3
alphabetic characters"/>
    </label>
    <label>Email
      <input type="email" name="email" required />
    </label>
    <label>Age
      <input type="number" name="age" required min="16" max="120" />
    </label>
    <input type="submit" value="Register"/>
  </form></body></html>
```

EXP-2

Build a responsive banking UI with deposit/withdrawal buttons and balance display:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <title>Bank UI</title>
  <meta name="viewport" content="width=device-width, initial-scale=1.0"/>
</style>
body { font-family: sans-serif; background: #eaeef1; }
.bank-container {
  max-width: 400px;
  background: #fff;
  margin: 3rem auto;
  border-radius: 10px;
  box-shadow: 0 2px 10px #0002;
  padding: 2rem;
  text-align: center;
}
.balance { font-size: 2rem; margin: 1rem 0; color: #3560f6; }
.btns input[type="number"] { width: 100px; margin-right: 1rem; }
.deposit, .withdraw {
  background: #3560f6;
  color: #fff; border: none; border-radius: 5px; padding: 8px 14px;
  margin: 0.5rem;
  cursor: pointer;
}
.withdraw { background: #f66c4f; }
@media (max-width: 520px) {
  .bank-container { padding: 1rem; }
  .btns { display: block; }
  .btns > * { margin: 0.25rem auto; }
```

```

    }
</style>
</head>
<body>
  <div class="bank-container">
    <h2>Your Account</h2>
    <div class="balance" id="balance">$0.00</div>
    <div class="btns">
      <input type="number" id="amount" placeholder="Amount" min="1"/>
      <button class="deposit" onclick="deposit()">Deposit</button>
      <button class="withdraw" onclick="withdraw()">Withdraw</button>
    </div>
    <div id="message" style="margin-top: 1rem; color: #d64f3a;"></div>
  </div>
<script>
let balance = 0;
function updateBalance() {
  document.getElementById('balance').innerText = `$$${balance.toFixed(2)}`;
}
function showMsg(msg, color) {
  const msgDiv = document.getElementById('message');
  msgDiv.style.color = color;
  msgDiv.innerText = msg;
  setTimeout(()=>msgDiv.innerText="",2000);
}
function deposit() {
  let amt = Number(document.getElementById('amount').value);
  if(amt > 0) {
    balance += amt;
    updateBalance();
    showMsg('Deposit Successful', '#36ad6e');
  } else {
    showMsg('Enter a valid amount.', '#d64f3a');
  }
  document.getElementById('amount').value = "";
}
function withdraw() {
  let amt = Number(document.getElementById('amount').value);
  if(amt > 0 && amt <= balance) {

```

```
    balance -= amt;
    updateBalance();
    showMsg('Withdrawal Successful', '#36ad6e');
} else if(amt > balance) {
    showMsg('Insufficient funds.', '#d64f3a');
} else {
    showMsg('Enter a valid amount.', '#d64f3a');
}
document.getElementById('amount').value = "";
}
updateBalance();
</script>
</body>
</html>
```

EXP-3

Admin Dashboard with CSS Grid & Dynamic Theme Switching:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <title>Admin Dashboard</title>
  <meta name="viewport" content="width=device-width, initial-scale=1.0"/>
  <style>
    :root {
      --bg: #f4f4fa;
      --sidebar: #222b45;
      --sidebar-text: #fff;
      --main: #fff;
      --accent: #3560f6;
      --text: #1c1e21;
    }
    [data-theme="dark"] {
      --bg: #181c23;
      --sidebar: #233;
      --sidebar-text: #c8cfff;
      --main: #24273a;
      --accent: #e9b96e;
      --text: #f5f7fa;
    }
    body {
      font-family: 'Segoe UI', sans-serif;
      margin: 0; background: var(--bg); color: var(--text);
      min-height: 100vh;
      transition: background 0.3s, color 0.3s;
    }
    .dashboard {
      min-height: 100vh; display: grid;
      grid-template-areas:
        "sidebar header"
        "sidebar main";
      grid-template-columns: 220px 1fr;
      grid-template-rows: 60px 1fr;
    }
  </style>
</head>
<body>
  <div class="dashboard">
    <div class="sidebar">
      <div class="header">
        <div class="logo">
          <img alt="Logo" data-bbox="10 10 40 40"/>
        </div>
        <div class="title">Admin Dashboard</div>
      </div>
      <div class="main">
        <div class="list">
          <div class="item">Dashboard</div>
          <div class="item">Users</div>
          <div class="item">Settings</div>
          <div class="item">Logout</div>
        </div>
      </div>
    </div>
    <div class="main">
      <div class="content">
        <div class="header">
          <div class="title">Dashboard</div>
          <div class="stats">
            <div class="stat">
              <div class="value">100</div>
              <div class="label">Users</div>
            </div>
            <div class="stat">
              <div class="value">20</div>
              <div class="label">Items</div>
            </div>
            <div class="stat">
              <div class="value">50</div>
              <div class="label">Orders</div>
            </div>
            <div class="stat">
              <div class="value">10</div>
              <div class="label">Comments</div>
            </div>
          </div>
          <div class="table">
            <table>
              <thead>
                <tr>
                  <th>ID</th>
                  <th>Name</th>
                  <th>Email</th>
                  <th>Role</th>
                </tr>
              </thead>
              <tbody>
                <tr>
                  <td>1</td>
                  <td>John Doe</td>
                  <td>john.doe@example.com</td>
                  <td>Admin</td>
                </tr>
                <tr>
                  <td>2</td>
                  <td>Jane Smith</td>
                  <td>jane.smith@example.com</td>
                  <td>User</td>
                </tr>
                <tr>
                  <td>3</td>
                  <td>Bob Johnson</td>
                  <td>bob.johnson@example.com</td>
                  <td>User</td>
                </tr>
                <tr>
                  <td>4</td>
                  <td>Alice Brown</td>
                  <td>alice.brown@example.com</td>
                  <td>User</td>
                </tr>
                <tr>
                  <td>5</td>
                  <td>Charlie Davis</td>
                  <td>charlie.davis@example.com</td>
                  <td>User</td>
                </tr>
              </tbody>
            </table>
          </div>
        </div>
      </div>
    </div>
  </div>
</body>
</html>
```

```
.sidebar {
  grid-area: sidebar;
  background: var(--sidebar);
  color: var(--sidebar-text);
  padding: 1.5rem 1rem;
  min-height: 0;
  display: flex;
  flex-direction: column;
  gap: 1.5rem;
}
.sidebar h2 { color: var(--accent); font-size: 1.4rem; }
.sidebar a {
  color: var(--sidebar-text); text-decoration: none;
  padding: 0.4rem 0.8rem; border-radius: 4px;
}
.sidebar a.active, .sidebar a:hover { background: var(--accent); color: #fff; }
.header {
  grid-area: header; background: var(--main);
  display: flex;
  align-items: center; justify-content: space-between;
  padding: 0 1.5rem; box-shadow: 0 2px 4px #0001;
}
.main {
  grid-area: main; background: var(--main);
  padding: 2rem;
}
.main h1 { margin-top: 0; }
.dashboard-widgets {
  display: grid; gap: 1.5rem;
  grid-template-columns: repeat(auto-fit, minmax(200px, 1fr));
  margin-top: 1.5rem;
}
.widget {
  background: var(--bg); border-radius: 10px; padding: 1.2rem;
  box-shadow: 0 2px 8px #0001;
}
.theme-toggle {
  cursor: pointer; padding: 0.5rem 1.2rem;
  border: none; border-radius: 6px;
  background: var(--accent); color: #fff; font-size: 1rem;
}
```

```

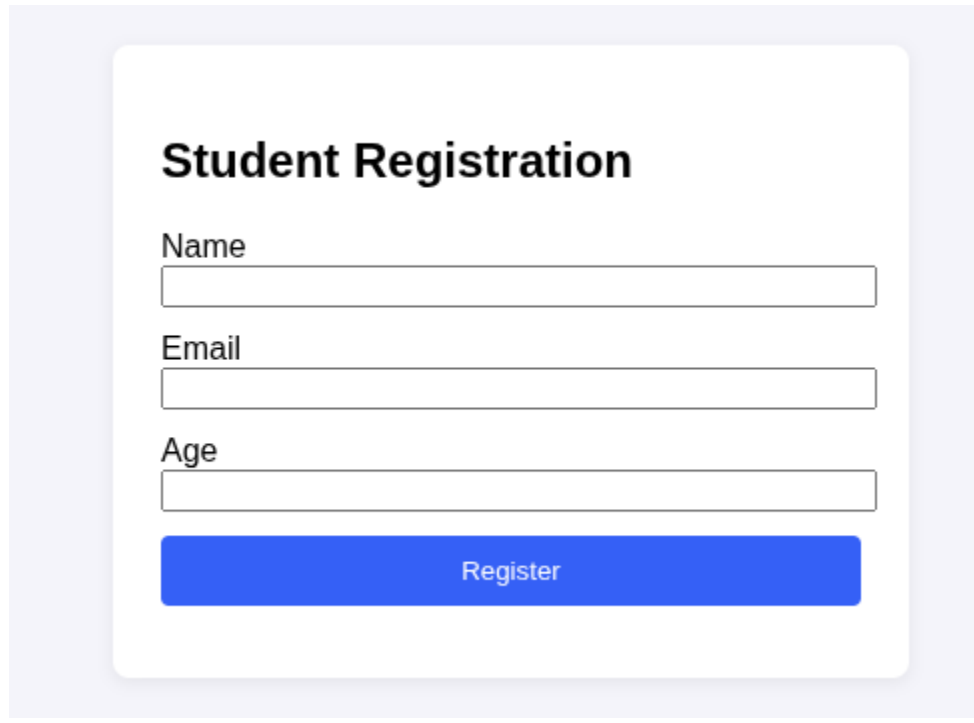
    transition: background .3s;
    margin-left: 2rem;
  }
  @media (max-width: 800px) {
    .dashboard { grid-template-areas: "header" "main" "sidebar"; grid-template-columns:
1fr; grid-template-rows: 60px 1fr auto;}
    .sidebar { flex-direction: row; gap: 2rem; justify-content: center; }
    .main { padding: 1rem;}
  }
</style>
</head>
<body>
<div class="dashboard" id="dashboard">
  <nav class="sidebar">
    <h2>Admin</h2>
    <a href="#" class="active">Dashboard</a>
    <a href="#">Users</a>
    <a href="#">Reports</a>
    <a href="#">Settings</a>
  </nav>
  <header class="header">
    <span>Admin Dashboard</span>
    <button class="theme-toggle" onclick="toggleTheme()"> 🌙 / 🌞 Theme</button>
  </header>
  <main class="main">
    <h1>Welcome, Admin!</h1>
    <div class="dashboard-widgets">
      <div class="widget">
        <h3>Users</h3>
        <p>Registered: <b>256</b></p>
      </div>
      <div class="widget">
        <h3>Transactions</h3>
        <p>This Month: <b>1,245</b></p>
      </div>
      <div class="widget">
        <h3>Errors</h3>
        <p>Critical: <b>2</b></p>
      </div>
      <div class="widget">

```

```
    <h3>Revenue</h3>
    <p>$<b>87,500</b></p>
  </div>
</div>
</main>
</div>
<script>
function toggleTheme() {
  const theme = document.body.getAttribute('data-theme');
  if(theme === 'dark') {
    document.body.removeAttribute('data-theme');
    localStorage.setItem('theme','light');
  } else {
    document.body.setAttribute('data-theme','dark');
    localStorage.setItem('theme','dark');
  }
}
(function(){ //Persist theme
  if(localStorage.getItem('theme') === 'dark') {
    document.body.setAttribute('data-theme','dark');
  }
})();
</script>
</body>
</html>
```


OUTPUTS:

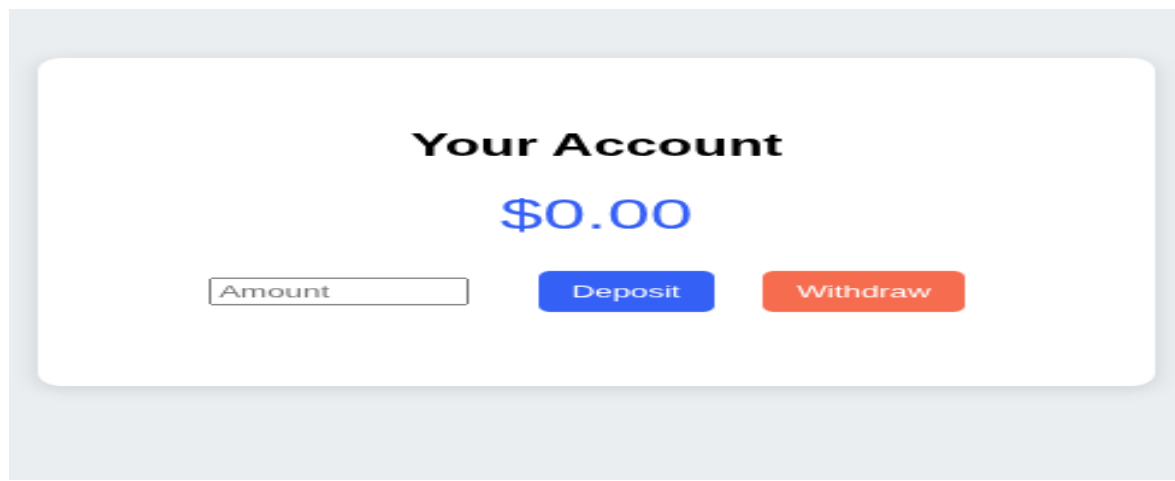
❖ Task-1:



A student registration form titled "Student Registration" is displayed on a light purple background. The form is a white rounded rectangle containing three input fields labeled "Name", "Email", and "Age", each with a corresponding text box. Below these fields is a blue button labeled "Register".

❖ Task-2:

❖ Basic Interface:



A basic interface for account management is shown on a light blue background. It features a white rounded rectangle with the title "Your Account" in bold black text, followed by the balance "\$0.00" in large blue text. Below the balance, there is an input field labeled "Amount" and two buttons: a blue "Deposit" button and an orange "Withdraw" button.

❖ Money Deposited:

Your Account

\$1000000.00

Deposit

Withdraw

Deposit Successful

❖ Money Withdrawal:

Your Account

\$500000.00

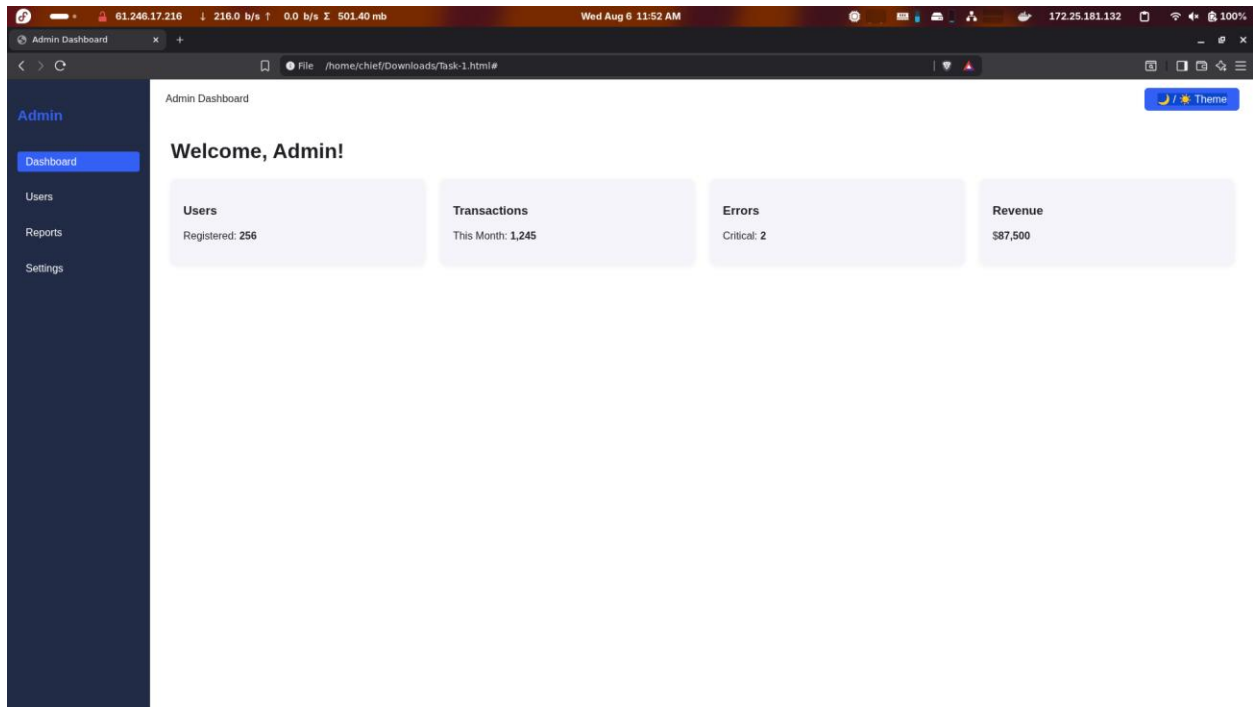
Deposit

Withdraw

Withdrawal Successful

Task-3:

❖ Normal Dashboard in Default Mode:



❖ Normal Dashboard in Dark Mode:

