

Experiment 6: Form Validation, Dark Mode Toggle, and Data Persistence Using JavaScript

HTML CODE:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>Experiment 6 - Form Validation</title>
  <link rel="stylesheet" href="styles.6css">
</head>
<body>

  <button id="themeToggle">🌙 Toggle Dark Mode</button>

  <h1>Contact Form</h1>

  <form id="contactForm">
    <label>Email:</label>
    <input type="text" id="email">
    <small class="error" id="emailError"></small>

    <label>Phone Number:</label>
    <input type="text" id="phone">
    <small class="error" id="phoneError"></small>

    <label>Password:</label>
    <input type="password" id="password">
    <small class="error" id="passwordError"></small>

    <button type="submit">Submit</button>
  </form>

  <h2>Saved Data</h2>
  <p id="savedData"></p>
```

```
<script src="scripts6.js"></script>
</body>
</html>
```

CSS CODE:

```
body {
  font-family: Arial, sans-serif;
  padding: 20px;
  background-color: white;
  color: black;
  transition: 0.3s;
}

.dark-mode {
  background-color: #121212;
  color: white;
}

input {
  display: block;
  margin-bottom: 10px;
  padding: 8px;
  width: 250px;
}

button {
  margin-top: 10px;
  padding: 8px 12px;
  cursor: pointer;
}

.error {
  color: red;
  font-size: 12px;
}
```

JAVASCRIPT CODE:

```
const form =
document.getElementById("contactForm");
const email =
document.getElementById("email");
const phone =
document.getElementById("phone");
const password =
document.getElementById("password");

const emailError =
document.getElementById("emailError");
const phoneError =
document.getElementById("phoneError");
const passwordError =
document.getElementById("passwordError");
;

const savedData =
document.getElementById("savedData");
const toggleBtn =
document.getElementById("themeToggle");

// ----- DARK MODE TOGGLE -----
toggleBtn.addEventListener("click", () => {

    document.body.classList.toggle("dark-mode");

    if
    (document.body.classList.contains("dark-mode")) {
        localStorage.setItem("theme", "dark");
    } else {
        localStorage.setItem("theme", "light");
    }
});

// Apply saved theme on load
window.onload = function () {
    if (localStorage.getItem("theme") ===
"dark") {

        document.body.classList.add("dark-mode");
    }
}

// ----- FORM VALIDATION -----
form.addEventListener("submit", function (e)
{
    e.preventDefault();

    let isValid = true;

    // Email validation
    const emailPattern =
/^[^@\s]+@[^\s@]+\.[^\s@]+$/;
    if (!emailPattern.test(email.value)) {
        emailError.textContent = "Invalid email
format";
        isValid = false;
    } else {
        emailError.textContent = "";
    }

    // Phone validation (10 digits)
    if (phone.value.length !== 10 ||
isNaN(phone.value)) {
        phoneError.textContent = "Phone must
be 10 digits";
        isValid = false;
    } else {
        phoneError.textContent = "";
    }

    // Password strength validation
    if (password.value.length < 6) {
        passwordError.textContent =
>Password must be at least 6 characters";
        isValid = false;
    } else {
        passwordError.textContent = "";
    }

    // If valid, store data
    if (isValid) {
```

```

const userData = {
  email: email.value,
  phone: phone.value,
  password: password.value
};

localStorage.setItem("formData",
JSON.stringify(userData));
displaySavedData();
alert("Form submitted successfully!");
form.reset();
}

});

// ----- DISPLAY STORED DATA -----
function displaySavedData() {
  const data =
JSON.parse(localStorage.getItem("formData"));

  if (data) {
    savedData.innerHTML = `
      Email: ${data.email} <br>
      Phone: ${data.phone} <br>
      Password: ${data.password}
    `;
  }
}

```

OUTPUT:

 Toggle Dark Mode

Contact Form

Email:

Phone Number:

Password:

Submit

Saved Data

 Toggle Dark Mode

Contact Form

Email:

Phone Number:

Password:

Submit

Saved Data