Case Study: Product Management System (PMS)

1. Project Overview

Objective:

Build a web-based Product Management System where an admin can manage products (CRUD operations) and users can browse products, add them to cart, and checkout.
Technology Stack:

• Frontend: HTML5, CSS3, Bootstrap 5

• Backend: JSON Server or any REST API simulation

• Storage: LocalStorage for logged-in session

• Optional: Images for product catalog

User Roles: 1. Admin – Can manage products

2. User – Can browse products, add to cart, checkout

2. Pages and Features

A. Welcome Page

• Purpose: Landing page for PMS

• Features:

◦ Welcome message and brand/logo

◦ Buttons to Login and Signup

Programs:

Index.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Product Management System</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css" rel="stylesheet">
```

```html
    <link href="https://cdn.jsdelivr.net/npm/bootstrap-icons/font/bootstrap-icons.css"
rel="stylesheet">



</head>
<body>
    <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
        <div class="container-fluid">
            <a class="navbar-brand" href="#">Product Management</a>
            <div class="d-flex">
                <a class="btn btn-success me-2" href="login.html">Login</a>
                <a class="btn btn-primary" href="signup.html">Signup</a>
            </div>
        </div>
    </nav>


    <div class="container text-center mt-5">
        <h2>Welcome to Product Management System!</h2>
        <p>Please Login or Signup to continue.</p>
        <a class="btn btn-success mt-3" href="login.html">Login</a>
        <a class="btn btn-primary mt-3 mx-2" href="signup.html">Signup</a>
    </div>


    <footer class="bg-dark text-white text-center mt-5 p-3">
        <p>Follow us on
            <a href="#" class="text-info mx-2"><i class="bi bi-facebook"></i></a>
            <a href="#" class="text-info mx-2"><i class="bi bi-twitter"></i></a>
            <a href="#" class="text-info mx-2"><i class="bi bi-linkedin"></i></a>
```

```html
          <a href="#" class="text-info mx-2"><i class="bi bi-instagram"></i></a>

      </p>

      <p>&copy; 2025 Product Management System. All Rights Reserved.</p>

    </footer>

</body>

</html>
```

Signup.html:

```html
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
rel="stylesheet">

    <title>Signup Page</title>

</head>

<body>

    <nav class="navbar navbar-expand-lg navbar-dark bg-dark">

      <div class="container-fluid">

        <a class="navbar-brand" href="index.html">Product Management System</a>

        <button class="navbar-toggler" type="button" data-bs-toggle="collapse"

        data-bs-target="#navbarNav">

        <span class="navbar-toggler-icon"></span>

      </button>


      <div class="collapse navbar-collapse" id="navbarNav">

        <ul class="navbar-nav ms-auto">
```

```html
        <li class="nav-item">

          <a id="loginLink" class="nav-link" href="login.html">Login</a>

        </li>

        <li class="nav-item">

          <a id="singupLink" class="nav-link" href="signup.html">Signup</a>

        </li>

        <li class="nav-item">

          <a id="logoutLink" class="nav-link" href="#" onclick="logout()">Login</a>

        </li>

      </ul>

    </div>

    </div>

  </nav>


  <div class="container mt-5">

    <h2>Signup</h2>

    <input type="text" id="name" placeholder="Full Name" class="form-control mb-2" required>

    <input type="email" id="email" placeholder="Email" class="form-control mb-2" required>

    <input type="password" id="password" placeholder="Password" class="form-control mb-2" required>


    <select id="role" class="form-control mb-3" required>

      <option value="user">User</option>

      <option value="admin">Admin</option>

    </select>


    <button class="btn btn-primary" onclick="signup()">Signup</button>
```

```html
    </div>

  <script>
    function signup() {
let name = document.getElementById("name").value.trim();

let email = document.getElementById("email").value.trim();

let password = document.getElementById("password").value.trim();

let role = document.getElementById("role").value;


if (!name || !email || !password || !role) {

  alert("All fields are required!");

  return;

}


// First check if user already exists

fetch(`http://localhost:3000/users?email=${encodeURIComponent(email)}`)

  .then(res => res.json())

  .then(usersFromServer => {

   if (usersFromServer.length > 0) {

    alert("User already exists!");

    return;

   }


   // Create new user in db.json

   fetch("http://localhost:3000/users", {

    method: "POST",

    headers: { "Content-Type": "application/json" },

    body: JSON.stringify({ name, email, password, role })
```

```javascript
      })
      .then(res => res.json())
      .then(data => {
        alert("Signup Successful! Please login.");
        window.location.href = "login.html";
      })
      .catch(err => {
        console.error("Error:", err);
        alert("Signup failed. Please try again.");
      });
    })
    .catch(err => {
      console.error("Error:", err);
      alert("Something went wrong. Try again later.");
    });
}


    function logout(){
        alert("You have been logged out.")
        window.location.href="index.html"
    }
  </script>


  <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/js/bootstrap.bundle.min.js"></script>
</body>
</html>
```

Login.html:

```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>Login</title>
  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.2/dist/css/bootstrap.min.css" rel="stylesheet">
</head>
<body class="bg-light">

  <div class="container mt-5">
    <h2 class="text-center mb-4">Login</h2>
    <form id="loginForm" class="mx-auto" style="max-width: 400px;">
      <div class="mb-3">
        <label for="email" class="form-label">Email address</label>
        <input type="email" id="email" class="form-control" placeholder="Enter email" required>
      </div>

      <div class="mb-3">
        <label for="password" class="form-label">Password</label>
        <input type="password" id="password" class="form-control" placeholder="Enter password" required>
      </div>

      <button type="submit" class="btn btn-primary w-100">Login</button>
    </form>
```

```html
  <p class="text-center mt-3">
    Don't have an account? <a href="signup.html">Sign up</a>
  </p>
</div>

<script>
  document.getElementById("loginForm").addEventListener("submit", function (e) {
    e.preventDefault();

    let email = document.getElementById("email").value.trim();
    let password = document.getElementById("password").value.trim();

    fetch(`http://localhost:3000/users?email=${email}&password=${password}`)
      .then(res => res.json())
      .then(users => {
        if (users.length > 0) {
          let user = users[0];

          // Save user details in localStorage
          localStorage.setItem("loggedInUser", JSON.stringify(user));

          alert("Login successful!");

          // Redirect based on role
          if (user.role === "admin") {
            window.location.href = "admin-dashboard.html";
          } else {
```

```
          window.location.href = "user-dashboard.html";

        }

      } else {

        alert("Invalid email or password!");

      }

    })

    .catch(err => {

      console.error("Error:", err);

      alert("Something went wrong. Please try again.");

    });

  });

  </script>

</body>

</html>
```

User-dashboard.html:

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>User Dashboard</title>

  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
rel="stylesheet">

</head>

<body>

  <!-- Navbar -->

  <nav class="navbar navbar-expand-lg navbar-dark bg-dark">
```

```html
  <div class="container-fluid">

    <a class="navbar-brand" href="#">Products Portal</a>

    <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNav">

      <span class="navbar-toggler-icon"></span>

    </button>

    <div class="collapse navbar-collapse" id="navbarNav">

      <ul class="navbar-nav ms-auto">

        <li class="nav-item">

          <a class="nav-link active" href="#">Products List</a>

        </li>

        <li class="nav-item">

          <a class="nav-link" href="#" id="cartLink">Cart (<span id="cartCount">0</span>)</a>

        </li>

        <li class="nav-item">

          <a class="nav-link" href="checkout.html">Checkout</a>

        </li>

        <li class="nav-item">

          <a class="nav-link text-danger" href="#" onclick="logout()">Logout</a>

        </li>

      </ul>

    </div>

  </div>

</nav>




<div class="container mt-4">

  <h2 class="mb-4">All Products</h2>
```

```html
    <div class="row" id="productList">


    </div>
</div>


<script>
const API_URL = "http://localhost:3000/products";

const CART_API_URL = "http://localhost:3000/cart";


function loadProducts() {
  fetch(API_URL)
    .then(res => res.json())
    .then(products => {
      const productList = document.getElementById("productList");
      productList.innerHTML = "";
      if (products.length === 0) {
        productList.innerHTML = "<p>No Products available.</p>";
        return;
      }

      products.forEach(product => {
        const card = `
          <div class="col-md-4 mb-3">
            <div class="card h-100">
              <img src="${product.image}"
                class="card-img-top"
                alt="${product.title}"
                style="height:200px; object-fit:cover;">
```

```
        <div class="card-body">

          <h5 class="card-title">${product.title}</h5>

          <p class="card-text">${product.description}</p>

          <p><strong>Price: </strong>$${product.price}</p>

          <button class="btn btn-primary" onclick="addToCart(${product.id},
'${product.title}', ${product.price})">Add to Cart</button>

        </div>

      </div>

     </div>

    `;

    productList.innerHTML += card;

   });

  })

  .catch(err => console.error("Error loading products:", err));

}


function addToCart(id, title, price) {


  let cart = JSON.parse(localStorage.getItem("cart")) || [];

  let existingItem = cart.find(item => item.id === id);

  if (existingItem) {

    existingItem.quantity += 1;

  } else {

    cart.push({ id, title, price, quantity: 1 });

  }

  localStorage.setItem("cart", JSON.stringify(cart));

  updateCartCount();
```

```javascript
  fetch(CART_API_URL, {
    method: "POST",
    headers: { "Content-Type": "application/json" },
    body: JSON.stringify({ id, title, price, quantity: 1 })
  })
  .then(res => res.json())
  .then(data => console.log("Cart item stored on server:", data))
  .catch(err => console.error("Failed to store cart on server:", err));
}


function updateCartCount() {
  let cart = JSON.parse(localStorage.getItem("cart")) || [];
  let totalCount = cart.reduce((sum, item) => sum + item.quantity, 0);
  document.getElementById("cartCount").innerText = totalCount;
}


function logout() {
  localStorage.removeItem("loggedInUser");
  window.location.href = "login.html";
}


window.onload = () => {
  const user = JSON.parse(localStorage.getItem("loggedInUser"));
  if (!user || user.role !== "user") {
    alert("Unauthorized! Please login as a user.");
    window.location.href = "login.html";
  }
```

```
    loadProducts();

    updateCartCount();

  };

</script>



  <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/bootstrap.bundle.min.js"></scrip
t>

</body>

</html>
```

Admin-dashboard.html:

```
<!DOCTYPE html>

<html lang="en">

<head>

    <meta charset="UTF-8">

    <meta name="viewport" content="width=device-width, initial-scale=1.0">

    <title>Admin Dashboard</title>

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css"
rel="stylesheet">

</head>

<body>

    <nav class="navbar navbar-expand-lg navbar-dark bg-dark">

    <div class="container-fluid">

      <a class="navbar-brand" href="#">Admin Dashboard</a>

      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-
target="#navbarNav">

        <span class="navbar-toggler-icon"></span>
```

```html
    </button>
    <div class="collapse navbar-collapse" id="navbarNav">
      <ul class="navbar-nav ms-auto">
        <li class="nav-item">
          <a class="nav-link" href="add-product.html">Add Product</a>
        </li>
        <li class="nav-item">
          <a class="nav-link active" aria-current="page" href="#">Product List</a>
        </li>
        <li class="nav-item">
          <a class="nav-link text-danger" href="#" onclick="logout()">Logout</a>
        </li>
      </ul>
    </div>
  </div>
</nav>


<div class="container mt-4">
  <h2 class="mb-4">All Products</h2>
  <div class="row" id="productList">

  </div>
</div>


<script>
  const API_URL = "http://localhost:3000/products";
  function loadProducts(){
    fetch(API_URL)
```

```javascript
.then(res=>res.json())
.then(products => {
    let productList = document.getElementById("productList");
    productList.innerHTML = ""
    if(products.length === 0){
        productList.innerHTML = "<p>No Products available.</p>";
        return;
    }
    products.forEach(product => {
        let card = `
        <div class="col-md-4 mb-3">
            <div class="card h-100">
                <img src="${product.image}"
                alt="${product.title}"
                    class="card-img-top"
                    style="width:70%; height:200px;
                    object-fit:cover; margin:0 auto; display:block;">
            <div class="card-body">
                <h5 class="card-title">${product.title}</h5>
                <p class="card-text">${product.description}</p>
                <p><strong>Price: </strong>$${product.price}</p>
                <div class="d-flex justify-content-between">
            <button class="btn btn-warning btn-sm"
onclick="editProduct(${product.id})">Edit</button>
            <button class="btn btn-danger btn-sm"
onclick="deleteProduct(${product.id})">Delete</button>
                </div>
            </div>
        </div>
```

```
        </div>

        `;

        productList.innerHTML += card;

      })

    })

    .catch(err => console.error("Error loading Products: ", err))

}


loadProducts();


function editProduct(id) {

  window.location.href = `edit-product.html?id=${id}`;

}


function deleteProduct(id) {

  if (confirm("Are you sure you want to delete this Product?")) {

    fetch(`${API_URL}/${id}`, { method: "DELETE" })

      .then(res => {

        if (res.ok) {

          alert("Product deleted successfully!");

          loadProducts(); // refresh list

        } else {

          alert("Failed to delete Product.");

        }

      })

      .catch(err => console.error("Error deleting Product:", err));

  }

}
```

```
    function logout(){

        localStorage.removeItem("loggedInUser")

        window.location.href="login.html"

    }

  </script>

</body>

</html>
```

Add-product.html:

```
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1">

  <title>Add Product</title>

  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css"
rel="stylesheet">

</head>

<body class="bg-light">


  <!-- Navbar -->

  <nav class="navbar navbar-expand-lg navbar-dark bg-dark">

   <div class="container-fluid">

     <a class="navbar-brand" href="admin-dashboard.html">Admin Dashboard</a>

     <div class="d-flex">

       <a href="admin-dashboard.html" class="btn btn-outline-light me-2">Products</a>

       <a href="add-product.html" class="btn btn-outline-light me-2">Add Product</a>
```

```html
        <button class="btn btn-danger" onclick="logout()">Logout</button>
    </div>
  </div>
</nav>



<div class="container mt-5">
  <h2 class="mb-4">Add New Product</h2>
  <form id="productForm" enctype="multipart/form-data">
    <div class="mb-3">
      <label for="title" class="form-label">Product Title</label>
      <input type="text" class="form-control" id="title" required>
    </div>



    <div class="mb-3">
      <label for="description" class="form-label">Description</label>
      <textarea class="form-control" id="description" rows="3" required></textarea>
    </div>



    <div class="mb-3">
      <label for="price" class="form-label">Price ($)</label>
      <input type="number" class="form-control" id="price" required>
    </div>



    <div class="mb-3">
      <label for="image" class="form-label">Product Image</label>
      <input type="file" class="form-control" id="image" accept="image/*" required>
    </div>
```

```html
    <button type="submit" class="btn btn-primary">Add Product</button>
  </form>
</div>

<script>
  const API_URL = "http://localhost:3000/products";

  document.getElementById("productForm").addEventListener("submit", function(e) {
e.preventDefault();

let title = document.getElementById("title").value;

let description = document.getElementById("description").value;

let price = document.getElementById("price").value;

let imageInput = document.getElementById("image");

let imagePath = "images/" + imageInput.files[0].name;

fetch(API_URL)
  .then(res => res.json())
  .then(products => {
   let maxId = products.length > 0 ? Math.max(...products.map(p => Number(p.id))) : 0;

   let newProduct = {
    id: maxId + 1,
    title,
    description,
    price,
```

```javascript
      image: imagePath

    };



    return fetch(API_URL, {

      method: "POST",

      headers: { "Content-Type": "application/json" },

      body: JSON.stringify(newProduct)

    });

  })

  .then(res => res.json())

  .then(data => {

    alert("Product Added Successfully!");

    //window.location.href = "admin-dashboard.html";

    setTimeout(() => {

      window.location.href = "admin-dashboard.html";

  }, 1000);

  })

  .catch(err => console.error("Error:", err));

});



  function logout() {

    localStorage.removeItem("loggedInUser");

    window.location.href = "login.html";

  }

 </script>

</body>
```

</html>

Checkout.html:

```html
<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1.0">

  <title>Checkout</title>

  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/css/bootstrap.min.css" rel="stylesheet">

</head>

<body>

  <!-- Navbar -->

  <nav class="navbar navbar-expand-lg navbar-dark bg-dark">

    <div class="container-fluid">

      <a class="navbar-brand" href="user-dashboard.html">Product Portal</a>

      <button class="navbar-toggler" type="button" data-bs-toggle="collapse" data-bs-target="#navbarNav">

        <span class="navbar-toggler-icon"></span>

      </button>

      <div class="collapse navbar-collapse" id="navbarNav">

        <ul class="navbar-nav ms-auto">

          <li class="nav-item">

            <a class="nav-link" href="user-dashboard.html">Product List</a>

          </li>

          <li class="nav-item">

            <a class="nav-link active" aria-current="page" href="#">Checkout</a>

          </li>

          <li class="nav-item">
```

```html
          <a class="nav-link text-danger" href="#" onclick="logout()">Logout</a>
        </li>
      </ul>
    </div>
  </div>
</nav>


<div class="container mt-5">
  <h2 class="mb-4">Checkout</h2>
  <table class="table table-bordered">
    <thead class="table-dark">
      <tr>
        <th>Product Name</th>
        <th>Price ($)</th>
      </tr>
    </thead>
    <tbody id="checkoutBody">
      <!-- Cart items will be loaded here -->
    </tbody>
    <tfoot>
      <tr>
        <th>Total</th>
        <th id="totalPrice">$0</th>
      </tr>
    </tfoot>
  </table>
</div>
```

```html
<script>
  const CART_API_URL = "http://localhost:3000/cart";

  function loadCart() {
    fetch(CART_API_URL)
      .then(res => res.json())
      .then(cart => {
        const tbody = document.getElementById("checkoutBody");
        tbody.innerHTML = "";
        let total = 0;

        if(cart.length === 0){
          tbody.innerHTML = '<tr><td colspan="2" class="text-center">No items in cart.</td></tr>';
          document.getElementById("totalPrice").innerText = "$0";
          return;
        }

        cart.forEach(item => {
          total += Number(item.price);
          const row = `
            <tr>
              <td>${item.title}</td>
              <td>$${item.price}</td>
            </tr>
          `;
          tbody.innerHTML += row;
        });
```

```
      document.getElementById("totalPrice").innerText = `$${total}`;

    })

    .catch(err => console.error("Error loading cart:", err));

  }


  function logout() {

    localStorage.removeItem("loggedInUser");

    window.location.href = "login.html";

  }


  window.onload = () => {

    const user = JSON.parse(localStorage.getItem("loggedInUser"));

    if(!user || user.role !== "user"){

      alert("Unauthorized! Please login as a user.");

      window.location.href = "login.html";

    }

    loadCart();

  };
 </script>


 <script
src="https://cdn.jsdelivr.net/npm/bootstrap@5.3.0/dist/js/bootstrap.bundle.min.js"></scrip
t>

</body>

</html>


Db.json:

{
```

"users": [
  {
    "id": "1",
    "name": "Charles",
    "email": "charles@example.com",
    "password": "charles123",
    "role": "admin"
  },
  {
    "id": "2",
    "name": "John Doe",
    "email": "john@example.com",
    "password": "john123",
    "role": "user"
  },
  {
    "id": "6944",
    "name": "swe",
    "email": "swe@gmail.com",
    "password": "swe",
    "role": "user"
  }
],
"products": [
  {
    "title": "Fresh Bread",
    "description": "A delicious Fresh Bread",
    "price": "3",

```json
      "image": "images/bread.png",

      "id": "1"

    },

    {

      "title": "Fresh Straweberry",

      "description": "A delicious Fresh strawberry",

      "price": "50",

      "image": "images/strawberry.png",

      "id": "2"

    },

    {

      "title": "Fresh Apples",

      "description": "A delicious Fresh Apples",

      "price": "10",

      "image": "images/freshapple.png",

      "id": "3"

    },

    {

      "title": "Fresh Milk",

      "description": "A Fresh Milk With High Caramel",

      "price": "7",

      "image": "images/milk.png",

      "id": "4"

    }

  ],

  "cart": [

    {

      "id": 1,
```

    "title": "Fresh Bread",

    "price": 3,

    "quantity": 1

  },

  {

    "id": 2,

    "title": "Fresh Straweberry",

    "price": 50,

    "quantity": 1

  },

  {

    "id": 1,

    "title": "Fresh Bread",

    "price": 3,

    "quantity": 1

  },

  {

    "id": 2,

    "title": "Fresh Straweberry",

    "price": 50,

    "quantity": 1

  },

  {

    "id": 4,

    "title": "Fresh Milk",

    "price": 7,

    "quantity": 1

  }

```
  ]

}


Edit-product.html:

<!DOCTYPE html>

<html lang="en">

<head>

  <meta charset="UTF-8">

  <meta name="viewport" content="width=device-width, initial-scale=1">

  <title>Edit product</title>

  <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.3.3/dist/css/bootstrap.min.css"
rel="stylesheet">

</head>

<body class="bg-light">


  <nav class="navbar navbar-expand-lg navbar-dark bg-dark">

    <div class="container-fluid">

      <a class="navbar-brand" href="admin-dashboard.html">Admin Dashboard</a>

      <div class="d-flex">

        <a href="admin-dashboard.html" class="btn btn-outline-light me-2">products</a>

        <a href="add-product.html" class="btn btn-outline-light me-2">Add product</a>

        <button class="btn btn-danger" onclick="logout()">Logout</button>

      </div>

    </div>

  </nav>


  <div class="container mt-5">
```

```html
<h2 class="mb-4">Edit product</h2>
<form id="editproductForm" enctype="multipart/form-data">
  <div class="mb-3">
    <label for="title" class="form-label">product Title</label>
    <input type="text" class="form-control" id="title" required>
  </div>

  <div class="mb-3">
    <label for="description" class="form-label">Description</label>
    <textarea class="form-control" id="description" rows="3" required></textarea>
  </div>

  <div class="mb-3">
    <label for="price" class="form-label">Price ($)</label>
    <input type="number" class="form-control" id="price" required>
  </div>

  <div class="mb-3">
    <label for="image" class="form-label">product Image</label>
    <input type="file" class="form-control" id="image" accept="image/*">
    <img id="currentImage" src="" alt="Current Image" class="mt-2" style="width:150px; height:auto;">
  </div>

  <button type="submit" class="btn btn-primary">Update product</button>
</form>
</div>
```

```
<script>
  const API_URL = "http://localhost:3000/products";


  const urlParams = new URLSearchParams(window.location.search);

  const productId = urlParams.get('id');


  if (!productId) {

    alert("No product ID provided!");

    window.location.href = "admin-dashboard.html";

  }


  // Fetch product data and populate form

  fetch(`${API_URL}/${productId}`)

    .then(res => res.json())

    .then(product => {

      document.getElementById("title").value = product.title;

      document.getElementById("description").value = product.description;

      document.getElementById("price").value = product.price;

      document.getElementById("currentImage").src = product.image;

    })

    .catch(err => {

      console.error("Error fetching product:", err);

      alert("Failed to load product details.");

      window.location.href = "admin-dashboard.html";

    });


  // Update product on form submit
```

```javascript
document.getElementById("editproductForm").addEventListener("submit", function(e) {
  e.preventDefault();

  let title = document.getElementById("title").value;
  let description = document.getElementById("description").value;
  let price = document.getElementById("price").value;
  let imageInput = document.getElementById("image");

  let updatedproduct = {
    title,
    description,
    price,
    image: imageInput.files[0] ? "images/" + imageInput.files[0].name :
document.getElementById("currentImage").src
  };

  fetch(`${API_URL}/${productId}`, {
    method: "PUT",
    headers: { "Content-Type": "application/json" },
    body: JSON.stringify(updatedproduct)
  })
  .then(res => res.json())
  .then(data => {
    alert("product updated successfully!");
    //window.location.href = "admin-dashboard.html";
    setTimeout(() => {
    window.location.href = "admin-dashboard.html";
}, 1000);
```

```javascript
      })
      .catch(err => {
        console.error("Error updating product:", err);
        alert("Failed to update product.");
      });
    });


    function logout() {
      localStorage.removeItem("loggedInUser");
      window.location.href = "login.html";
    }
  </script>


</body>
</html>
```