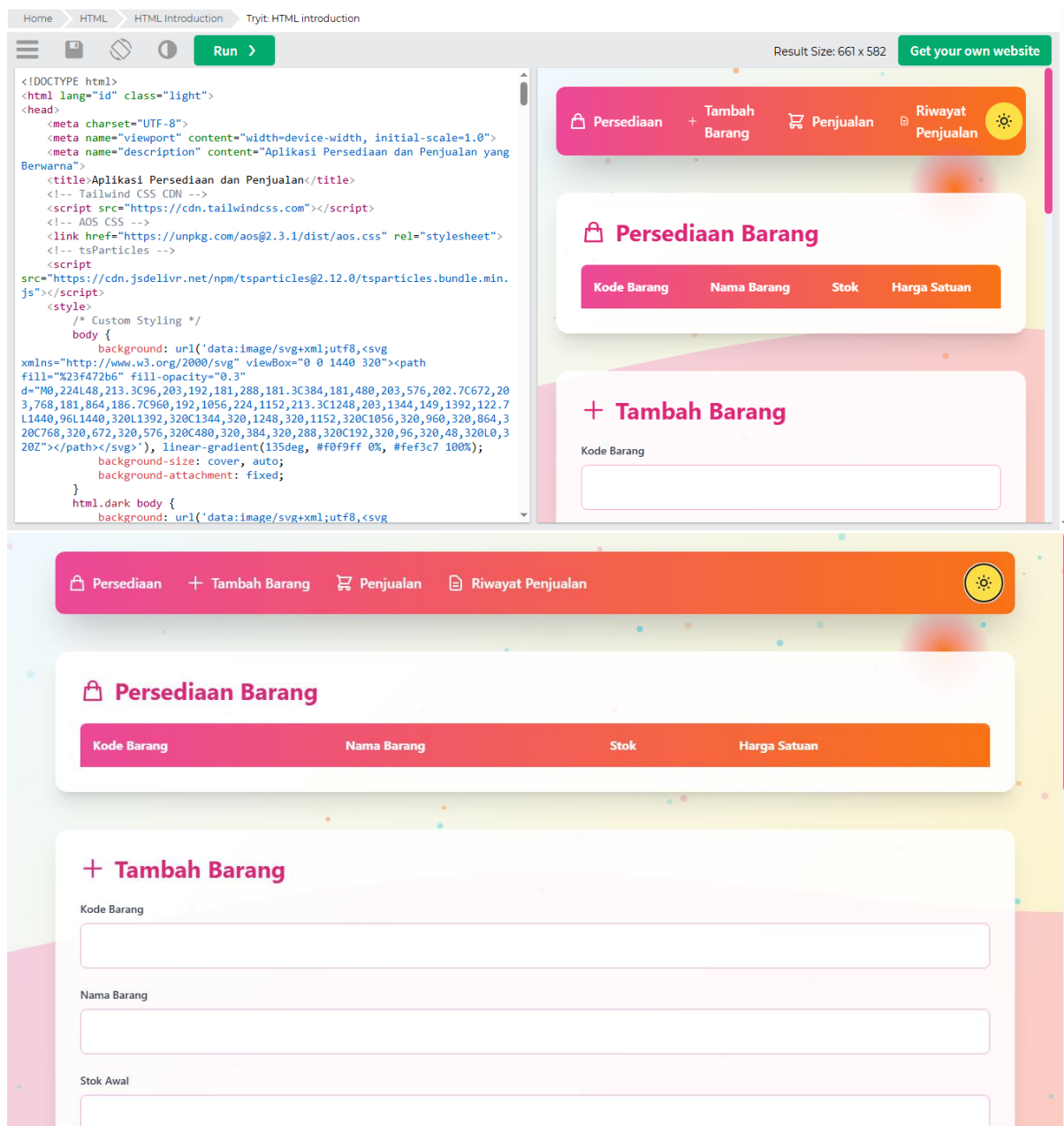TUGAS HTML (Aplikasi Persediaan dan Penjualan)

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Mata Kuliah   : Pengkodean dan Pemrograman

Kelas   : D

1. Tampilan W3Schools

2. Kode HTML

<!DOCTYPE html>

```html
<html lang="id" class="light">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <meta name="description" content="Aplikasi Persediaan dan Penjualan yang Berwarna">
  <title>Aplikasi Persediaan dan Penjualan</title>
  <!-- Tailwind CSS CDN -->
  <script src="https://cdn.tailwindcss.com"></script>
  <!-- AOS CSS -->
  <link href="https://unpkg.com/aos@2.3.1/dist/aos.css" rel="stylesheet">
  <!-- tsParticles -->
  <script src="https://cdn.jsdelivr.net/npm/tsparticles@2.12.0/tsparticles.bundle.min.js"></script>
  <style>
    /* Custom Styling */
    body {
      background: url('data:image/svg+xml;utf8,<svg xmlns="http://www.w3.org/2000/svg" viewBox="0 0 1440 320"><path fill="%23f472b6" fill-opacity="0.3" d="M0,224L48,213.3C96,203,192,181,288,181.3C384,181,480,203,576,202.7C672,203,768,181,864,186.7C960,192,1056,224,1152,213.3C1248,203,1344,149,1392,122.7L1440,96L1440,320L1392,320C1344,320,1248,320,1152,320C1056,320,960,320,864,320C768,320,672,320,576,320C480,320,384,320,288,320C192,320,96,320,48,320L0,320Z"></path></svg>'), linear-gradient(135deg, #f0f9ff 0%, #fef3c7 100%);
      background-size: cover, auto;
      background-attachment: fixed;
    }
    html.dark body {
      background: url('data:image/svg+xml;utf8,<svg xmlns="http://www.w3.org/2000/svg" viewBox="0 0 1440 320"><path fill="%23a855f7" fill-opacity="0.3" d="M0,224L48,213.3C96,203,192,181,288,181.3C384,181,480,203,576,202.7C672,203,768,181,864,186.7C960,192,1056,224,1152,213.3C1248,203,1344,149,1392,122.7L1440,96L1440,320L1392,320C1344,320,1248,320,1152,320C1056,320,960,320,864,320C768,320,672,320,576,320C480,320,384,320,288,320C192,320,96,320,48,320L0,320Z"></path></svg>'), linear-gradient(135deg, #1e293b 0%, #3b0764 100%);
      background-size: cover, auto;
      background-attachment: fixed;
```

```css
}
.card {
  transition: transform 0.3s ease, box-shadow 0.3s ease;
  background: rgba(255, 255, 255, 0.9);
}
html.dark .card {
  background: rgba(31, 41, 55, 0.9);
}
.card:hover {
  transform: scale(1.02);
  box-shadow: 0 15px 30px rgba(0, 0, 0, 0.2);
}
.btn-glow {
  background: linear-gradient(45deg, #ec4899, #f97316);
  box-shadow: 0 0 15px rgba(236, 72, 153, 0.5);
}
.btn-glow:hover {
  box-shadow: 0 0 25px rgba(236, 72, 153, 0.7);
}
html.dark .btn-glow {
  background: linear-gradient(45deg, #a855f7, #22d3ee);
  box-shadow: 0 0 15px rgba(168, 85, 247, 0.5);
}
html.dark .btn-glow:hover {
  box-shadow: 0 0 25px rgba(168, 85, 247, 0.7);
}
/* Scrollbar */
::-webkit-scrollbar {
  width: 10px;
}
::-webkit-scrollbar-track {
```

```css
      background: #f1f5f9;

    }

    ::-webkit-scrollbar-thumb {

      background: #ec4899;

      border-radius: 5px;

    }

    html.dark ::-webkit-scrollbar-track {

      background: #1e293b;

    }

    html.dark ::-webkit-scrollbar-thumb {

      background: #a855f7;

    }

    /* Particle Container */

    #tsparticles {

      position: fixed;

      top: 0;

      left: 0;

      width: 100%;

      height: 100%;

      z-index: -1;

    }

  </style>
</head>
<body class="min-h-screen text-gray-900 transition-colors duration-300">

  <!-- Particle Background -->

  <div id="tsparticles"></div>


  <div class="container mx-auto p-6 max-w-7xl relative z-10">

    <!-- Navbar -->

    <nav class="bg-gradient-to-r from-pink-500 to-orange-500 dark:from-purple-600 dark:to-cyan-
500 text-white p-4 rounded-xl shadow-2xl flex justify-between items-center" data-aos="zoom-in">
```

```html
<div class="flex space-x-8">

    <a href="#inventory" class="hover:text-yellow-200 transition-colors flex items-center space-x-2 text-lg font-semibold">

        <svg class="w-6 h-6" fill="none" stroke="currentColor" viewBox="0 0 24 24" xmlns="http://www.w3.org/2000/svg"><path stroke-linecap="round" stroke-linejoin="round" stroke-width="2" d="M16 11V7a4 4 0 00-8 0v4M5 9h14l1 12H4L5 9z"></path></svg>

        <span>Persediaan</span>

    </a>

    <a href="#add-item" class="hover:text-yellow-200 transition-colors flex items-center space-x-2 text-lg font-semibold">

        <svg class="w-6 h-6" fill="none" stroke="currentColor" viewBox="0 0 24 24" xmlns="http://www.w3.org/2000/svg"><path stroke-linecap="round" stroke-linejoin="round" stroke-width="2" d="M12 4v16m8-8H4"></path></svg>

        <span>Tambah Barang</span>

    </a>

    <a href="#sales" class="hover:text-yellow-200 transition-colors flex items-center space-x-2 text-lg font-semibold">

        <svg class="w-6 h-6" fill="none" stroke="currentColor" viewBox="0 0 24 24" xmlns="http://www.w3.org/2000/svg"><path stroke-linecap="round" stroke-linejoin="round" stroke-width="2" d="M3 3h2l.4 2M7 13h10l4-8H5.4M7 13L5.4 5M7 13l-2.293 2.293c-.63.63-.184 1.707.707 1.707H17m0 0a2 2 0 100 4 2 2 0 000-4zm-8 2a2 2 0 11-4 0 2 2 0 014 0z"></path></svg>

        <span>Penjualan</span>

    </a>

    <a href="#sales-history" class="hover:text-yellow-200 transition-colors flex items-center space-x-2 text-lg font-semibold">

        <svg class="w-6 h-6" fill="none" stroke="currentColor" viewBox="0 0 24 24" xmlns="http://www.w3.org/2000/svg"><path stroke-linecap="round" stroke-linejoin="round" stroke-width="2" d="M9 12h6m-6 4h6m2 5H7a2 2 0 01-2-2V5a2 2 0 012-2h5.586a1 1 0 01.707.293l5.414 5.414a1 1 0 01.293.707V19a2 2 0 01-2 2z"></path></svg>

        <span>Riwayat Penjualan</span>

    </a>

</div>

<!-- Dark Mode Toggle -->

<button id="themeToggle" class="p-3 rounded-full bg-yellow-300 dark:bg-cyan-300 text-gray-900 dark:text-gray-900 hover:scale-110 transition-transform">

    <svg class="w-6 h-6" fill="none" stroke="currentColor" viewBox="0 0 24 24" xmlns="http://www.w3.org/2000/svg"><path stroke-linecap="round" stroke-linejoin="round"
```

```html
stroke-width="2" d="M12 3v1m0 16v1m9-9h-1M4 12H3m15.364 6.364l-.707-.707M6.343 6.343l-.707-.707m12.728 0l-.707.707M6.343 17.657l-.707.707M16 12a4 4 0 11-8 0 4 4 0 018 0z"></path></svg>

        </button>

    </nav>


    <!-- Decorative SVG -->
    <div class="absolute top-20 right-10 opacity-30 z-0" data-aos="fade-left">
      <svg width="150" height="150" viewBox="0 0 200 200" fill="none"
xmlns="http://www.w3.org/2000/svg">
        <circle cx="100" cy="100" r="80" fill="url(#paint0_radial)" />
        <defs>
          <radialGradient id="paint0_radial" cx="0" cy="0" r="1" gradientUnits="userSpaceOnUse"
gradientTransform="translate(100 100) scale(80)">
            <stop stop-color="#f97316" />
            <stop offset="1" stop-color="#ec4899" stop-opacity="0" />
          </radialGradient>
        </defs>
      </svg>
    </div>


    <!-- Persediaan -->
    <section id="inventory" class="mt-12 relative z-10" data-aos="fade-up">
      <div class="card p-8 rounded-2xl shadow-xl">
        <h2 class="text-3xl font-bold text-pink-600 dark:text-purple-400 mb-6 flex items-center">
          <svg class="w-8 h-8 mr-3" fill="none" stroke="currentColor" viewBox="0 0 24 24"
xmlns="http://www.w3.org/2000/svg"><path stroke-linecap="round" stroke-linejoin="round"
stroke-width="2" d="M16 11V7a4 4 0 00-8 0v4M5 9h14l1 12H4L5 9z"></path></svg>
          Persediaan Barang
        </h2>
        <div class="overflow-x-auto">
          <table id="inventoryTable" class="w-full text-left">
```

```html
            <thead class="bg-gradient-to-r from-pink-500 to-orange-500 dark:from-purple-600
dark:to-cyan-500 text-white">
                <tr>
                    <th class="p-4 rounded-tl-lg">Kode Barang</th>
                    <th class="p-4">Nama Barang</th>
                    <th class="p-4">Stok</th>
                    <th class="p-4 rounded-tr-lg">Harga Satuan</th>
                </tr>
            </thead>
            <tbody class="text-gray-900 dark:text-gray-100"></tbody>
        </table>
      </div>
    </div>
  </section>


  <!-- Tambah Barang -->
  <section id="add-item" class="mt-12 relative z-10" data-aos="fade-up" data-aos-delay="100">
    <div class="card p-8 rounded-2xl shadow-xl">
      <h2 class="text-3xl font-bold text-pink-600 dark:text-purple-400 mb-6 flex items-center">
        <svg class="w-8 h-8 mr-3" fill="none" stroke="currentColor" viewBox="0 0 24 24"
xmlns="http://www.w3.org/2000/svg"><path stroke-linecap="round" stroke-linejoin="round"
stroke-width="2" d="M12 4v16m8-8H4"></path></svg>
        Tambah Barang
      </h2>
      <form id="addItemForm" class="space-y-6">
        <div>
          <label for="itemCode" class="block text-sm font-medium text-gray-700 dark:text-gray-
300">Kode Barang</label>
          <input type="text" id="itemCode" class="mt-2 w-full p-4 border border-pink-300
dark:border-purple-500 rounded-lg focus:ring-4 focus:ring-pink-200 dark:focus:ring-purple-300
dark:bg-gray-800 dark:text-gray-200 transition-all" required>
        </div>
        <div>
```

```html
                <label for="itemName" class="block text-sm font-medium text-gray-700 dark:text-gray-300">Nama Barang</label>

                <input type="text" id="itemName" class="mt-2 w-full p-4 border border-pink-300 dark:border-purple-500 rounded-lg focus:ring-4 focus:ring-pink-200 dark:focus:ring-purple-300 dark:bg-gray-800 dark:text-gray-200 transition-all" required>

            </div>

            <div>

                <label for="itemStock" class="block text-sm font-medium text-gray-700 dark:text-gray-300">Stok Awal</label>

                <input type="number" id="itemStock" min="0" class="mt-2 w-full p-4 border border-pink-300 dark:border-purple-500 rounded-lg focus:ring-4 focus:ring-pink-200 dark:focus:ring-purple-300 dark:bg-gray-800 dark:text-gray-200 transition-all" required>

            </div>

            <div>

                <label for="itemPrice" class="block text-sm font-medium text-gray-700 dark:text-gray-300">Harga Satuan (Rp)</label>

                <input type="number" id="itemPrice" min="0" class="mt-2 w-full p-4 border border-pink-300 dark:border-purple-500 rounded-lg focus:ring-4 focus:ring-pink-200 dark:focus:ring-purple-300 dark:bg-gray-800 dark:text-gray-200 transition-all" required>

            </div>

            <button type="submit" class="w-full btn-glow text-white p-4 rounded-lg text-lg font-semibold transition-transform hover:scale-105">Tambah Barang</button>

        </form>

        <div id="addItemMessage" class="mt-6 p-4 rounded-lg hidden"></div>

      </div>

    </section>


    <!-- Penjualan -->

    <section id="sales" class="mt-12 relative z-10" data-aos="fade-up" data-aos-delay="200">

      <div class="card p-8 rounded-2xl shadow-xl">

        <h2 class="text-3xl font-bold text-pink-600 dark:text-purple-400 mb-6 flex items-center">

          <svg class="w-8 h-8 mr-3" fill="none" stroke="currentColor" viewBox="0 0 24 24" xmlns="http://www.w3.org/2000/svg"><path stroke-linecap="round" stroke-linejoin="round" stroke-width="2" d="M3 3h2l.4 2M7 13h10l4-8H5.4M7 13L5.4 5M7 13l-2.293 2.293c-.63.63-.184 1.707.707 1.707H17m0 0a2 2 0 100 4 2 2 0 000-4zm-8 2a2 2 0 11-4 0 2 2 0 014 0z"></path></svg>

          Form Penjualan
```

```html
        </h2>
        <form id="salesForm" class="space-y-6">
          <div>
            <label for="itemSelect" class="block text-sm font-medium text-gray-700 dark:text-gray-300">Pilih Barang</label>
            <select id="itemSelect" class="mt-2 w-full p-4 border border-pink-300 dark:border-purple-500 rounded-lg focus:ring-4 focus:ring-pink-200 dark:focus:ring-purple-300 dark:bg-gray-800 dark:text-gray-200 transition-all" required>
              <option value="" disabled selected>Pilih Barang</option>
            </select>
          </div>
          <div>
            <label for="quantity" class="block text-sm font-medium text-gray-700 dark:text-gray-300">Jumlah</label>
            <input type="number" id="quantity" min="1" class="mt-2 w-full p-4 border border-pink-300 dark:border-purple-500 rounded-lg focus:ring-4 focus:ring-pink-200 dark:focus:ring-purple-300 dark:bg-gray-800 dark:text-gray-200 transition-all" required>
          </div>
          <button type="submit" class="w-full btn-glow text-white p-4 rounded-lg text-lg font-semibold transition-transform hover:scale-105">Proses Penjualan</button>
        </form>
        <div id="salesMessage" class="mt-6 p-4 rounded-lg hidden"></div>
      </div>
    </section>


    <!-- Riwayat Penjualan -->
    <section id="sales-history" class="mt--12 relative z-10" data-aos="fade-up" data-aos-delay="300">
      <div class="card p-8 rounded-2xl shadow-xl">
        <h2 class="text-3xl font-bold text-pink-600 dark:text-purple-400 mb-6 flex items-center">
          <svg class="w-8 h-8 mr-3" fill="none" stroke="currentColor" viewBox="0 0 24 24" xmlns="http://www.w3.org/2000/svg"><path stroke-linecap="round" stroke-linejoin="round" stroke-width="2" d="M9 12h6m-6 4h6m2 5H7a2 2 0 01-2-2V5a2 2 0 012-2h5.586a1 1 0 01.707.293l5.414 5.414a1 1 0 01.293.707V19a2 2 0 01-2 2z"></path></svg>
          Riwayat Penjualan
```

```html
        </h2>

        <div class="overflow-x-auto">

          <table id="salesHistoryTable" class="w-full text-left">

            <thead class="bg-gradient-to-r from-pink-500 to-orange-500 dark:from-purple-600 dark:to-cyan-500 text-white">

              <tr>

                <th class="p-4 rounded-tl-lg">Tanggal</th>

                <th class="p-4">Kode Barang</th>

                <th class="p-4">Nama Barang</th>

                <th class="p-4">Jumlah</th>

                <th class="p-4 rounded-tr-lg">Total Harga</th>

              </tr>

            </thead>

            <tbody class="text-gray-900 dark:text-gray-100"></tbody>

          </table>

        </div>

      </div>

    </section>

  </div>


  <!-- AOS JS -->

  <script src="https://unpkg.com/aos@2.3.1/dist/aos.js"></script>

  <script>

    // Initialize AOS

    AOS.init({

      duration: 1000,

      easing: 'ease-in-out',

      once: false,

    });


    // Initialize tsParticles
```

```javascript
tsParticles.load("tsparticles", {
  particles: {
    number: { value: 80, density: { enable: true, value_area: 800 } },
    color: { value: ["#ec4899", "#f97316", "#22d3ee"] },
    shape: { type: "circle" },
    opacity: { value: 0.5, random: true },
    size: { value: 5, random: true },
    move: { enable: true, speed: 2, direction: "none", random: true, out_mode: "out" },
  },
  interactivity: {
    events: {
      onhover: { enable: true, mode: "repulse" },
      onclick: { enable: true, mode: "push" },
    },
    modes: {
      repulse: { distance: 100, duration: 0.4 },
      push: { quantity: 4 },
    },
  },
  retina_detect: true,
});

/**
 * Inventory and Sales Application
 * Author: Grok (Generated for xAI)
 * Version: 1.0
 * Features: Manage inventory, add items, process sales, view sales history
 */

class InventoryManager {
  constructor() {
```

```javascript
        this.inventory = JSON.parse(localStorage.getItem('inventory')) || {};

        this.salesHistory = JSON.parse(localStorage.getItem('salesHistory')) || [];

        this.initializeEventListeners();

        this.renderInventory();

        this.renderItemSelect();

        this.renderSalesHistory();

    }


    initializeEventListeners() {

        document.getElementById('addItemForm').addEventListener('submit', (e) =>
this.handleAddItem(e));

        document.getElementById('salesForm').addEventListener('submit', (e) =>
this.handleSale(e));

    }


    handleAddItem(e) {

      e.preventDefault();

      const code = document.getElementById('itemCode').value.trim();

      const name = document.getElementById('itemName').value.trim();

      const stock = parseInt(document.getElementById('itemStock').value);

      const price = parseInt(document.getElementById('itemPrice').value);

      const messageDiv = document.getElementById('addItemMessage');


      if (this.inventory[code]) {

        this.showMessage(messageDiv, 'error', 'Kode barang sudah ada!');

        return;

      }


      this.inventory[code] = { name, stock, price };

      this.saveInventory();

      this.renderInventory();

      this.renderItemSelect();
```

```javascript
        this.showMessage(messageDiv, 'success', 'Barang berhasil ditambahkan!');

        e.target.reset();

    }


    handleSale(e) {

        e.preventDefault();

        const itemCode = document.getElementById('itemSelect').value;

        const quantity = parseInt(document.getElementById('quantity').value);

        const messageDiv = document.getElementById('salesMessage');


        if (!this.inventory[itemCode]) {

            this.showMessage(messageDiv, 'error', 'Barang tidak ditemukan!');

            return;

        }


        if (this.inventory[itemCode].stock < quantity) {

            this.showMessage(messageDiv, 'error', `Stok ${this.inventory[itemCode].name} tidak
cukup!`);

            return;

        }


        this.inventory[itemCode].stock -= quantity;

        const total = quantity * this.inventory[itemCode].price;

        const sale = {

            date: new Date().toLocaleString('id-ID'),

            code: itemCode,

            name: this.inventory[itemCode].name,

            quantity,

            total

        };
```

```javascript
      this.salesHistory.push(sale);

      this.saveInventory();

      this.saveSalesHistory();

      this.renderInventory();

      this.renderSalesHistory();

      this.showMessage(messageDiv, 'success', `Penjualan berhasil! ${quantity}
${this.inventory[itemCode].name} - Total: Rp ${total.toLocaleString('id-ID')}`);

      e.target.reset();

    }


    renderInventory() {

      const tbody = document.querySelector('#inventoryTable tbody');

      tbody.innerHTML = '';

      for (const [code, item] of Object.entries(this.inventory)) {

        const row = document.createElement('tr');

        row.className = 'hover:bg-pink-100 dark:hover:bg-purple-800 transition-colors';

        row.innerHTML = `

          <td class="p-4">${code}</td>

          <td class="p-4">${item.name}</td>

          <td class="p-4">${item.stock}</td>

          <td class="p-4">Rp ${item.price.toLocaleString('id-ID')}</td>

        `;

        tbody.appendChild(row);

      }

    }


    renderItemSelect() {

      const select = document.getElementById('itemSelect');

      select.innerHTML = '<option value="" disabled selected>Pilih Barang</option>';

      for (const [code, item] of Object.entries(this.inventory)) {

        const option = document.createElement('option');
```

```
      option.value = code;

      option.textContent = `${item.name} - Rp ${item.price.toLocaleString('id-ID')}`;

      select.appendChild(option);

    }

}


renderSalesHistory() {

    const tbody = document.querySelector('#salesHistoryTable tbody');

    tbody.innerHTML = '';

    this.salesHistory.forEach(sale => {

      const row = document.createElement('tr');

      row.className = 'hover:bg-pink-100 dark:hover:bg-purple-800 transition-colors';

      row.innerHTML = `

        <td class="p-4">${sale.date}</td>

        <td class="p-4">${sale.code}</td>

        <td class="p-4">${sale.name}</td>

        <td class="p-4">${sale.quantity}</td>

        <td class="p-4">Rp ${sale.total.toLocaleString('id-ID')}</td>

      `;

      tbody.appendChild(row);

    });

}


saveInventory() {

    localStorage.setItem('inventory', JSON.stringify(this.inventory));

}


saveSalesHistory() {

    localStorage.setItem('salesHistory', JSON.stringify(this.salesHistory));

}
```

```javascript
      showMessage(element, type, text) {

        element.className = `mt-6 p-4 rounded-lg ${type === 'success' ? 'bg-green-500 text-white'
: 'bg-red-500 text-white'} animate-bounce`;

        element.textContent = text;

        element.classList.remove('hidden');

        setTimeout(() => {

          element.classList.add('hidden');

        }, 3000);

      }

    }


    // Initialize application

    document.addEventListener('DOMContentLoaded', () => {

      new InventoryManager();


      // Dark Mode Toggle

      const themeToggle = document.getElementById('themeToggle');

      themeToggle.addEventListener('click', () => {

        document.documentElement.classList.toggle('dark');

        localStorage.setItem('theme', document.documentElement.classList.contains('dark') ?
'dark' : 'light');

        // Update particle colors

        tsParticles.load("tsparticles", {

          particles: {

            number: { value: 80, density: { enable: true, value_area: 800 } },

            color: { value: document.documentElement.classList.contains('dark') ? ["#a855f7",
"#22d3ee", "#f472b6"] : ["#ec4899", "#f97316", "#22d3ee"] },

            shape: { type: "circle" },

            opacity: { value: 0.5, random: true },

            size: { value: 5, random: true },

            move: { enable: true, speed: 2, direction: "none", random: true, out_mode: "out" },

          },
```

```
            interactivity: {

               events: {

                  onhover: { enable: true, mode: "repulse" },

                  onclick: { enable: true, mode: "push" },

               },

               modes: {

                  repulse: { distance: 100, duration: 0.4 },

                  push: { quantity: 4 },

               },

            },

            retina_detect: true,

         });

      });


      // Load saved theme

      if (localStorage.getItem('theme') === 'dark') {

         document.documentElement.classList.add('dark');

      }

   });
</script>
</body>
</html>
```