```html
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>Digital Contact Book</title>
  <!-- Tailwind CSS CDN for modern, responsive styling -->
  <script src="https://cdn.tailwindcss.com"></script>
  <!-- Font Awesome for icons -->
  <link
    rel="stylesheet"
    href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/6.4.0/css/all.min.css"
    crossorigin="anonymous"
  />
  <style>
    /* Custom CSS for variables and base styles, complementing Tailwind */
    :root {
      --primary: #4361ee;
      --primary-dark: #3a0ca3;
      --secondary: #4cc9f0;
      --accent: #f72585;
      --dark-bg: #1e1e2e;
      --darker-bg: #121212;
      --light-text: #f8f9fa;
      --gray-text: #a0aec0; /* Adjusted for better contrast */
      --success: #4caf50;
      --danger: #f44336;
      --warning: #ff9800;
      --card-bg: rgba(30, 30, 46, 0.8);
      --border-color: rgba(255,255,255,0.15);
      --input-bg: rgba(0,0,0,0.4);
    }

    body {
      font-family: 'Inter', sans-serif; /* Using Inter font as requested */
      background-color: var(--darker-bg);
      color: var(--light-text);
      min-height: 100vh;
      display: flex;
      flex-direction: column;
      line-height: 1.6;
    }

    /* Message Box Styling */
    #message-box {
      position: fixed;
      top: 1.25rem; /* 20px */
      left: 50%;
```

```css
      transform: translateX(-50%);
      padding: 0.75rem 1.5rem; /* 12px 24px */
      border-radius: 0.5rem; /* 8px */
      z-index: 1000;
      box-shadow: 0 4px 8px rgba(0, 0, 0, 0.2);
      font-weight: 600;
      display: none; /* Hidden by default */
    }

    /* Page transition animation */
    .page {
      display: none;
      animation: fadeIn 0.6s ease-out forwards;
    }

    .page.active {
      display: block;
    }

    @keyframes fadeIn {
      from { opacity: 0; transform: translateY(20px); }
      to { opacity: 1; transform: translateY(0); }
    }

    /* Custom scrollbar for better aesthetics */
    ::-webkit-scrollbar {
      width: 8px;
      height: 8px;
    }

    ::-webkit-scrollbar-track {
      background: rgba(255, 255, 255, 0.05);
      border-radius: 10px;
    }

    ::-webkit-scrollbar-thumb {
      background: var(--primary);
      border-radius: 10px;
      transition: background 0.3s ease;
    }

    ::-webkit-scrollbar-thumb:hover {
      background: var(--secondary);
    }
  </style>
</head>
<body class="antialiased">
  <!-- Message Box for user feedback -->
```

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    <div id="message-box" class="bg-green-500 text-white"></div>

    <!-- Delete Confirmation Modal -->
    <div id="delete-modal" class="fixed inset-0 bg-black bg-opacity-75 flex items-center justify-center z-50 hidden">
      <div class="bg-gray-800 p-8 rounded-xl shadow-lg border border-gray-700 max-w-sm w-full text-center">
        <h3 class="text-xl font-bold mb-4 text-red-400">Confirm Deletion</h3>
        <p class="text-gray-300 mb-6">Are you sure you want to delete this contact? This action cannot be undone.</p>
        <div class="flex justify-center space-x-4">
          <button id="confirm-delete-btn" class="px-6 py-2 bg-red-600 hover:bg-red-700 text-white rounded-lg font-semibold transition duration-200">Delete</button>
          <button id="cancel-delete-btn" class="px-6 py-2 bg-gray-600 hover:bg-gray-700 text-white rounded-lg font-semibold transition duration-200">Cancel</button>
        </div>
      </div>
    </div>

    <div class="flex flex-col min-h-screen bg-gray-900">
      <!-- Header -->
      <header class="bg-gray-800 shadow-lg p-4 md:p-6 flex flex-col md:flex-row items-center justify-between sticky top-0 z-40 border-b border-gray-700">
        <div class="flex items-center space-x-3 mb-4 md:mb-0">
          <i class="fas fa-address-book text-3xl text-blue-400"></i>
          <h1 class="text-3xl font-extrabold text-transparent bg-clip-text bg-gradient-to-r from-blue-400 to-purple-500">
            Digital Contact Book
          </h1>
        </div>
        <div class="text-sm text-gray-400">
          User ID: <span id="user-id-display" class="font-mono text-gray-300 break-all">Loading...</span>
        </div>
      </header>

      <!-- Navigation -->
      <nav class="bg-gray-800 p-3 shadow-md flex justify-center space-x-4 md:space-x-8 border-b border-gray-700">
        <button class="nav-btn active px-4 py-2 rounded-lg transition duration-200 flex items-center space-x-2" data-page="contacts-list">
          <i class="fas fa-list-alt"></i>
          <span>All Contacts</span>
        </button>
        <button class="nav-btn px-4 py-2 rounded-lg transition duration-200 flex items-center space-x-2" data-page="add-edit-contact">
          <i class="fas fa-plus-circle"></i>
          <span>Add Contact</span>
```

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        </button>
    </nav>

    <!-- Main Content Area -->
    <main class="container mx-auto p-4 flex-grow">

      <!-- Contacts List Page -->
      <section id="contacts-list-page" class="page active bg-gray-800 p-6 rounded-xl
shadow-lg border border-gray-700 mb-6">
        <h2 class="text-2xl font-bold mb-6 text-blue-300 flex items-center space-x-3">
          <i class="fas fa-users"></i>
          <span>Your Contacts</span>
        </h2>

        <!-- Search and Filter -->
        <div class="flex flex-col md:flex-row gap-4 mb-6">
          <input type="text" id="search-input" placeholder="Search by name, phone, or email..."
              class="flex-grow p-3 rounded-lg bg-gray-700 border border-gray-600 text-white
focus:ring-2 focus:ring-blue-500 focus:border-transparent transition duration-200" />

          <select id="category-filter" class="p-3 rounded-lg bg-gray-700 border border-gray-600
text-white focus:ring-2 focus:ring-blue-500 focus:border-transparent transition duration-200">
            <option value="All">All Categories</option>
            <!-- Categories will be dynamically loaded here -->
          </select>

          <button id="favorite-filter-btn" class="p-3 rounded-lg bg-gray-700 border
border-gray-600 text-white hover:bg-gray-600 focus:ring-2 focus:ring-blue-500 transition
duration-200 flex items-center justify-center space-x-2">
            <i class="far fa-star"></i>
            <span>Show Favorites</span>
          </button>
        </div>

        <!-- Contact Cards Container -->
        <div id="contacts-container" class="grid grid-cols-1 md:grid-cols-2 lg:grid-cols-3
gap-6">
          <p id="no-contacts-message" class="col-span-full text-center text-gray-400 py-8">No
contacts found. Add a new contact to get started!</p>
        </div>
      </section>

      <!-- Add/Edit Contact Page -->
      <section id="add-edit-contact-page" class="page bg-gray-800 p-6 rounded-xl shadow-lg
border border-gray-700 mb-6">
        <h2 id="form-title" class="text-2xl font-bold mb-6 text-blue-300 flex items-center
space-x-3">
          <i class="fas fa-user-plus"></i>
```

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      <span>Add New Contact</span>
    </h2>
    <form id="contact-form" class="space-y-4">
     <div>
       <label for="fullName" class="block text-gray-300 text-sm font-semibold mb-1">Full
Name <span class="text-red-500">*</span></label>
        <input type="text" id="fullName" required
            class="w-full p-3 rounded-lg bg-gray-700 border border-gray-600 text-white
focus:ring-2 focus:ring-blue-500 transition duration-200" />
      </div>

      <div>
       <label class="block text-gray-300 text-sm font-semibold mb-1">Phone Numbers
<span class="text-red-500">*</span></label>
        <div id="phone-inputs-container" class="space-y-2">
         <div class="flex gap-2">
          <input type="tel" class="phone-input flex-grow p-3 rounded-lg bg-gray-700 border
border-gray-600 text-white focus:ring-2 focus:ring-blue-500 transition duration-200"
placeholder="e.g., +1234567890" required />
           <button type="button" class="add-phone-btn p-3 bg-blue-600 hover:bg-blue-700
text-white rounded-lg transition duration-200"><i class="fas fa-plus"></i></button>
         </div>
        </div>
      </div>

      <div>
       <label class="block text-gray-300 text-sm font-semibold mb-1">Email
Addresses</label>
        <div id="email-inputs-container" class="space-y-2">
         <div class="flex gap-2">
          <input type="email" class="email-input flex-grow p-3 rounded-lg bg-gray-700
border border-gray-600 text-white focus:ring-2 focus:ring-blue-500 transition duration-200"
placeholder="e.g., email@example.com" />
           <button type="button" class="add-email-btn p-3 bg-blue-600 hover:bg-blue-700
text-white rounded-lg transition duration-200"><i class="fas fa-plus"></i></button>
         </div>
        </div>
      </div>

      <div>
       <label for="address" class="block text-gray-300 text-sm font-semibold
mb-1">Address</label>
        <textarea id="address" rows="2"
            class="w-full p-3 rounded-lg bg-gray-700 border border-gray-600 text-white
focus:ring-2 focus:ring-blue-500 transition duration-200"></textarea>
      </div>

      <div>
```

```html
        <label for="notes" class="block text-gray-300 text-sm font-semibold
mb-1">Notes</label>
        <textarea id="notes" rows="3"
              class="w-full p-3 rounded-lg bg-gray-700 border border-gray-600 text-white
focus:ring-2 focus:ring-blue-500 transition duration-200"></textarea>
      </div>

      <div>
        <label for="category" class="block text-gray-300 text-sm font-semibold
mb-1">Category</label>
        <div class="flex gap-2 items-center">
          <select id="category" class="flex-grow p-3 rounded-lg bg-gray-700 border
border-gray-600 text-white focus:ring-2 focus:ring-blue-500 transition duration-200">
            <option value="Family">Family</option>
            <option value="Work">Work</option>
            <option value="Friends">Friends</option>
            <option value="Other">Other</option>
          </select>
          <input type="text" id="new-category-input" placeholder="New category" class="p-3
rounded-lg bg-gray-700 border border-gray-600 text-white focus:ring-2 focus:ring-blue-500
transition duration-200 hidden" />
          <button type="button" id="add-category-btn" class="p-3 bg-blue-600
hover:bg-blue-700 text-white rounded-lg transition duration-200"><i class="fas
fa-plus"></i></button>
        </div>
      </div>

      <div class="flex items-center space-x-2">
        <input type="checkbox" id="isFavorite" class="form-checkbox h-5 w-5
text-yellow-500 rounded-md border-gray-600 bg-gray-700 focus:ring-yellow-500" />
        <label for="isFavorite" class="text-gray-300 text-sm font-semibold">Favorite
Contact</label>
      </div>

      <div class="flex justify-end space-x-4">
        <button type="button" id="cancel-form-btn" class="px-6 py-3 bg-gray-600
hover:bg-gray-700 text-white rounded-lg font-semibold transition
duration-200">Cancel</button>
        <button type="submit" id="save-contact-btn" class="px-6 py-3 bg-blue-600
hover:bg-blue-700 text-white rounded-lg font-semibold transition duration-200">Save
Contact</button>
      </div>
    </form>
  </section>

  <!-- Contact Details Page -->
  <section id="contact-details-page" class="page bg-gray-800 p-6 rounded-xl shadow-lg
border border-gray-700 mb-6">
```

```html
        <h2 class="text-2xl font-bold mb-6 text-blue-300 flex items-center space-x-3">
          <i class="fas fa-user-circle"></i>
          <span id="details-full-name">Contact Details</span>
        </h2>

        <div class="space-y-4 text-gray-300">
          <p><strong class="text-blue-200">Favorite:</strong> <span id="details-is-favorite"
class="text-yellow-400"></span></p>
          <p><strong class="text-blue-200">Phone Numbers:</strong> <span
id="details-phone-numbers"></span></p>
          <p><strong class="text-blue-200">Email Addresses:</strong> <span
id="details-email-addresses"></span></p>
          <p><strong class="text-blue-200">Address:</strong> <span
id="details-address"></span></p>
          <p><strong class="text-blue-200">Notes:</strong> <span
id="details-notes"></span></p>
          <p><strong class="text-blue-200">Category:</strong> <span
id="details-category"></span></p>
          <p class="text-sm text-gray-500">Created At: <span
id="details-created-at"></span></p>
          <p class="text-sm text-gray-500">Last Updated: <span
id="details-last-updated"></span></p>
        </div>

        <div class="flex justify-end space-x-4 mt-6">
          <button id="edit-details-btn" class="px-6 py-3 bg-purple-600 hover:bg-purple-700
text-white rounded-lg font-semibold transition duration-200 flex items-center space-x-2">
            <i class="fas fa-edit"></i>
            <span>Edit</span>
          </button>
          <button id="delete-details-btn" class="px-6 py-3 bg-red-600 hover:bg-red-700
text-white rounded-lg font-semibold transition duration-200 flex items-center space-x-2">
            <i class="fas fa-trash-alt"></i>
            <span>Delete</span>
          </button>
          <button id="back-to-list-btn" class="px-6 py-3 bg-gray-600 hover:bg-gray-700
text-white rounded-lg font-semibold transition duration-200 flex items-center space-x-2">
            <i class="fas fa-arrow-left"></i>
            <span>Back to List</span>
          </button>
        </div>
      </section>

    </main>

    <!-- Footer -->
    <footer class="bg-gray-800 p-4 text-center text-gray-400 border-t border-gray-700
mt-auto">
```

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            &copy; 2025 Digital Contact Book. All rights reserved.
        </footer>
    </div>

    <!-- Firebase SDK -->
    <script type="module">
        import { initializeApp } from "https://www.gstatic.com/firebasejs/11.6.1/firebase-app.js";
        import { getAuth, signInAnonymously, signInWithCustomToken, onAuthStateChanged }
from "https://www.gstatic.com/firebasejs/11.6.1/firebase-auth.js";
        import { getFirestore, collection, doc, addDoc, getDoc, updateDoc, deleteDoc,
onSnapshot, query } from "https://www.gstatic.com/firebasejs/11.6.1/firebase-firestore.js";

        // --- Global Firebase Variables ---
        let app;
        let db;
        let auth;
        let userId = null;
        let isAuthReady = false; // Flag to ensure Firebase Auth is initialized and user is
authenticated

        // --- Global Application State ---
        let contacts = []; // Array to store all contacts fetched from Firestore
        let currentContactId = null; // Stores the ID of the contact being viewed/edited
        let currentFilterCategory = 'All'; // Current category filter
        let currentSearchTerm = ''; // Current search term
        let showFavoritesOnly = false; // Toggle for showing only favorite contacts

        // --- DOM Elements ---
        const messageBox = document.getElementById('message-box');
        const userIdDisplay = document.getElementById('user-id-display');
        const navButtons = document.querySelectorAll('.nav-btn');
        const pages = document.querySelectorAll('.page');

        // Contact List Page elements
        const contactsContainer = document.getElementById('contacts-container');
        const noContactsMessage = document.getElementById('no-contacts-message');
        const searchInput = document.getElementById('search-input');
        const categoryFilter = document.getElementById('category-filter');
        const favoriteFilterBtn = document.getElementById('favorite-filter-btn');

        // Add/Edit Contact Page elements
        const contactForm = document.getElementById('contact-form');
        const formTitle = document.getElementById('form-title');
        const fullNameInput = document.getElementById('fullName');
        const phoneInputsContainer = document.getElementById('phone-inputs-container');
        const emailInputsContainer = document.getElementById('email-inputs-container');
        const addressInput = document.getElementById('address');
        const notesInput = document.getElementById('notes');
```

```javascript
    const categorySelect = document.getElementById('category');
    const newCategoryInput = document.getElementById('new-category-input');
    const addCategoryBtn = document.getElementById('add-category-btn');
    const isFavoriteCheckbox = document.getElementById('isFavorite');
    const cancelFormBtn = document.getElementById('cancel-form-btn');
    const saveContactBtn = document.getElementById('save-contact-btn');

    // Contact Details Page elements
    const detailsFullName = document.getElementById('details-full-name');
    const detailsIsFavorite = document.getElementById('details-is-favorite');
    const detailsPhoneNumbers = document.getElementById('details-phone-numbers');
    const detailsEmailAddresses = document.getElementById('details-email-addresses');
    const detailsAddress = document.getElementById('details-address');
    const detailsNotes = document.getElementById('details-notes');
    const detailsCategory = document.getElementById('details-category');
    const detailsCreatedAt = document.getElementById('details-created-at');
    const detailsLastUpdated = document.getElementById('details-last-updated');
    const editDetailsBtn = document.getElementById('edit-details-btn');
    const deleteDetailsBtn = document.getElementById('delete-details-btn');
    const backToListBtn = document.getElementById('back-to-list-btn');

    // Delete Modal elements
    const deleteModal = document.getElementById('delete-modal');
    const confirmDeleteBtn = document.getElementById('confirm-delete-btn');
    const cancelDeleteBtn = document.getElementById('cancel-delete-btn');

    // --- Utility Functions ---

    /**
     * Displays a temporary message box to the user.
     * @param {string} message - The message to display.
     * @param {'success' | 'danger' | 'info'} type - The type of message (determines color).
     */
    function showMessageBox(message, type = 'info') {
      messageBox.textContent = message;
      messageBox.className = 'fixed top-5 left-1/2 -translate-x-1/2 p-4 rounded-lg shadow-lg
font-semibold z-50 transition-all duration-300 ease-out';
      if (type === 'success') {
        messageBox.classList.add('bg-green-500', 'text-white');
      } else if (type === 'danger') {
        messageBox.classList.add('bg-red-500', 'text-white');
      } else { // info
        messageBox.classList.add('bg-blue-500', 'text-white');
      }
      messageBox.style.display = 'block';
      setTimeout(() => {
        messageBox.style.display = 'none';
      }, 3000);
```

```javascript
  }

  /**
   * Switches the active page view.
   * @param {string} pageId - The ID of the page to show (e.g., 'contacts-list',
'add-edit-contact', 'contact-details').
   */
  function showPage(pageId) {
    pages.forEach(page => {
      page.classList.remove('active');
    });
    document.getElementById(`${pageId}-page`).classList.add('active');

    navButtons.forEach(btn => {
      btn.classList.remove('bg-blue-600', 'text-white');
      btn.classList.add('bg-gray-700', 'text-gray-300', 'hover:bg-gray-600');
      if (btn.dataset.page === pageId) {
        btn.classList.add('bg-blue-600', 'text-white');
        btn.classList.remove('bg-gray-700', 'text-gray-300', 'hover:bg-gray-600');
      }
    });

    // Specific actions when navigating to a page
    if (pageId === 'add-edit-contact') {
      clearContactForm(); // Always clear form when navigating to Add/Edit page
      currentContactId = null; // Ensure it's for adding new contact by default
      formTitle.innerHTML = '<i class="fas fa-user-plus"></i> <span>Add New
Contact</span>';
      saveContactBtn.textContent = 'Save Contact';
    } else if (pageId === 'contacts-list') {
      renderContactList(); // Re-render list to apply current filters/search
    }
  }

  /**
   * Adds an input field for phone number or email.
   * @param {HTMLElement} container - The container element for inputs.
   * @param {string} type - 'tel' for phone, 'email' for email.
   * @param {string} placeh
```