**UserProfileApp**

**Overview**

UserProfileApp is an ASP.NET Core web application that allows users to register, manage their profiles, upload profile pictures, and manage files (PDF, DOC). The app includes user authentication, role-based access control, and a responsive UI built with Bootstrap.

**Features**

* **User Registration & Authentication**:
  + Register new users with username, password, and validation for password complexity (minimum 8 characters, 1 capital letter, 1 small letter, and 1 number).
  + Secure login and logout functionality.
  + Role-based access control to different sections of the application.
* **Profile Management**:
  + Users can update their profile information including first name, last name, address, and phone number.
  + Profile pictures can be uploaded and displayed on the profile page.
  + The uploaded profile picture is stored in a path structured as /uploads/{UserId}/{UserId}\_profile.jpg.
* **File Uploads**:
  + Users can upload files (PDF, DOC) to their profile.
  + Uploaded files are listed on the profile page with options to download or delete.
  + Files are stored in a directory structured as /uploads/{UserId}/{FileName}.
* **Data Storage**:
  + User profile data, including profile pictures and files, are stored using an InMemoryDb in combination with the ApplicationDbContext class, which extends IdentityDbContext<IdentityUser>.
* **Validation**:
  + User input is validated using Data Annotations.
  + Passwords have a minimum complexity requirement, and the username must be at least 3 characters long and alphanumeric.
  + Profile picture uploads are restricted to image formats (JPG, PNG, GIF).
  + File uploads are restricted to document formats (PDF, DOC, DOCX).

**Project Structure**

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UserProfileApp/

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├── Controllers/

│ ├── AccountController.cs // Handles user registration, login, and logout

│ └── ProfileController.cs // Manages user profile, file uploads, and profile picture uploads

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├── Models/

│ ├── UserProfile.cs // User profile model with details like Name, Address, PhoneNumber

│ └── FileInfo.cs // Stores details of uploaded files for each user

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├── Views/

│ ├── Account/

│ │ └── Register.cshtml // User registration page

│ ├── Profile/

│ │ └── Index.cshtml // Main profile page (edit profile, upload files, view uploaded files)

│ └── Shared/

│ └── \_Layout.cshtml // Shared layout for all views

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├── wwwroot/

│ ├── uploads/ // Stores uploaded files and profile pictures

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├── Data/

│ └── ApplicationDbContext.cs // In-memory database with Identity support

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└── Startup.cs // Configures services and the app's middleware

**Installation and Setup**

**Prerequisites**

* [.NET Core SDK](https://dotnet.microsoft.com/download) 8.0 or higher.
* [Visual Studio](https://visualstudio.microsoft.com/) (recommended for development).

**Ensure the wwwroot/uploads directory has appropriate write permissions.**