**DpWorld Employee Management App**

**Tech Stack:**

* **Frontend:** Angular 17, Angular Material
* **Backend:** ASP.NET Core 8, Entity Framework Core, ASP.NET Identity
* **Authentication:** JWT (JSON Web Token)
* **Database:** (e.g., SQL Server, SQLite – specify your actual DB)

**1. Overview**

This web application allows company admins to manage employees and track attendance, while employees can check in daily and view their profiles and attendance history. The system enforces role-based access and secure authentication.

**2. Features**

**Admin**

* Add, edit, and delete employees (with validation)
* View paginated, sortable, and filterable employee list
* Track daily and weekly attendance for all employees
* View employee signatures

**Employee**

* View personal profile and weekly attendance summary
* Daily check-in (only once per day, between 7:30 AM and 9:00 AM)
* Upload or draw a signature (if not already set)
* View check-in history

**3. Architecture**

**Frontend (Angular)**

* **Modules:** Auth, Admin, Employee (lazy-loaded)
* **Routing:** Role-based guards, JWT-protected routes
* **UI:** Angular Material for responsive design
* **State:** Services for API communication, localStorage for JWT
* **Forms:** Reactive Forms for validation
* **HTTP:** Interceptors attach JWT to all API requests

**Backend (ASP.NET Core)**

* **Controllers:** Separate for Admin and Employee
* **Services:** UserService, AttendanceService (DI via interfaces)
* **Authentication:** ASP.NET Identity, JWT tokens
* **Database:** Stores users, attendance, and signatures (as base64)
* **Validation:** DTOs and model validation
* **API Docs:** Swagger/Swashbuckle enabled

**4. Database Schema (Simplified)**

* **Users**
* Id (PK)
* FirstName, LastName, Email, UserName, PhoneNumber, NationalId, Age, PasswordHash, Role, SignatureUrl
* **Attendance**
* Id (PK)
* UserId (FK)
* CheckInTime (DateTime)

**5. Setup & Usage**

**Backend**

1. **Install dependencies:**

dotnet restore

1. **Update DB (if needed):**

dotnet ef database update

1. **Run the server:**

dotnet run

1. **API available at:**

https://localhost:7029/api/

**Frontend**

1. **Install dependencies:**

npm install

1. **Run Angular dev server (with proxy):**

ng serve --proxy-config proxy.conf.json

1. **App available at:**

http://localhost:53142/

**6. Security**

* JWT-based authentication for all API calls
* Role-based route guards (Admin/Employee)
* Passwords hashed via ASP.NET Identity
* CORS and HTTPS enforced

**7. Usage Guide**

* **Admin Login:** Use credentials provided by the system or seeded in the DB.
* **Add Employee:** Fill out all required fields, including email and password.
* **Employee Login:** Use credentials provided by admin.
* **Check-In:** Employees can check in once per day, only between 7:30 AM and 9:00 AM.
* **Signature:** Employees can upload a signature image if not already set.