IdentityService

IdentityService is a microservice that handles user authentication and authorization using JWT (JSON Web Tokens). It leverages ASP.NET Core Identity and SQL Server for user management, including password hashing and validation.

Features

- User authentication using JWT tokens.
- Secure password hashing with ASP.NET Core Identity.
- Async methods for efficient user management and authentication.
- SQL Server integration for user data storage.
- Initial user seeding for testing (`mehran` and `admin` users).
- RESTful API for user login.

Prerequisites

- .NET 8 SDK
- SQL Server
- Entity Framework Core (included in the project)

Getting Started

1. Clone the repository

```
git clone <repository-url>
cd backend/IdentityService
```

2. Update the Configuration

Update the connection string in `appsettings.json` to match your SQL Server configuration:

```
{
  "ConnectionStrings": {
    "DefaultConnection": "Server=your_server;Database=IdentityServiceDb;User Id=your_user;Password=your_password;"
  },
  "Jwt": {
    "Key": "MehranSecureKeyThatIsAtLeast32BytesLongIII",
    "Issuer": "IdentityService",
    "Audience": "Kasbotech",
    "Subject": "IdentityKasbo"
  }
}
```

3. Run Database Migrations

Run the following commands to create the database and apply the migrations:

```
dotnet ef migrations add InitialCreate
dotnet ef database update
```

4. Run the Application:

```
dotnet run
```

The service will now be running at `https://localhost:7069/` (or another port, depending on your configuration).

5. Seed Initial Users

On startup, the application will seed two initial users:

- Username: **mehran** , Password: **password**
- Username: **admin** , Password: **admin**

These users are seeded once in the database and can be used to test the login functionality.

API Endpoints

POST `/api/auth/login`

Authenticate a user and receive a JWT token.

Request :

```
{
  "username": "mehran",
  "password": "password"
}
```

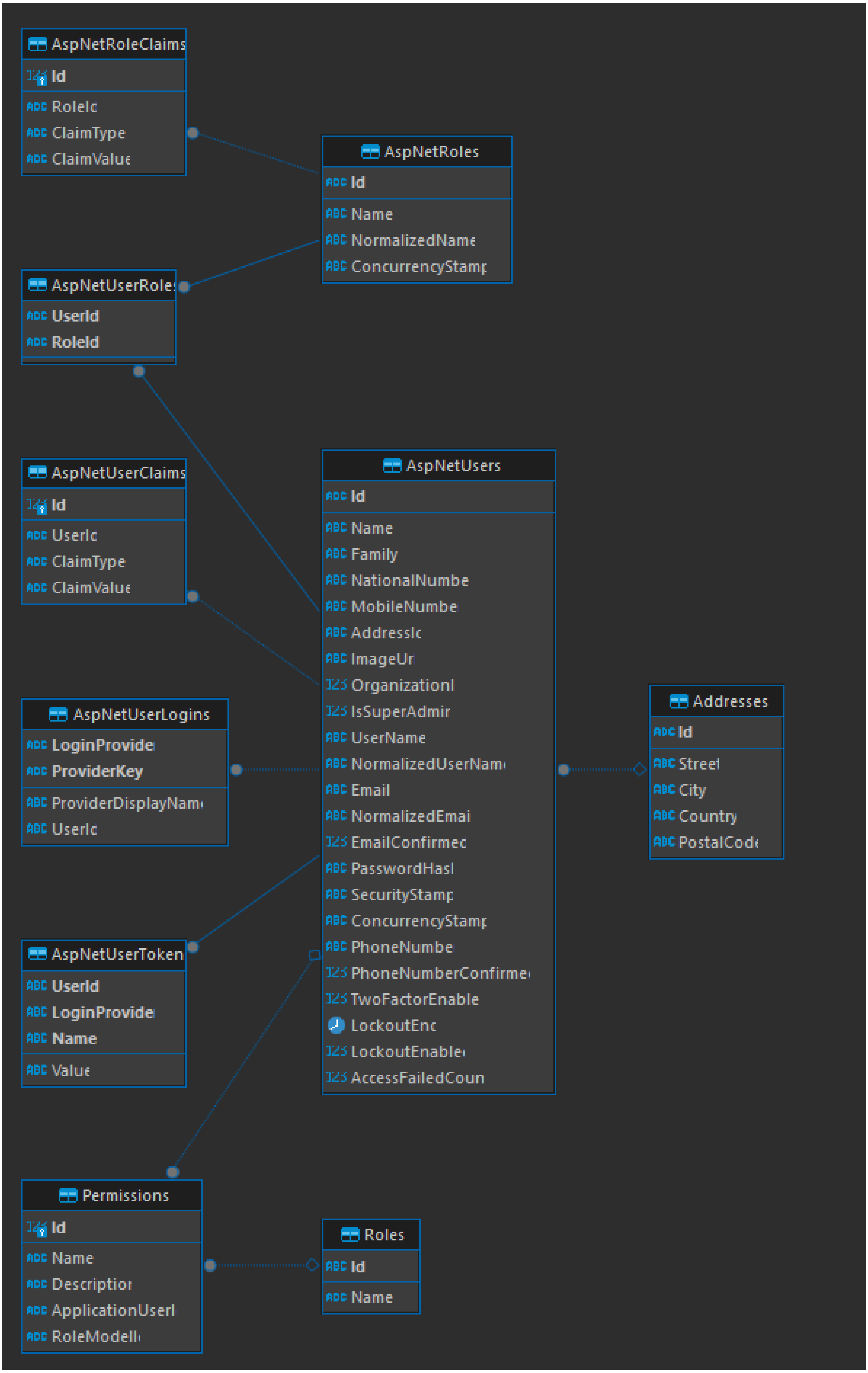
Response (Success) :

```
{
  "username": "mehran",
  "email": "mehran@example.com",
  "token": "<JWT_TOKEN>"
}
```

Response (Failure) :

```
{
  "error": "Invalid credentials"
}
```

Identity ER Diagram:


AspNetRoleClaims
Id
Roleld
ClaimType
ClaimValue
AspNetRoles
Id
Name
NormalizedName
ConcurrencyStamp
AspNetUserRoles
UserId
RoleId
AspNetUserClaims
Id
Userld
ClaimType
ClaimValue
AspNetUsers
Id
Name
Family
NationalNumbe
MobileNumbe
Addressld
ImageUr
OrganizationI
IsSuperAdmir
UserName
NormalizedUserNam
Email
NormalizedEmai
EmailConfirmec
PasswordHasl
SecurityStamp
ConcurrencyStamp
PhoneNumbe
PhoneNumberConfirme
TwoFactorEnable
LockoutEnc
LockoutEnable
AccessFailedCoun
Addresses
Id
Street
City
Country
PostalCode
AspNetUserLogins
LoginProvide
ProviderKey
ProviderDisplayNam
Userld
AspNetUserToken
UserId
LoginProvide
Name
Value
Permissions
Id
Name
Descriptior
ApplicationUserl
RoleModell
Roles
Id
Name