# ASP.NET Core Web API - JWT Authentication and Authorization Guide

## Step 1: Setup (Already Completed)

• Installed required NuGet packages  
• Configured JWT authentication in Program.cs  
• Configured Identity and DB connection in appsettings.json

## Step 2: Create ApplicationUser and ApplicationDbContext

File: Authentication/ApplicationUser.cs  
public class ApplicationUser : IdentityUser { public string FullName { get; set; } }  
  
File: Authentication/ApplicationDbContext.cs  
public class ApplicationDbContext : IdentityDbContext<ApplicationUser> { ... }

## Step 3: Create Models

RegisterModel.cs and LoginModel.cs with basic fields for user registration and login.

## Step 4: Create AuthController

Implements /register and /login endpoints.  
Generates JWT token and adds role claims.  
Uses UserManager and IConfiguration.

## Step 5: Seed Roles (Admin, User)

In Program.cs, use a scoped service to create roles during application startup.

## Step 6: Secure Endpoints

[Authorize] and [Authorize(Roles = "Admin")] attributes on API methods.

## Step 7: Test in Swagger

• Register a user using /api/auth/register  
• Login to get JWT using /api/auth/login  
• Use Authorize button to test secured endpoints