

Model

```
namespace Day12.Models
{
    public class CM
    {
        public int ID { get; set; }

        public string Name { get; set; }

        public string State { get; set; }

        public string Language { get; set; }
    }
}

namespace Day12.Security
{
    public class JwtOptions
    {
        public string Issuer { get; set; }

        public string Audience { get; set; }
        public string key { get; set; }
        public string ExpireMinutes { get; set; }
    }
}
```

Service

```
using Microsoft.IdentityModel.Tokens;
using System.IdentityModel.Tokens.Jwt;
using System.Security.Claims;
using System.Text;

namespace Day12.Security
{
    public class JwtService
    {
        public static string CreateJWTToken(JwtOptions options, IEnumerable<Claim> claims)
        {
            var creds = new SigningCredentials(new
            SymmetricSecurityKey(Encoding.UTF8.GetBytes(options.key)),
            SecurityAlgorithms.HmacSha256);
```

```
var token = new JwtSecurityToken(  
    issuer: options.Issuer,  
    audience: options.Audience,  
    claims: claims,  
    expires: DateTime.Now.AddMinutes(30),  
    signingCredentials: creds);  
  
return new JwtSecurityTokenHandler().WriteToken(token);  
}  
}  
}
```

Controller

```
using Day12.Context;  
using Day12.Models;  
using Microsoft.AspNetCore.Authorization;  
using Microsoft.AspNetCore.Mvc;  
using Microsoft.EntityFrameworkCore;  
  
namespace Day12.Controllers  
{  
    public class CMController : Controller  
    {  
        MyAppDbContext appDbContext;  
  
        public CMController(MyAppDbContext DbContext)  
        {  
            appDbContext = DbContext;  
        }  
  
        [Authorize(Roles = "Admin")]  
        [HttpPost("AddCM")]  
        public IActionResult AddCM(CM cm)  
        {  
            appDbContext.CMTable.Add(cm);  
            appDbContext.SaveChanges();  
            return Ok("CM Added");  
        }  
  
        [Authorize(Roles = "Officer")]  
        [HttpGet("GetAllCM")]
```

```
public IActionResult GetAllCM()
{
    var AllCM = appDbContext.CMTable.ToList();
    return Ok(AllCM);
}
}
```

Program.cs

```
using Day12.Context;
using Day12.Security;
using Microsoft.AspNetCore.Authentication.JwtBearer;
using Microsoft.EntityFrameworkCore;
using Microsoft.IdentityModel.Tokens;
using System.Security.Claims;
using System.Text;

var builder = WebApplication.CreateBuilder(args);

builder.Services.AddControllers();
string connectionString = builder.Configuration.GetConnectionString("DefaultConnection");

builder.Services.Configure<JwtOptions>(builder.Configuration.GetSection("Jwt"));
var jwt = builder.Configuration.GetSection("Jwt");
var issuer = jwt["Issuer"];
var audience = jwt["Audience"];
var key = new SymmetricSecurityKey(Encoding.UTF8.GetBytes(jwt["key"]));

builder.Services.AddAuthentication(options =>
{
    options.DefaultAuthenticateScheme = JwtBearerDefaults.AuthenticationScheme;
    options.DefaultChallengeScheme = JwtBearerDefaults.AuthenticationScheme;
}).AddJwtBearer(options =>
{
    options.TokenValidationParameters = new TokenValidationParameters
    {
        ValidIssuer = issuer,
        ValidAudience = audience,
        IssuerSigningKey = key,
        ValidateIssuer = true,
```



```
var app = builder.Build();

if (app.Environment.IsDevelopment())
{
    app.UseSwagger();
    app.UseSwaggerUI();
}

app.UseHttpsRedirection();

app.UseAuthorization();

app.MapControllers();

app.Run();

public class JwtSettings
{
    public string SecretKey { get; set; }
    public string Issuer { get; set; }
    public string Audience { get; set; }
    public int ExpiryInMinutes { get; set; }
}
```

Output

The screenshot displays a web browser window with a 403 error. The Request URL is `https://localhost:7196/GetAllICM`. The Server response section shows a table with the following details:

Code	Details
403 <i>undocumented</i>	Error: response status is 403

Below the table, the Response headers are listed:

```
content-length: 0
date: Thu, 21 Aug 2025 12:23:00 GMT
server: Kestrel
```

Request URL

```
https://localhost:7196/GetAllICM
```

Server response

Code	Details
200	<p>Response body</p> <pre>[{ "id": 1, "name": "Vijay", "state": "Tamil Nadu", "language": "Tamil" }]</pre> <p>Response headers</p> <pre>content-type: application/json; charset=utf-8 date: Thu, 21 Aug 2025 12:23:50 GMT server: Kestrel</pre>

Request URL

```
https://localhost:7196/AddCM?Name=Modi&State=Andra&Language=Telugu
```

Server response

Code	Details
403 <i>Undocumented</i>	<p>Error: response status is 403</p> <p>Response headers</p> <pre>content-length: 0 date: Thu, 21 Aug 2025 12:24:42 GMT server: Kestrel</pre>

Request URL

```
https://localhost:7196/AddCM?Name=Modi&State=Andra&Language=Telugu
```

Server response

Code	Details
200	<p>Response body</p> <pre>OK Added</pre>