# You

How do I generate a OAuth or JWT token from repository in a VS code folder that is hosted to the web through the five server extension?

#### Copilot

Certainly! To generate an OAuth or JWT token in a .NET 5.0 API hosted through the Five Server extension, follow these steps:

#### 1. Create a .NET 5.0 API Project with JWT Authentication:

• You can start by creating an empty web project using the .NET CLI:

```
dotnet new web -o MyJWT
  cd MyJWT
  dotnet add package Microsoft.AspNetCore.Authentication.JwtBearer
• Add JWT authentication to your project by configuring it in Program.cs:
```

```
// Add this line to your Program.cs
builder.Services.AddAuthentication(JwtBearerDefaults.AuthenticationScheme).AddJwtBearer(options =>
    options.TokenValidationParameters = new TokenValidationParameters
         ValidateAudience = true.
         ValidAudience = "domain.com", // Replace with your domain
         ValidateIssuer = true,
ValidIssuer = "domain.com", // Replace with your domain
         ValidateLifetime = true,
         ValidateIssuerSigningKey = true,
         IssuerSigningKey = new SymmetricSecurityKey(System.Text.Encoding.UTF8.GetBytes("YOUR_SECRET_KEY")) // Use a secret key (GUID recommended)
    };
});
```

# 2. Run the API Locally:

- Download or clone the tutorial project code from <u>here</u>.
- Navigate to the project root folder and run:

```
dotnet run
```

• The API will be available at <a href="http://localhost:4000">http://localhost:4000</a>.

# 3. Test with Postman:

- o Download and install Postman
- Authenticate a user to get a JWT token from the API:
  - Send an HTTP POST request to /users/authenticate with the username and password in the request body.
  - If the credentials are correct, you'll receive a JWT token.
- Make an authenticated request to retrieve a list of users:
  - Send an HTTP GET request to /users with the JWT token in the Authorization header.

Remember to replace placeholders like "domain.com" and "YOUR\_SECRET\_KEY" with your actual values. Let me know if you need further assistance!



# You

How can I a google cloud console agent builder widget on my localhost?

# Copilot

Certainly! To add a Google Cloud Console Agent Builder widget to your localhost, follow these steps:

#### 1. Configure Results for the Search Widget:

- o In the Google Cloud console, go to the Agent Builder page.
- o Click the name of the search app you want to edit.
- · Configure how the widget displays search results for unstructured data. You can find more details in the official documentation.

### 2. Add the Search Widget:

- o Go to the Agent Builder page in the Google Cloud console.
- Click the name of the app you want to edit.
- Click Integration, then navigate to the Widget tab.
- o Choose either JWT or OAuth-based as the widget authorization type.
- Specify the domain name for the widget page (e.g., localhost for testing).
- Click Add for each domain where the widget will appear.
- o Copy the code snippet provided in the "Copy the following code to your web application" section.
- In your codebase, generate an authorization token and pass it to your widget using the second code snippet provided.

# 3. Configure Widget Feedback (Optional):

- o If you want to enable feedback buttons, go to the Agent Builder page.
- Click the name of the search app you want to edit.
- Navigate to Configurations > UI.
- o Toggle "Enable feedback" to turn feedback buttons on or off.
- o Save and publish your changes.

Remember to replace placeholders with your actual values. Let me know if you need further assistance!



How can I generate the authorization token in VS code if testing with localhost?

Certainly! To generate an authorization token for testing with localhost in VS Code, follow these steps:

#### 1. Create a JWT Token (for testing):

- o If you're using JWT (JSON Web Tokens) for authentication, you can create a token manually or use a library to generate it.
- o In your .NET 5.0 API (or any other backend), create a method that generates a JWT token. You'll need a secret key and the necessary claims (e.g., user ID,
- Here's a simplified example using the System.IdentityModel.Tokens.Jwt package:

```
using System;
using System.IdentityModel.Tokens.Jwt;
using System.Security.Claims;
using System.Text;
using Microsoft.IdentityModel.Tokens;
var secretKey = "YOUR_SECRET_KEY"; // Replace with your actual secret key
var key = new SymmetricSecurityKey(Encoding.UTF8.GetBytes(secretKey));
var creds = new SigningCredentials(key, SecurityAlgorithms.HmacSha256);
var claims = new[]
     new Claim(ClaimTypes.Name, "your_username"),
// Add other claims as needed (e.g., roles)
};
var token = new JwtSecurityToken(
   issuer: "localhost",
   audience: "localhost",
     claims: claims,
     expires: DateTime.UtcNow.AddHours(1),
     signingCredentials: creds
var tokenString = new JwtSecurityTokenHandler().WriteToken(token);
Console.WriteLine($"Generated token: {tokenString}");
```

o Replace "your\_username" and other claims with actual values.

#### 2. Use the Token in Your Widget:

- o Once you have the token, pass it to your Google Cloud Console Agent Builder widget.
- o If the widget expects the token in the request headers, set the Authorization header to "Bearer {your\_token}".

Remember to replace placeholders like "YOUR\_SECRET\_KEY" and "your\_username" with your actual values. Let me know if you need further assistance!

