## **Objective:**

Learn about how to setup authorization in ASP.NET Core. Learn what a JWT token is and how to setup Bearer scheme authorization in ASP.NET Core.

## **Theory:**

- <a href="https://docs.microsoft.com/en-us/aspnet/core/security/authen-tication/?view=aspnetcore-6.0">https://docs.microsoft.com/en-us/aspnet/core/security/authen-tication/?view=aspnetcore-6.0</a>
- <a href="https://docs.microsoft.com/en-us/aspnet/core/security/authorization/introduction?view=aspnetcore-6.0">https://docs.microsoft.com/en-us/aspnet/core/security/authorization/introduction?view=aspnetcore-6.0</a>
- <a href="https://codepedia.info/jwt-authentication-in-aspnet-core-web-api-token">https://codepedia.info/jwt-authentication-in-aspnet-core-web-api-token</a>
- <a href="https://docs.microsoft.com/en-us/aspnet/identity/overview/getting-started/introduction-to-aspnet-identity">https://docs.microsoft.com/en-us/aspnet/identity/overview/getting-started/introduction-to-aspnet-identity</a>

## Task:

**Deadline:** 4-5 days **Requirements**:

- Learn about how authorization is configured in ASP.NET Core.
- Learn about JWT token
- Implement JWT authorization in our web application. Authorization is simple, 2 roles: admin and customer. Authorization is based on email and password.
- Decorate all controllers/endpoints with authorize attribute.
- For login and registration create a simple html view with a couple of inputs to submit data. Technologies are up to you.

## Answer all of these questions to be prepared:

- 1. What is authentication and authorization?
- 2. What is JWT token, what are the main components of this token?
- 3. Explain JWT flow

- a. What access and refresh tokens are responsible for?
- b. Can a server have only access tokens without refresh ones? If yes what's pros and cons of such solution
- c. What pros and cons of storing access/refresh tokens in a database compared to not storing it?
- d. How does a modern web application understand a client is unauthorized?