

ASP.NET Core Web API – Full Interview Guide

Comprehensive interview questions and answers covering ASP.NET Core Web API, EF Core, Authentication, React integration, and common interview traps.

ASP.NET Core Web API Basics

Q: What is ASP.NET Core Web API?

A: It is a framework for building RESTful HTTP services that return JSON/XML and run cross-platform.

Q: What is REST?

A: REST is an architectural style using HTTP methods like GET, POST, PUT, DELETE.

Controllers & Routing

Q: What is ApiController?

A: It provides automatic validation, binding, and error responses.

Q: Attribute routing vs conventional routing?

A: Attribute routing defines routes on controllers, conventional uses central config.

Async & EF Core

Q: Why async/await?

A: Prevents thread blocking and improves scalability.

Q: FirstOrDefault vs FirstOrDefaultAsync?

A: Async version is non-blocking and recommended in Web API.

Dependency Injection

Q: What is DI?

A: A design pattern to inject dependencies instead of creating them manually.

Q: Transient vs Scoped vs Singleton?

A: Transient: new instance. Scoped: per request. Singleton: one instance.

Authentication & Authorization

Q: What is JWT?

A: JSON Web Token used for stateless authentication.

Q: Authentication vs Authorization?

A: Authentication checks identity, authorization checks permissions.

DTOs

Q: Why use DTOs?

A: To prevent overposting and hide sensitive fields.

Final Interview Tips

Explain your approach clearly, use async methods, mention DTOs and DI, and stay calm.
Interviewers value clarity over perfection.