

# ASP.NET Core Controller Assignments & Interview Questions

## ASP.NET Core Controller-Based Assignments

### - Basic Assignments:

- Create a HomeController with actions: Index, About, Contact. Return different ContentResult messages for each.
- Create an action /user/info that returns JSON: { "firstName": "Momin", "role": "Developer" } using JsonResult.
- Create a route /greet?name=Momin and display 'Hello Momin!' by reading the query string.

### - Intermediate Assignments:

- Create 3 endpoints: one returns ContentResult, one returns FileResult (pdf/txt), one returns JsonResult.
- Validate login credentials in /login?username=admin&password=123. Return BadRequestResult or UnauthorizedResult.
- Create a /start route that redirects to /dashboard using RedirectToAction.

### - Advanced Assignments:

- Use IActionResult return type to randomly return Ok(), NotFound(), or BadRequest() based on a query or route value.
- Create a FileContentResult endpoint that returns a .txt file from a byte array.
- Return StatusCode(204) if stock quantity is 0 in a stock-checking endpoint.

## ASP.NET Core Controller Interview Questions

### - Theory Questions:

- What is a controller in ASP.NET Core and what's its role?
- What's the difference between [Controller] and [ApiController]?
- What is IActionResult and why do we use it?

### - Practical / Scenario-Based Questions:

- How do you return JSON data from a controller action?
- What are different types of ActionResult youve used?
- How do you return a file from a controller action?
- How do you return a custom status code or error response?
- How do you redirect to another action or URL from a controller?