



Arctech Info Private Limited

REST APIs with .NET and C#



REST APIs with .NET and C#

- ASP.NET makes it easy to build services that reach a broad range of clients, including browsers and mobile devices.
- With ASP.NET you use the same framework and patterns to build both web pages and services, side-by-side in the same project.





Simple serialization

- ASP.NET was designed for modern web experiences.
- Endpoints automatically serialize your classes to properly formatted JSON out of the box.
- No special configuration is required.
- Of course, serialization can be customized for endpoints that have unique requirement

```
[ApiController]
public class PeopleController : ControllerBase
{
    [HttpGet("people/all")]
    public ActionResult<IEnumerable<Person>> GetAll()
    {
        return new []
        {
            new Person { Name = "Raman" },
            new Person { Name = "Kappan" },
            new Person { Name = "Sheela" }
        };
    }
}

public class Person
{
    public string Name { get; set; }
}
```

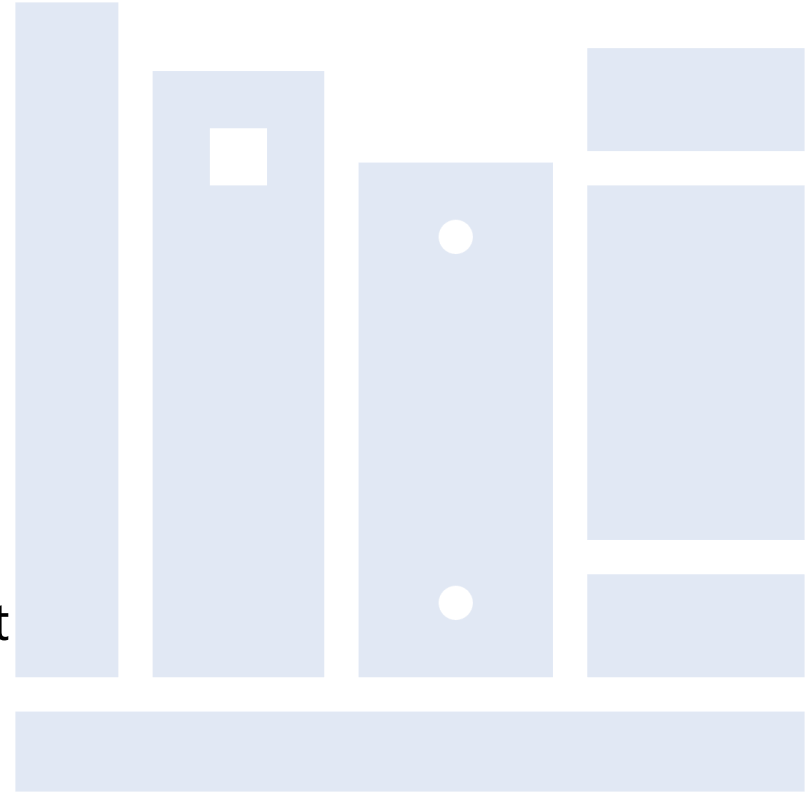
<https://localhost:5001/people/all>

```
[{"name": "Ana"}, {"name": "Felipe"}, {"name": "Emillia"}]
```



Authentication and authorization

- Secure API endpoints with built-in support for industry standard JSON Web Tokens (JWT).
Policy-based authorization gives you the flexibility to define powerful access control rules—all in code.





Routing alongside your code

- ASP.NET lets you define routes and verbs inline with your code, using attributes.
- Data from the request path, query string, and request body are automatically bound to method parameters

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        return new []
        {
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            new Person { Name = "Kappan" },
            new Person { Name = "Sheela" }
        };
    }

    [HttpPost("people/create")]
    public IActionResult Create(Person person)
    {
        db.Add(person);
        db.SaveChanges();
        return Accepted();
    }
}
```



Thank You

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