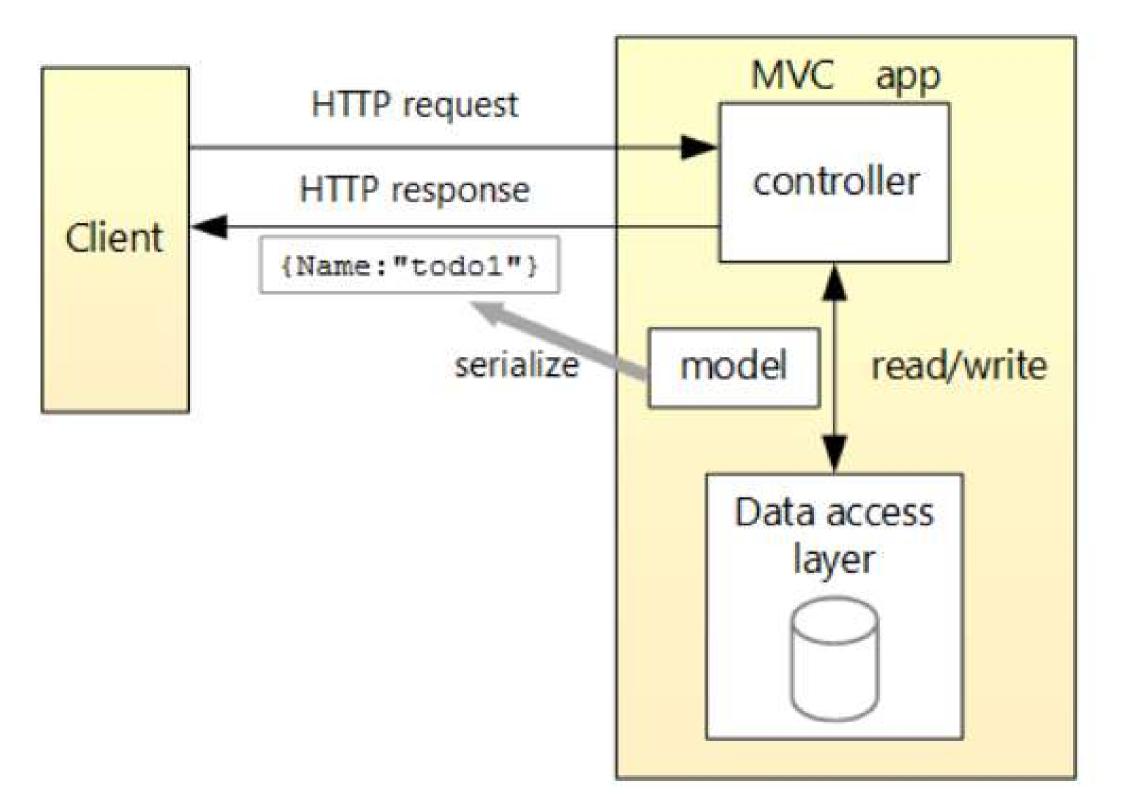
API	Description	Request body	Response body
GET /api/todoitems	Get all to-do items	None	Array of to-do items
<pre>GET /api/todoitems/{id}</pre>	Get an item by ID	None	To-do item
POST /api/todoitems	Add a new item	To-do item	To-do item
PUT /api/todoitems/{id}	Update an existing item	To-do item	None
DELETE /api/todoitems/{id}	Delete an item	None	None



/orklo	ads Individual components Language p	acks	Installation locations	
① Ne	ed help choosing what to install? More info			
/eb &	Cloud (4)			
	ASP.NET and web development Build web applications using ASP.NET Core, ASP.NET, HTML/JavaScript, and Containers including Docker supp		Azure development Azure SDKs, tools, and projects for developing cloud apps and creating resources using .NET and .NET Framework	
2	Python development Editing, debugging, interactive development and source control for Python.		Node.js development Build scalable network applications using Node.js, an asynchronous event-driven JavaScript runtime.	
Deskto	p & Mobile (5)			
X	Mobile development with .NET Build cross-platform applications for iOS, Android or Windows using Xamarin. This includes a preview of the		.NET desktop development Build WPF, Windows Forms, and console applications using C#, Visual Basic, and F# with .NET and .NET Frame	

Visual Studio 2022

Open recent

As you use Visual Studio, any projects, folders, or files that you open will show up here for quick access.

You can pin anything that you open frequently so that it's always at the top of the list.

Get started



Clone a repository

Get code from an online repository like GitHub or Azure DevOps



Open a project or solution

Open a local Visual Studio project or .sln file



Open a local folder

Navigate and edit code within any folder



Create a new project

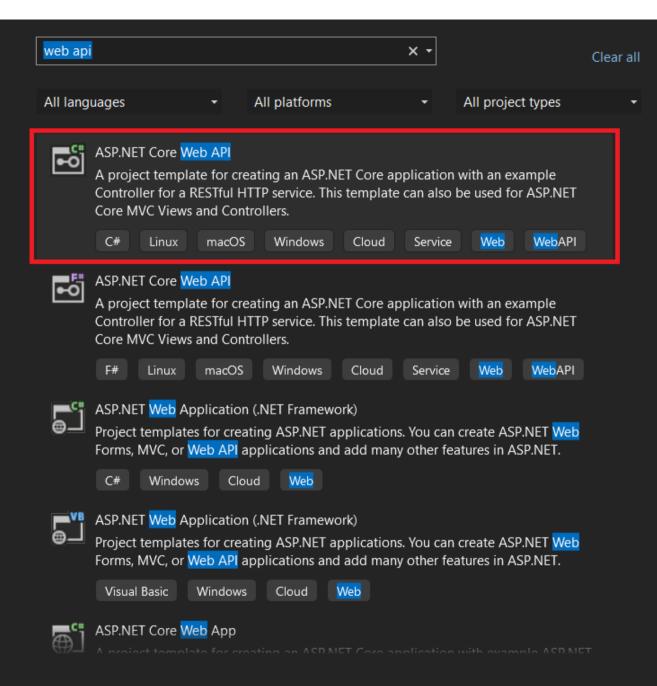
Choose a project template with code scaffolding to get started

Continue without code →

Create a new project

Recent project templates

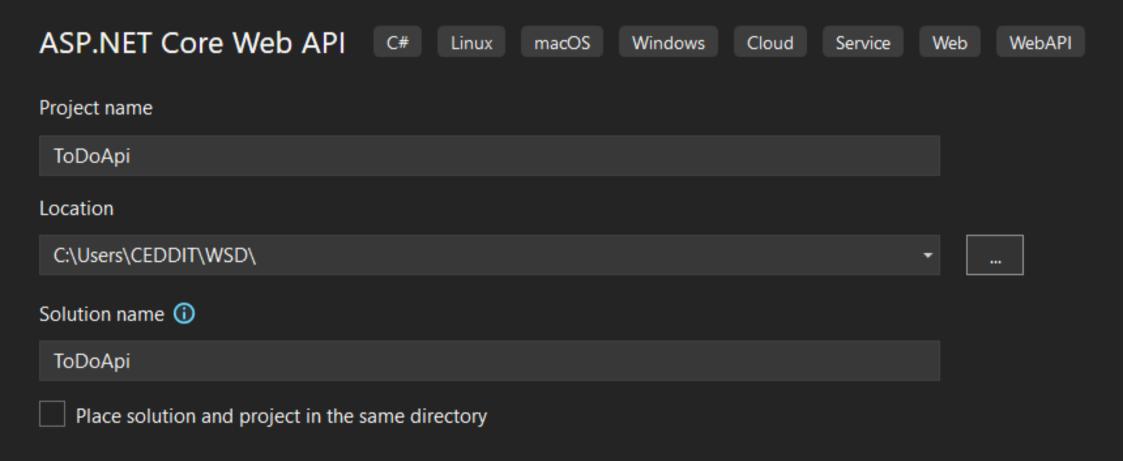
A list of your recently accessed templates will be displayed here.



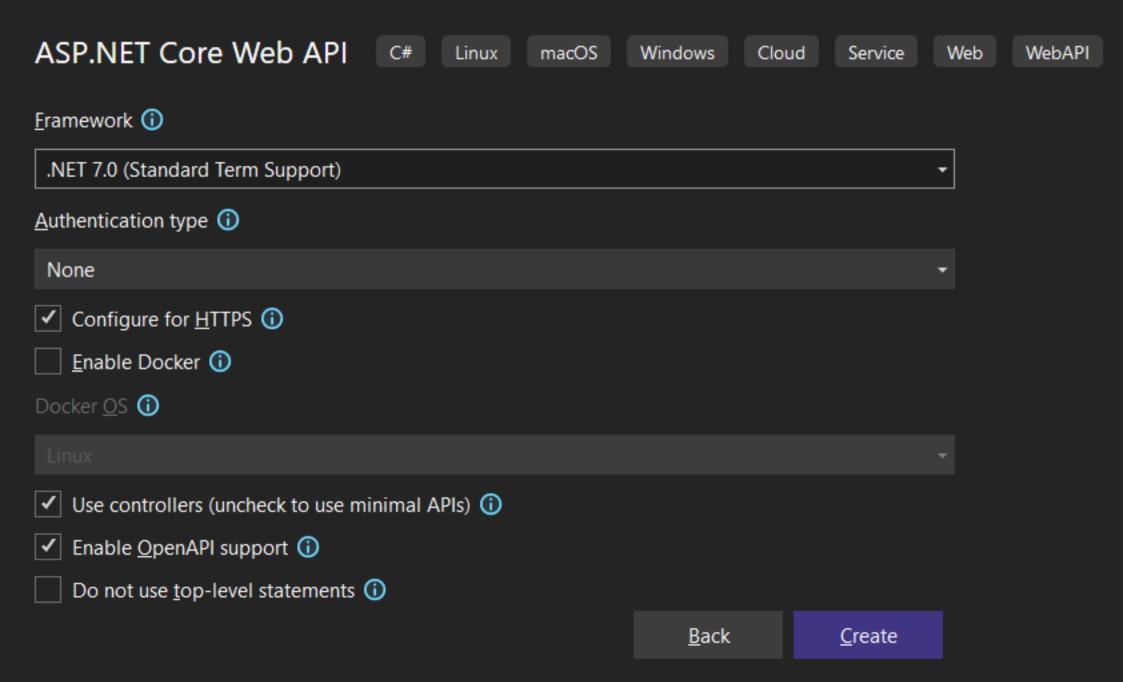
Back

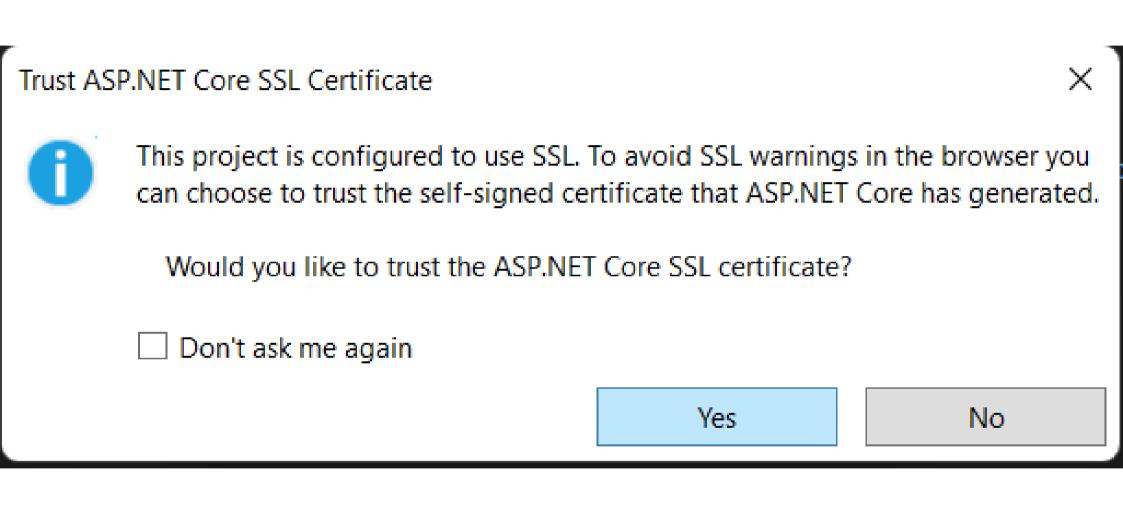
Next

Configure your new project



Additional information









You are about to install a certificate from a certification authority (CA) claiming to represent:

localhost

Windows cannot validate that the certificate is actually from "localhost". You should confirm its origin by contacting "localhost". The following number will assist you in this process:

Thumbprint (sha1): 745D795B 51EB7E7E 98A11522 3B3ADAA4 DEAE9D70

Warning:

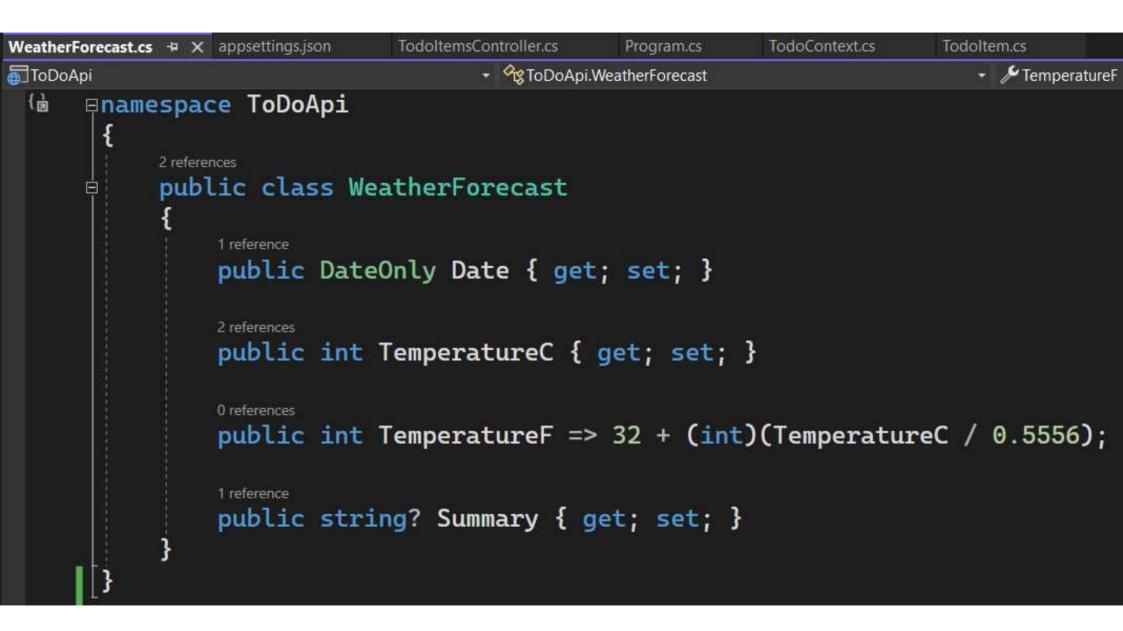
If you install this root certificate, Windows will automatically trust any certificate issued by this CA. Installing a certificate with an unconfirmed thumbprint is a security risk. If you click "Yes" you acknowledge this risk.

Do you want to install this certificate?

Yes

No

app.UseHttpsRedirection();
app.UseAuthorization();
app.MapControllers();



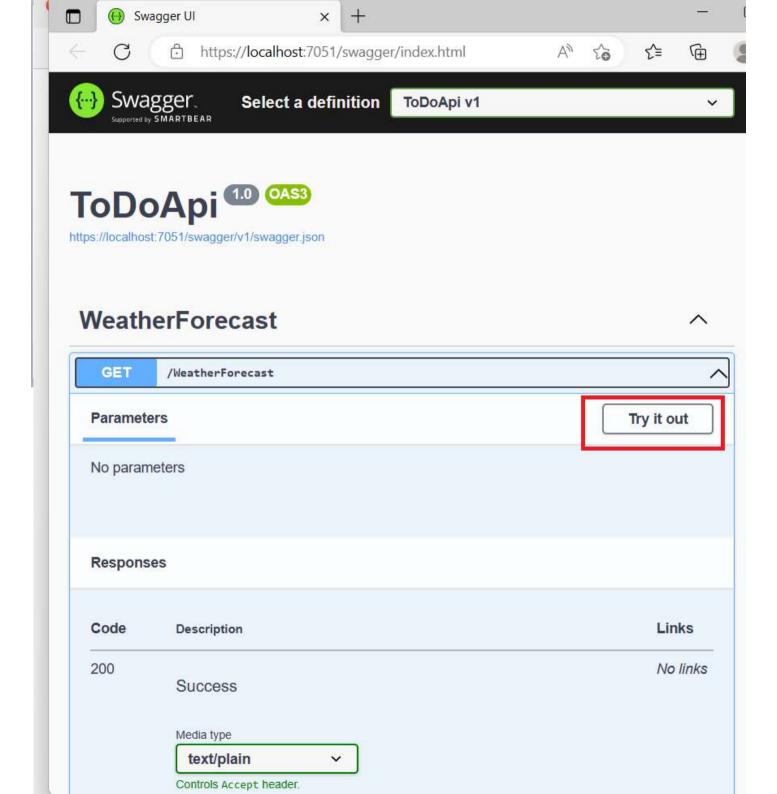
```
WeatherForecastController.cs → X WeatherForecast.cs
                                                   TodoltemsController.cs
                                                                                TodoContext.cs
                                                                                              Todoltem.cs
                                     appsettings.json
                                                                     Program.cs
■ ToDoApi

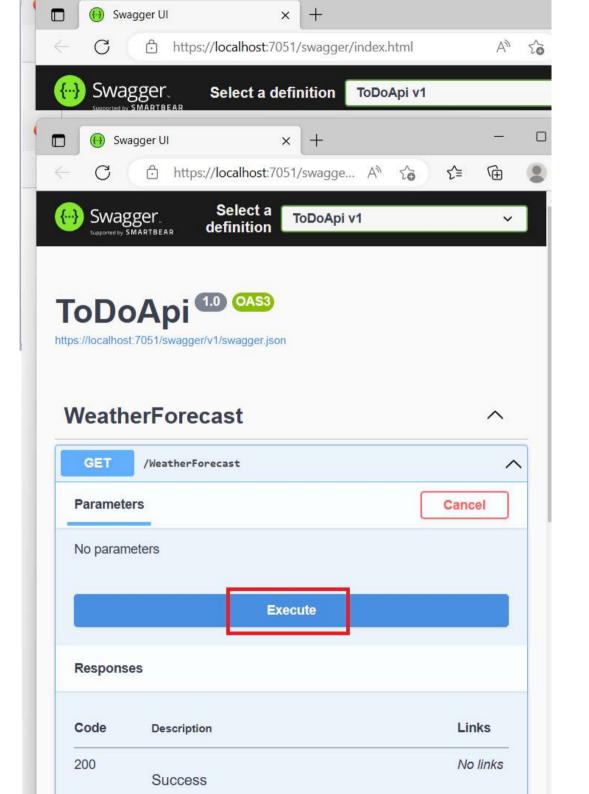
    → YgToDoApi.Controllers.WeatherForecastController

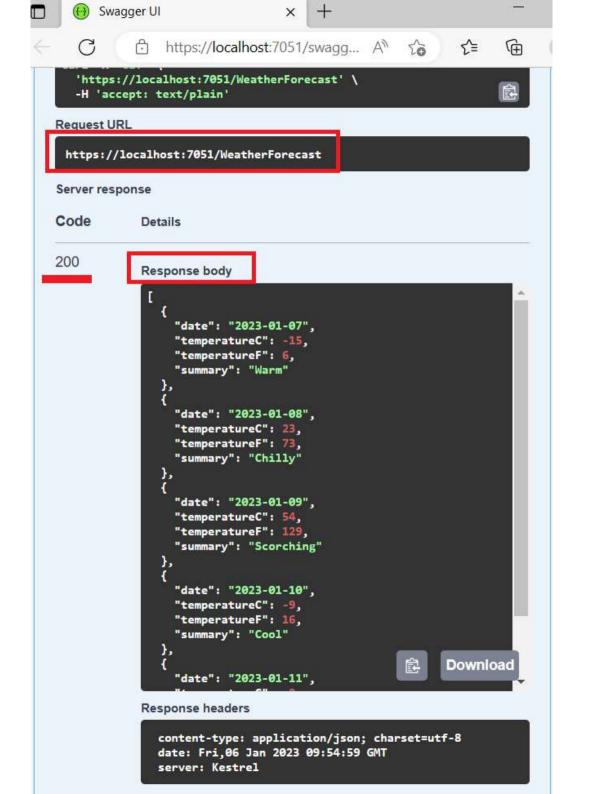
                                                                                               {à
       using Microsoft.AspNetCore.Mvc;
      □namespace ToDoApi.Controllers
           [ApiController]
           [Route("[controller]")]
           public class WeatherForecastController: ControllerBase
                private static readonly string[] Summaries = new[]
                "Freezing", "Bracing", "Chilly", "Cool", "Mild", "Warm", "Balmy", "Hot", "Sweltering", "Scorching"
                private readonly ILogger<WeatherForecastController> _logger;
                public WeatherForecastController(ILogger<WeatherForecastController> logger)
                    _logger = logger;
   d
                [HttpGet(Name = "GetWeatherForecast")]
                public IEnumerable<WeatherForecast> Get()
                    return Enumerable.Range(1, 5).Select(index => new WeatherForecast
```

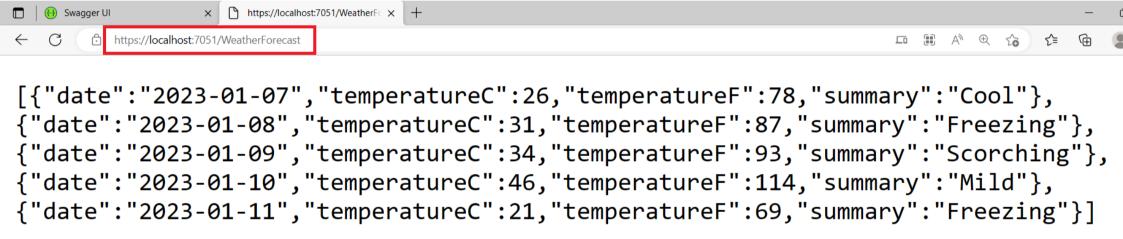
```
[HttpGet(Name = "GetWeatherForecast")]
0 references
public IEnumerable

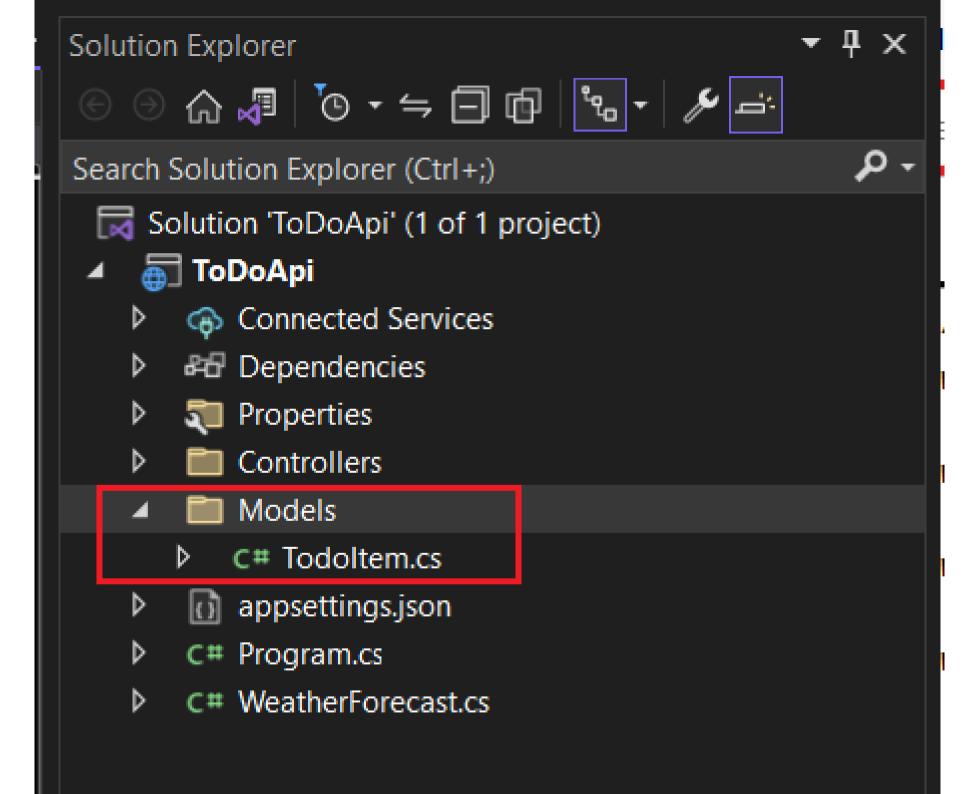
    return Enumerable.Range(1, 5).Select(index => new WeatherForecast
    {
        Date = DateOnly.FromDateTime(DateTime.Now.AddDays(index)),
        TemperatureC = Random.Shared.Next(-20, 55),
        Summary = Summaries[Random.Shared.Next(Summaries.Length)]
    })
    .ToArray();
```



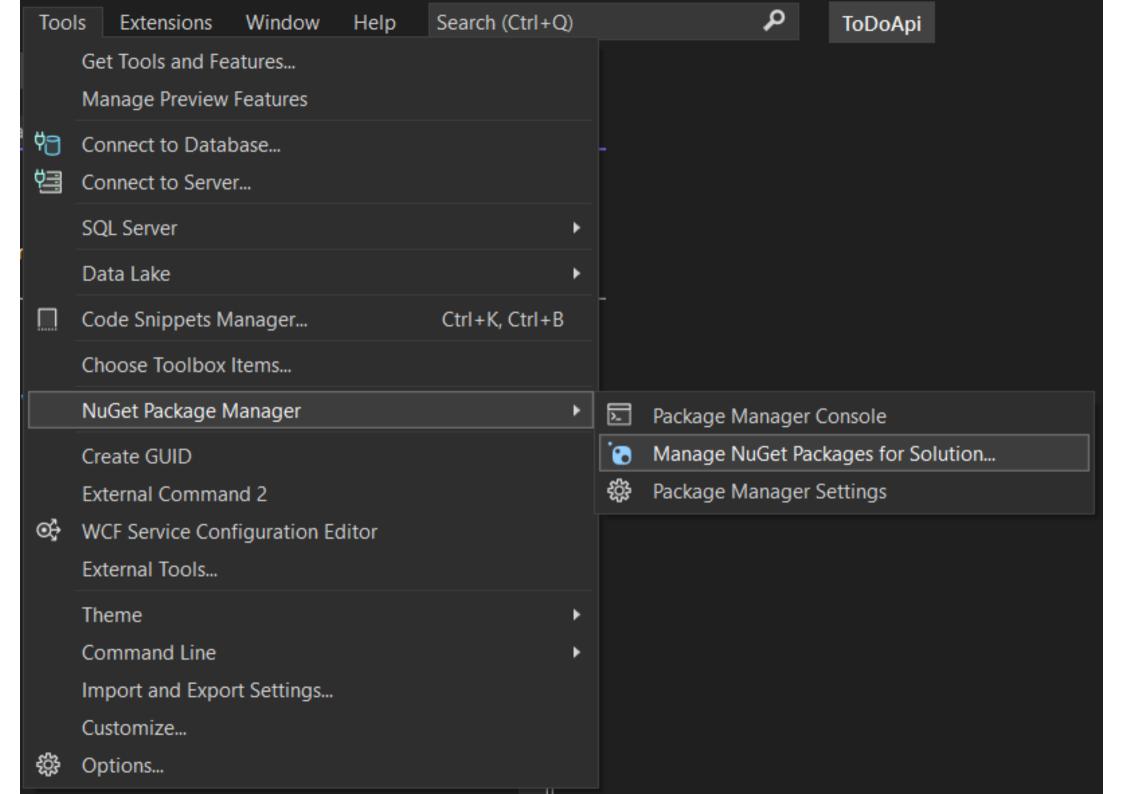


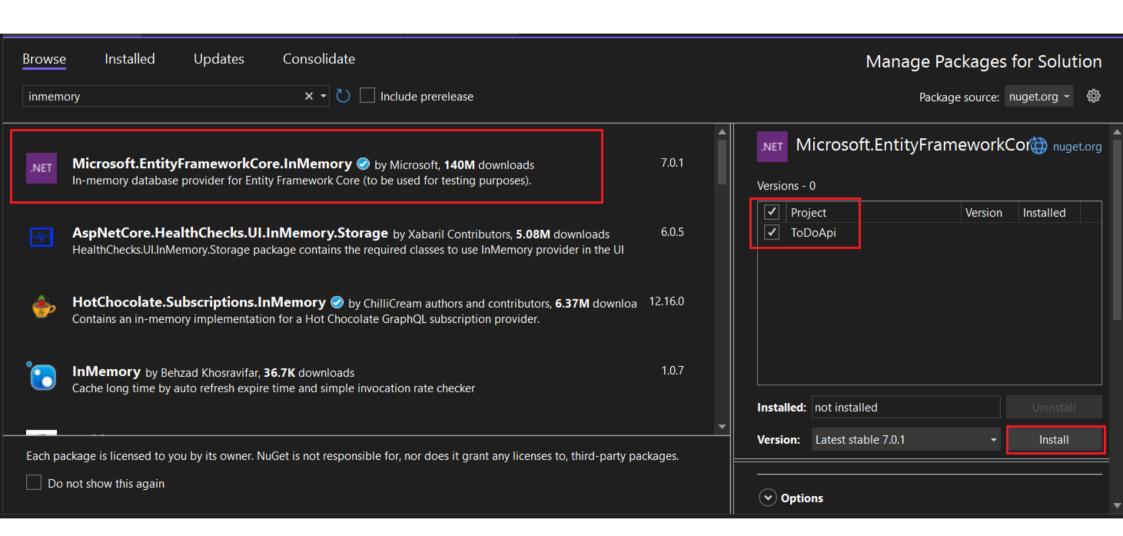


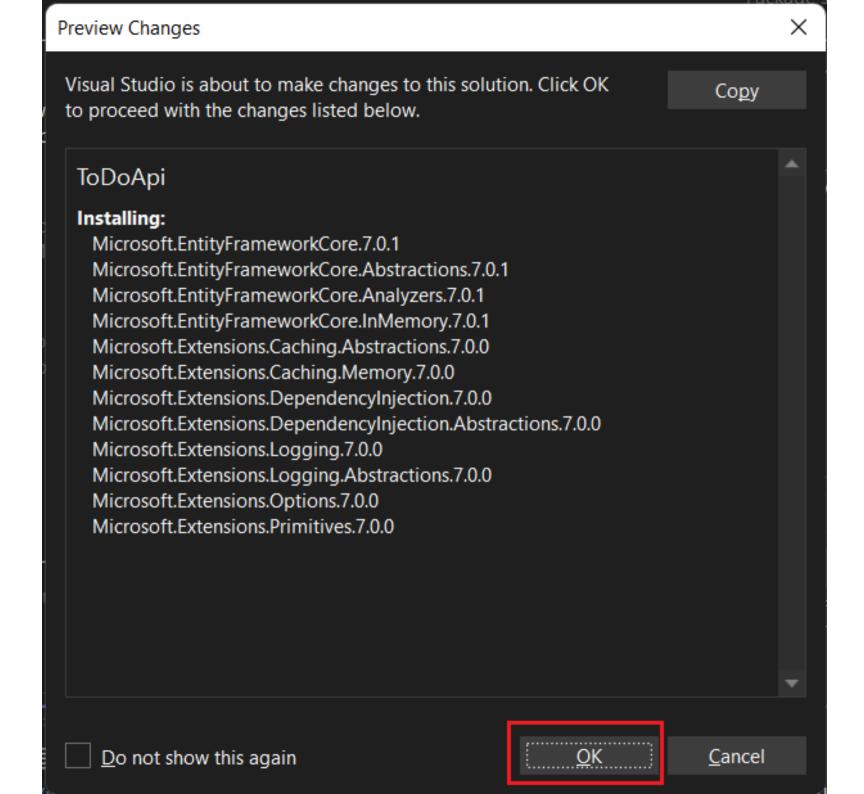




```
□namespace ToDoApi.Models
     0 references
      public class TodoItem
          0 references
          public long Id { get; set; }
          0 references
          public string? Name { get; set; }
          0 references
          public bool IsComplete { get; set; }
```









The following package(s) require that you accept their license terms before installing.

Microsoft.EntityFrameworkCore.Abstractions Author(s): Microsoft MIT

Microsoft.EntityFrameworkCore Author(s): Microsoft

MIT

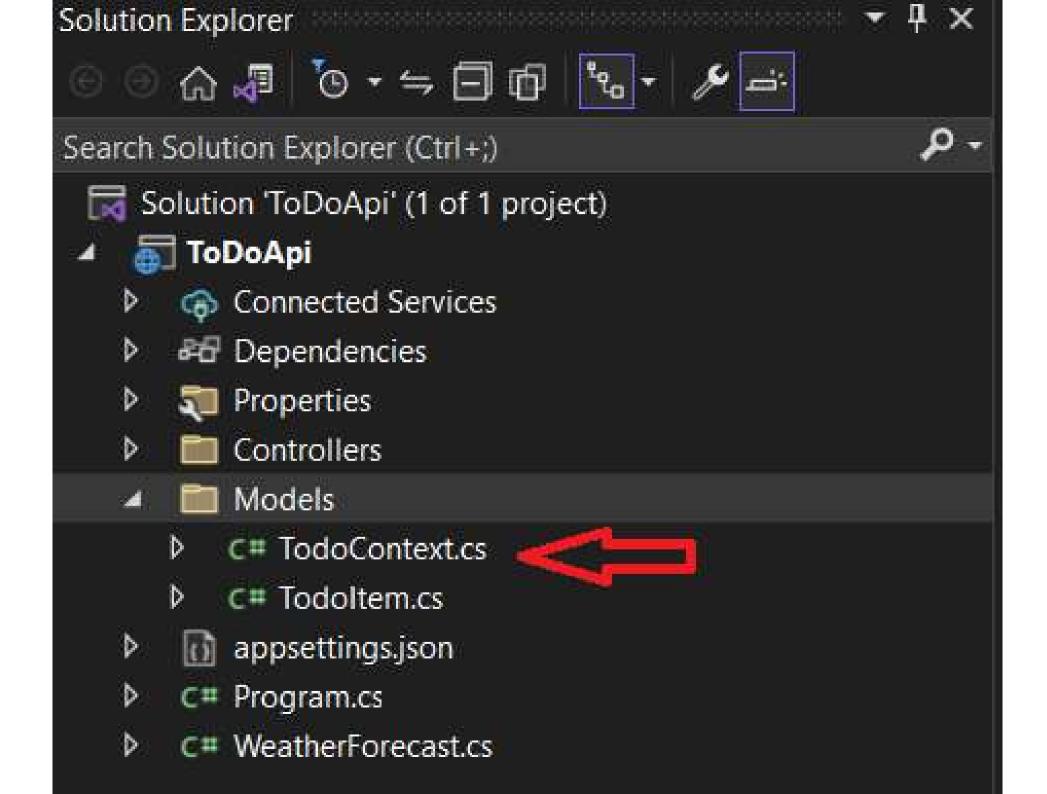
Microsoft.EntityFrameworkCore.Analyzers Author(s): Microsoft MIT

Microsoft.EntityFrameworkCore.InMemory Author(s): Microsoft MIT

By clicking "I Accept," you agree to the license terms for the package(s) listed above. If you do not agree to the license terms, click "I Decline."

I Accept

I Decline

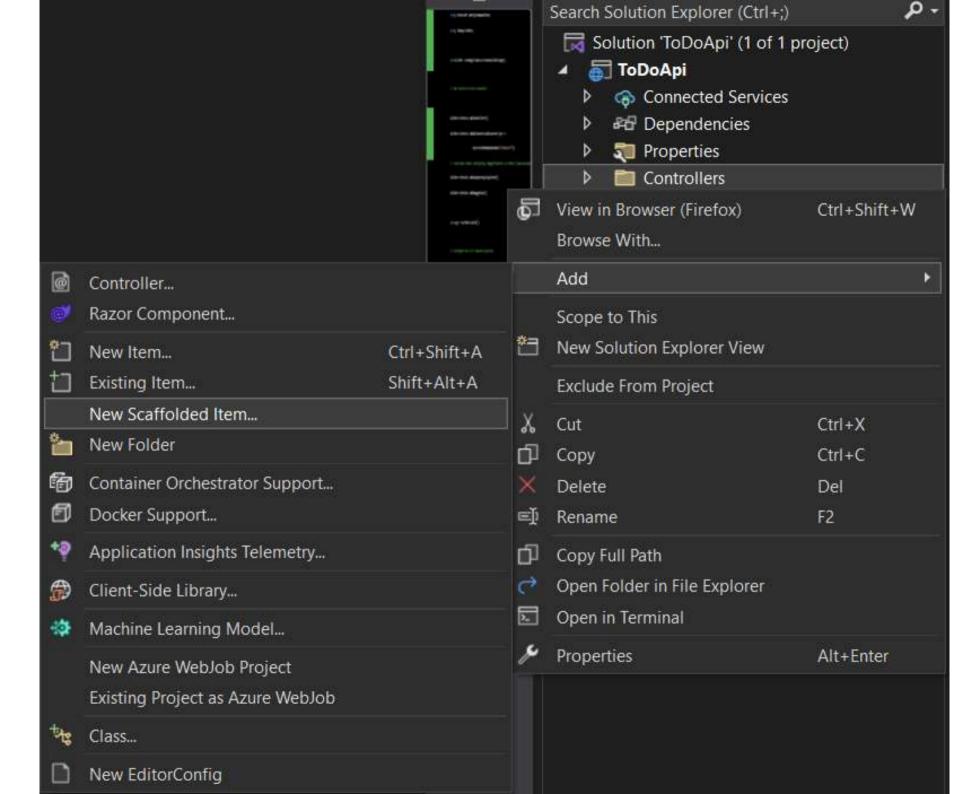


```
TodoContext.cs* → X TodoItem.cs
ToDoApi

    ToDoApi.Models.TodoContext

                                                                            - Fodoltems
       using Microsoft.EntityFrameworkCore;
 {b
      □namespace ToDoApi.Models
            2 references
 10
            public class TodoContext : DbContext
                 0 references
                 public TodoContext(DbContextOptions<TodoContext> options)
                      : base(options)
                 0 references
                 public DbSet<TodoItem> TodoItems { get; set; } = null!;
```

```
Todoltem.cs
■ ToDoApi
    gusing Microsoft.EntityFrameworkCore;
 {b
      using ToDoApi.Models:
      var builder = WebApplication.CreateBuilder(args);
      // Add services to the container.
                                                              Dependency Injection
      builder.Services.AddControllers():
      builder.Services.AddDbContext<TodoContext>(opt =>
                          opt.UseInMemoryDatabase("TodoList"));
      // Learn more about configuring Swagger/OpenAPI at https://aka.ms/aspnetcore/swashbuckle
      builder.Services.AddEndpointsApiExplorer();
      builder.Services.AddSwaggerGen();
      var app = builder.Build();
      // Configure the HTTP request pipeline.
         (app.Environment.IsDevelopment())
          app.UseSwagger();
          app.UseSwaggerUI();
      app.UseHttpsRedirection();
      app.UseAuthorization();
```



Add New Scaffolded Item

- ▲ Installed
- ▲ Common

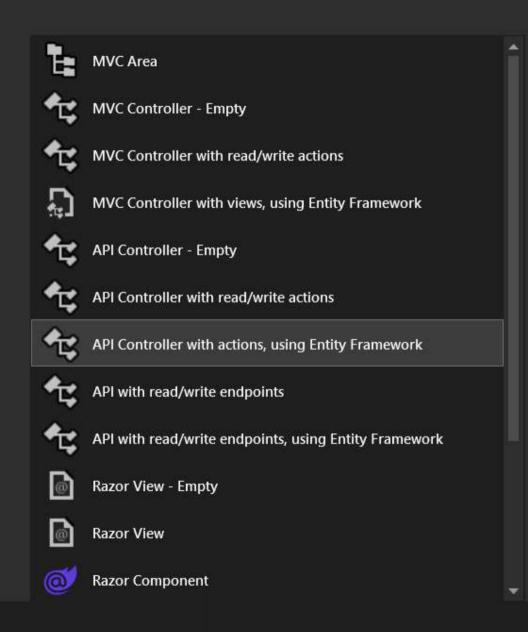
API

MVC

Razor Component Razor Pages

Identity

Layout

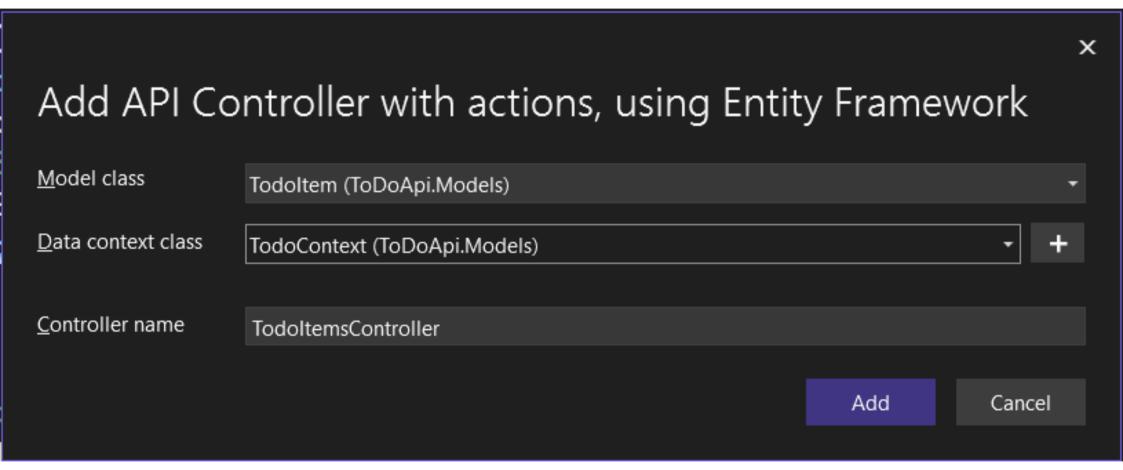


API Controller with actions, using Entity Framework

by Microsoft v1.0.0.0

An API controller with REST actions to create, read, update, delete, and list entities from an Entity Framework data context.

Id: ApiControllerWithContextScaffolder



Microsoft Visual Studio

Scaffolding...

Installing NuGet Packages. This may take a few moments. Microsoft.EntityFrameworkCore.SqlServer

Microsoft Visual Studio

×

select Add to try scaffolding a second time.



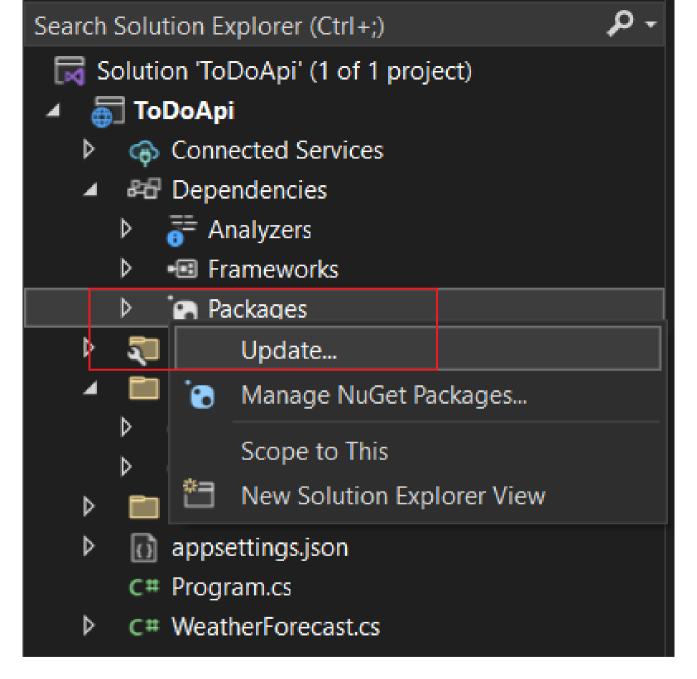
Error

There was an error running the selected code generator:

'Install the package

Microsoft.VisualStudio.Web.CodeGeneration.Design and try again.'

OK



If previous solution doesn't work, try to update the packages.

```
// GET: api/TodoItems/5
[HttpGet("{id}")]
0 references
public async Task<ActionResult<TodoItem>> GetTodoItem(long id)
  if (_context.TodoItems == null)
      return NotFound();
    var todoItem = await _context.TodoItems.FindAsync(id);
    if (todoItem == null)
        return NotFound();
    return todoItem;
```

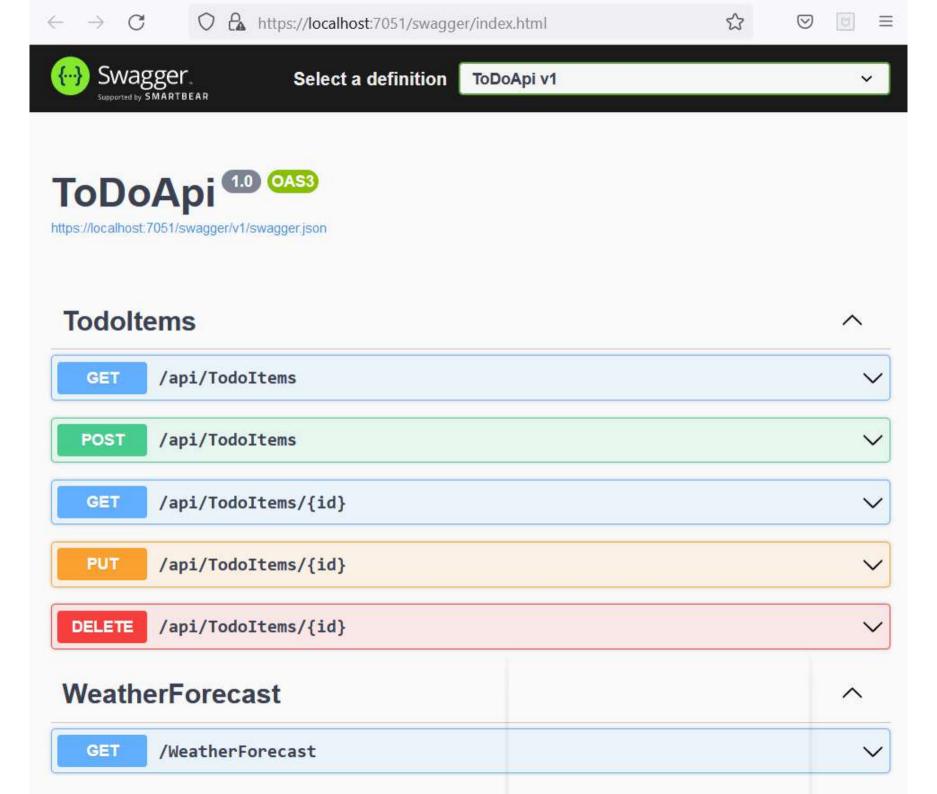
```
// PUT: api/TodoItems/5
[HttpPut("{id}")]
0 references
public async Task<IActionResult> PutTodoItem(long id, TodoItem todoItem)
    if (id != todoItem.Id) {
        return BadRequest();
    _context.Entry(todoItem).State = EntityState.Modified;
    try {
        await _context.SaveChangesAsync();
    catch (DbUpdateConcurrencyException)
        if (!TodoItemExists(id)) {
            return NotFound();
        else {
            throw;
    return NoContent();
```

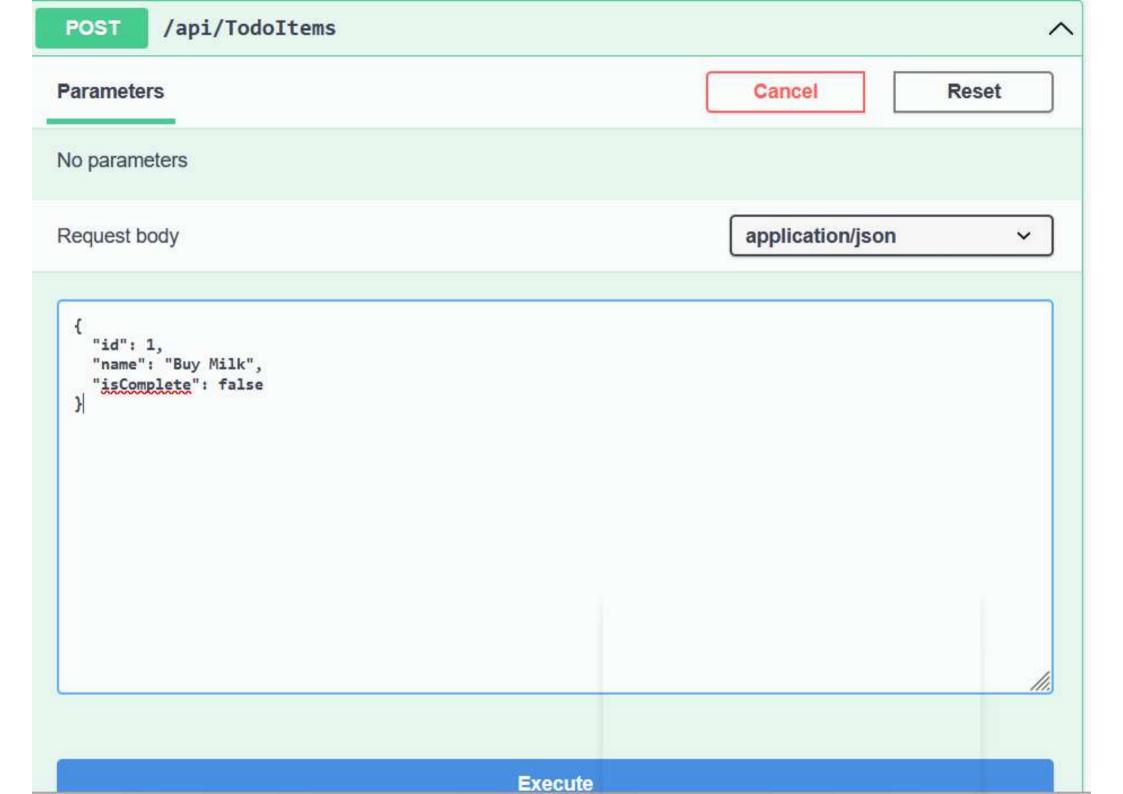
```
// PUT: api/TodoItems/5
[HttpPut("{id}")]
0 references
public async Task<IActionResult> PutTodoItem(long id, TodoItem todoItem)
    if (id != todoItem.Id) {
        return BadRequest();
    _context.Entry(todoItem).State = EntityState.Modified;
    try {
        await _context.SaveChangesAsync();
    catch (DbUpdateConcurrencyException)
        if (!TodoItemExists(id)) {
            return NotFound();
        else {
            throw;
    return NoContent();
```

```
// POST: api/TodoItems
[HttpPost]
Oreferences
public async Task<ActionResult<TodoItem>> PostTodoItem(TodoItem todoItem)
{
   if (_context.TodoItems == null)
   {
      return Problem("Entity set 'TodoContext.TodoItems' is null.");
   }
   _context.TodoItems.Add(todoItem);
   await _context.SaveChangesAsync();
   return CreatedAtAction(nameof(GetTodoItem), new { id = todoItem.Id }, todoItem);
}
```

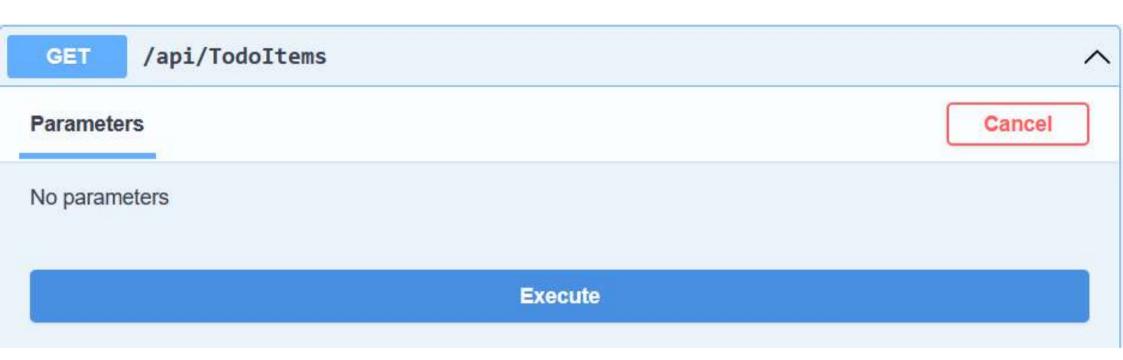
```
// DELETE: api/TodoItems/5
[HttpDelete("{id}")]
public async Task<IActionResult> DeleteTodoItem(long id)
    if (_context.TodoItems == null)
        return NotFound();
    var todoItem = await _context.TodoItems.FindAsync(id);
    if (todoItem == null)
        return NotFound();
    _context.TodoItems.Remove(todoItem);
    await _context.SaveChangesAsync();
    return NoContent();
```

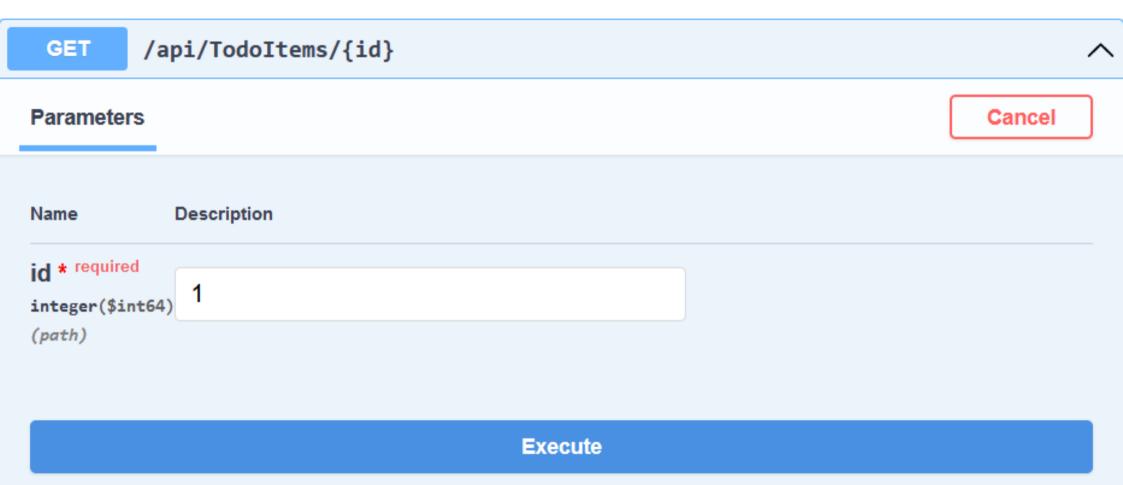
```
private bool TodoItemExists(long id)
{
    return (_context.TodoItems?.Any(e => e.Id == id)).GetValueOrDefault();
}
```





```
Curl
 curl -X 'POST' \
   'https://localhost:7051/api/TodoItems' \
  -H 'accept: text/plain' \
   -H 'Content-Type: application/json' \
   -d '{
   "id": 1,
   "name": "Buy Milk",
   "isComplete": false
Request URL
 https://localhost:7051/api/TodoItems
Server response
Code
             Details
201
Undocumented Response body
                "id": 1,
                "name": "Buy Milk",
                "isComplete": false
                                                                                                 Download
             Response headers
               content-type: application/json; charset=utf-8
               date: Mon,16 Jan 2023 06:46:39 GMT
               location: https://localhost:7051/api/TodoItems/1
               server: Kestrel
               x-firefox-spdy: h2
```





```
Curl
 curl -X 'GET' \
   'https://localhost:7051/api/TodoItems/1' \
   -H 'accept: text/plain'
Request URL
 https://localhost:7051/api/TodoItems/1
Server response
```

Code

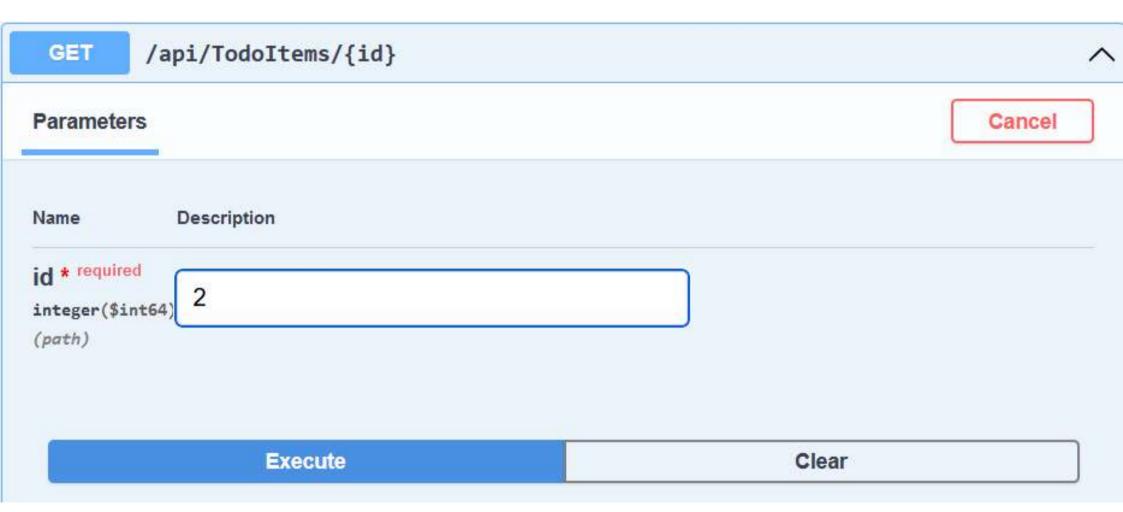
Details

200

Response body

```
"id": 1,
"name": "Buy Milk",
"isComplete": false
                                                                                Download
```

```
content-type: application/json; charset=utf-8
date: Mon,16 Jan 2023 07:11:39 GMT
server: Kestrel
x-firefox-spdy: h2
```



```
Curl
```

```
curl -X 'GET' \
  'https://localhost:7051/api/TodoItems/2' \
  -H 'accept: text/plain'
```

Request URL

```
https://localhost:7051/api/TodoItems/2
```

Server response

Code Details

404

Undocumented Error: Not Found

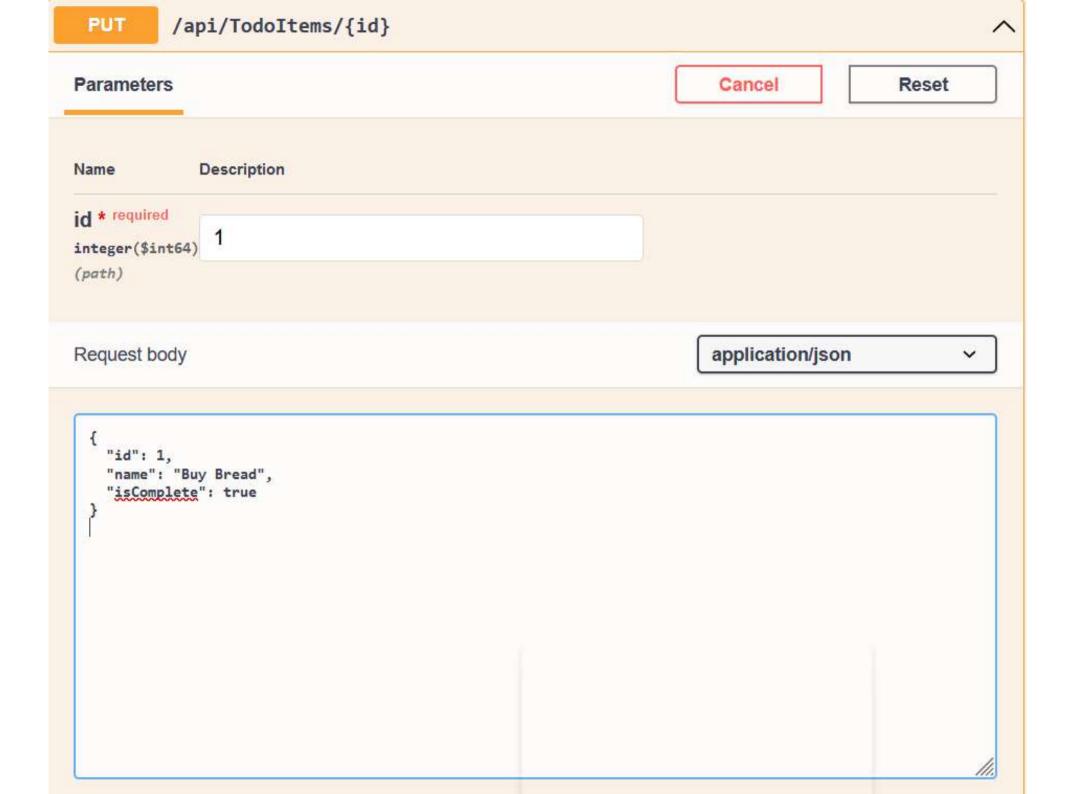
Response body

```
{
    "type": "https://tools.ietf.org/html/rfc7231#section-6.5.4",
    "title": "Not Found",
    "status": 404,

    "traceId": "00-a27e542e63322bb674f100396d27431f-7e3b912d11e75c17-00"
}

Download
}
```

```
content-type: application/problem+json; charset=utf-8
date: Mon,16 Jan 2023 07:13:02 GMT
server: Kestrel
x-firefox-spdy: h2
```



Curl

```
curl -X 'PUT' \
  'https://localhost:7051/api/TodoItems/1' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "id": 1,
    "name": "Buy Bread",
    "isComplete": true
}
```

Request URL

```
https://localhost:7051/api/TodoItems/1
```

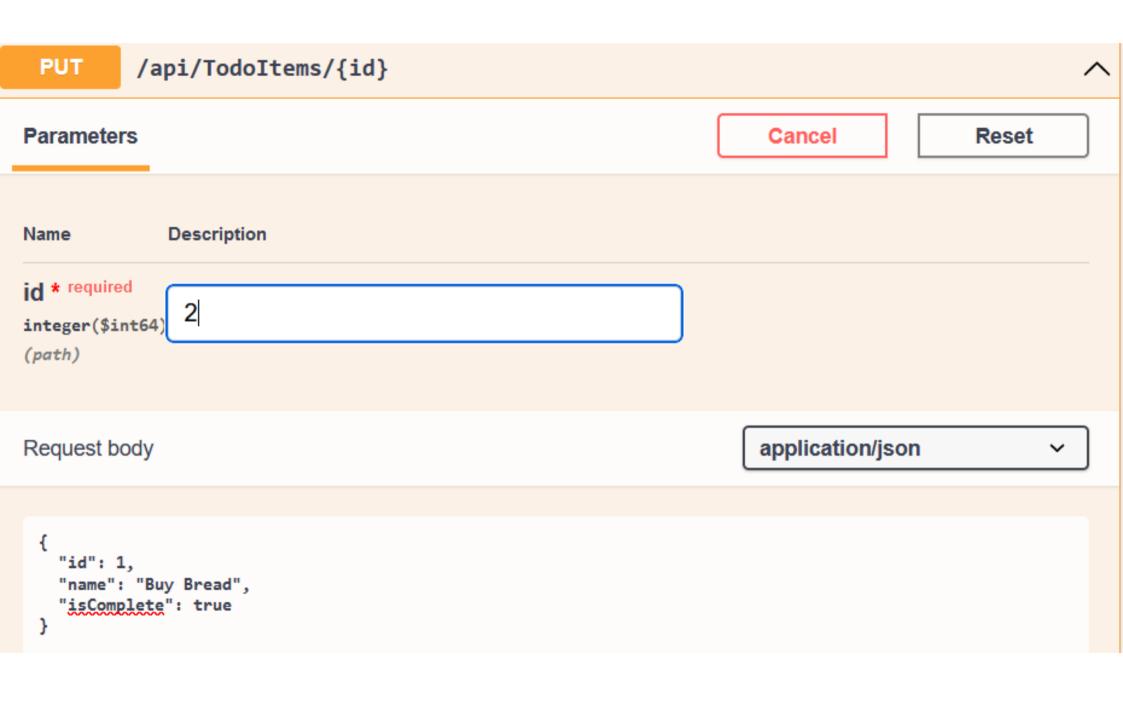
Server response

Code Details

204

Undocumented

```
No Content date: Mon,16 Jan 2023 07:16:48 GMT server: Kestrel x-firefox-spdy: h2
```



```
Curl
```

```
curl -X 'PUT' \
  'https://localhost:7051/api/TodoItems/2' \
  -H 'accept: */*' \
  -H 'Content-Type: application/json' \
  -d '{
    "id": 1,
    "name": "Buy Bread",
    "isComplete": true
}
```

Request URL

```
https://localhost:7051/api/TodoItems/2
```

Server response

Code Details

400

Undocumented Error: Bad Request

Response body

```
{
    "type": "https://tools.ietf.org/html/rfc7231#section-6.5.1",

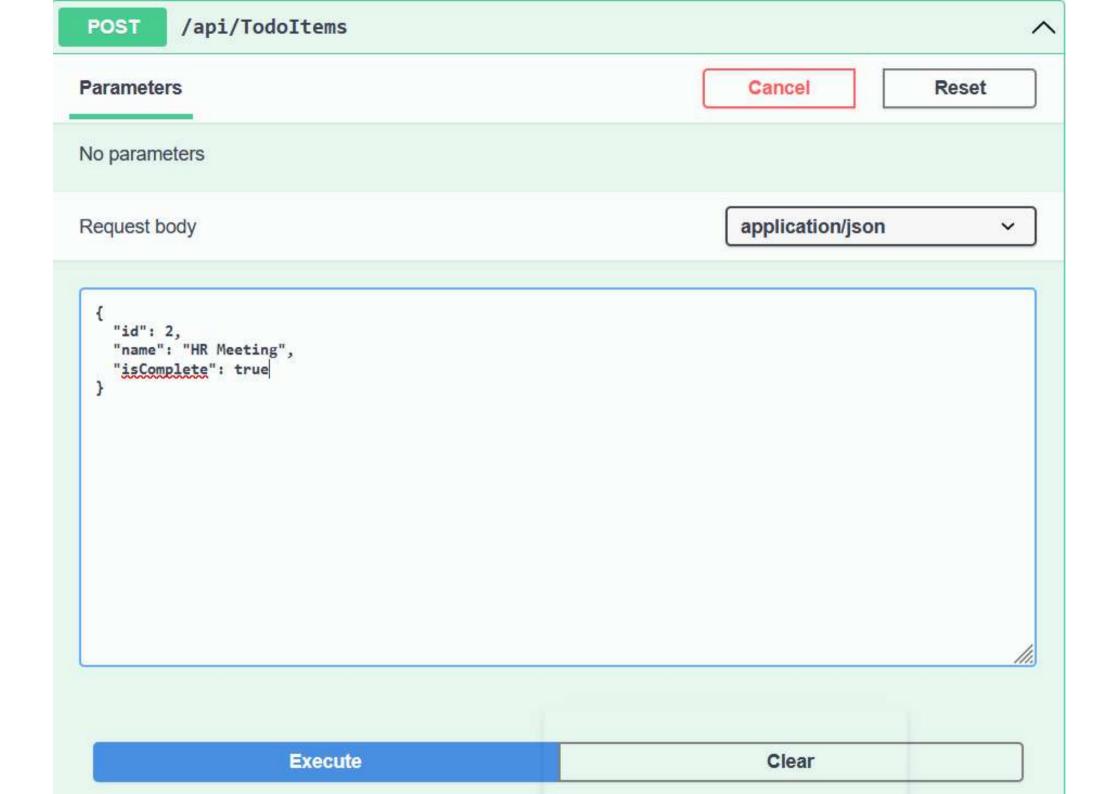
    "title": "Bad Request",
    "status": 400,

    "traceId": "00-33c680f3e592005a7737431d207c5bf0-524a3b0d17af8939-00"

}

Download
```

```
content-type: application/problem+json; charset=utf-8
date: Mon,16 Jan 2023 07:20:06 GMT
server: Kestrel
x-firefox-spdy: h2
```



```
Curl
```

```
curl -X 'POST' \
  'https://localhost:7051/api/TodoItems' \
  -H 'accept: text/plain' \
  -H 'Content-Type: application/json' \
  -d '{
  "id": 2,
  "name": "HR Meeting",
  "isComplete": true
```

Request URL

```
https://localhost:7051/api/TodoItems
```

Server response

Code

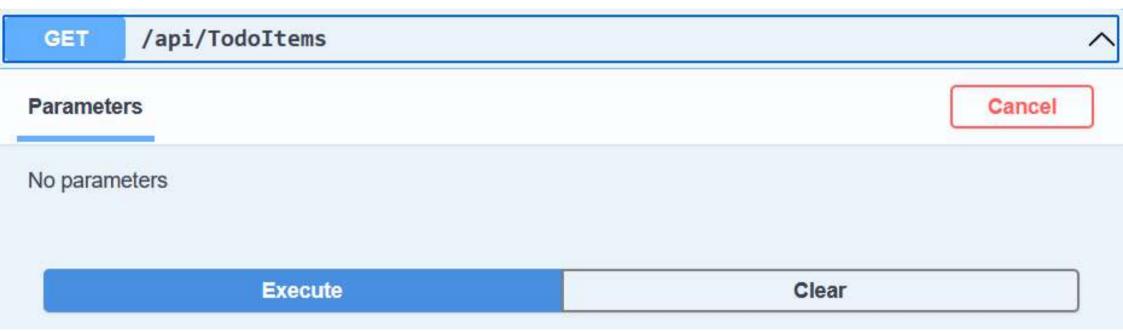
Details

201

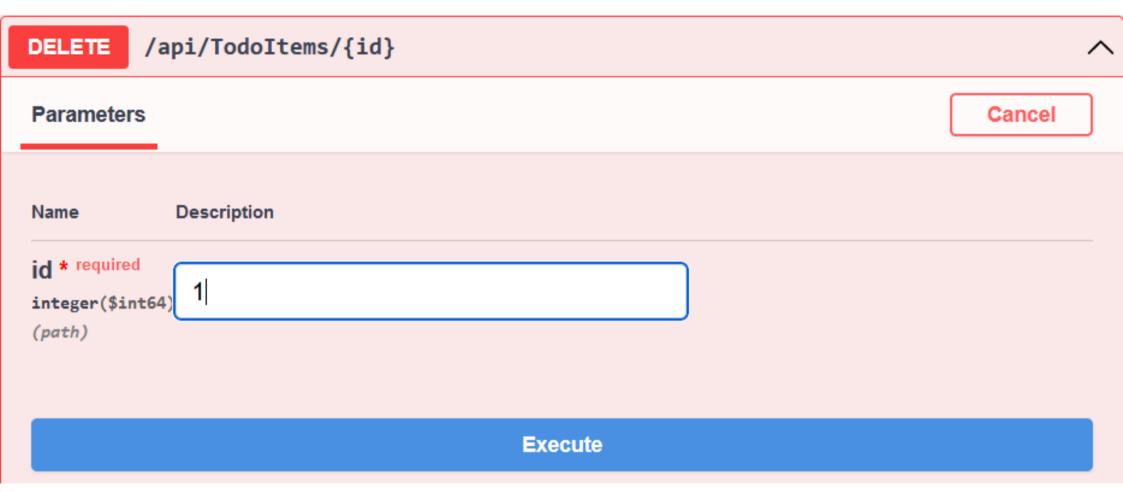
Undocumented Response body

```
"id": 2,
"name": "HR Meeting",
"isComplete": true
                                                                        Ê
                                                                              Download
```

```
content-type: application/json; charset=utf-8
date: Mon,16 Jan 2023 07:22:50 GMT
location: https://localhost:7051/api/TodoItems/2
server: Kestrel
x-firefox-spdy: h2
```



```
Curl
curl -X 'GET' \
   'https://localhost:7051/api/TodoItems' \
  -H 'accept: text/plain'
Request URL
 https://localhost:7051/api/TodoItems
Server response
Code
            Details
200
            Response body
                 "id": 1,
                 "name": "Buy Bread",
                 "isComplete": true
                 "id": 2,
                 "name": "HR Meeting",
                 "isComplete": true
                                                                                                Download
                                                                                          Ê
            Response headers
               content-type: application/json; charset=utf-8
               date: Mon,16 Jan 2023 07:24:15 GMT
               server: Kestrel
               x-firefox-spdy: h2
```



Curl

```
curl -X 'DELETE' \
 'https://localhost:7051/api/TodoItems/1' \
 -H 'accept: */*'
```

Request URL

https://localhost:7051/api/TodoItems/1

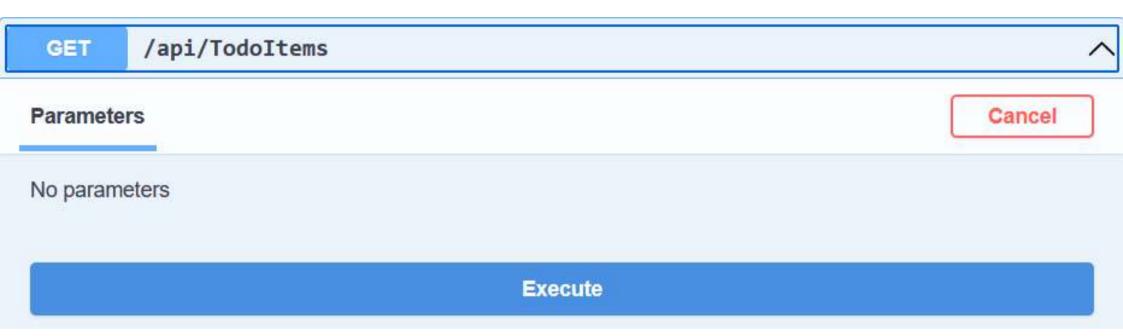
Server response

Code Details

No Content

Undocumented Response headers

```
date: Mon,16 Jan 2023 07:25:44 GMT
server: Kestrel
x-firefox-spdy: h2
```



```
Curl
```

```
curl -X 'GET' \
  'https://localhost:7051/api/TodoItems' \
  -H 'accept: text/plain'
```

Request URL

```
https://localhost:7051/api/TodoItems
```

Server response

Code

Details

200

Response body

```
content-type: application/json; charset=utf-8
date: Mon,16 Jan 2023 07:27:06 GMT
server: Kestrel
x-firefox-spdy: h2
```