Web API

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# Rest API

A diagram of a computer system

Description automatically generated

A diagram of a website

Description automatically generated

A close-up of a web page

Description automatically generatedA diagram of a system

Description automatically generatedA diagram of a computer system

Description automatically generated

# HTTP status messages

|  |  |
| --- | --- |
| 1xx | Information |
| 2xx | Success |
| 200 | OK |
| 201 | Created |
| 204 | No content |
| 3xx | Redirection |
| 301 | Moved permanently |
| 302/303 | Found at this other URL |
| 307 | Temporary redirect |
| 308 | Resume incomplete |
| 4xx | Client Error |
| 400 | Bad request |
| 401 | Unauthorized |
| 403 | Forbidden |
| 404 | Not found |
| 405 | Method not allowed |
| 5xx | Server Error |
| 500 | Internal server error |
| 502 | Bad gateway |
| 503 | Service unavailable |

# 

# Actions

## Options

# Crud Actions

A white and blue screen with text

Description automatically generated with medium confidence

# Controller

## ActionResult

|  |  |
| --- | --- |
| [BadRequest()](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.badrequest?view=aspnet-webapi-5.2#system-web-http-apicontroller-badrequest) | Creates a [BadRequestResult](https://learn.microsoft.com/en-us/dotnet/api/microsoft.aspnetcore.mvc.badrequestresult?view=aspnet-webapi-5.2) (400 Bad Request). |
| [BadRequest(String)](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.badrequest?view=aspnet-webapi-5.2#system-web-http-apicontroller-badrequest(system-string)) | Creates a [BadRequestErrorMessageResult](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.badrequesterrormessageresult?view=aspnet-webapi-5.2) (400 Bad Request) with the specified error message. |
| [Conflict()](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.conflict?view=aspnet-webapi-5.2#system-web-http-apicontroller-conflict) | Creates a [ConflictResult](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.conflictresult?view=aspnet-webapi-5.2) (409 Conflict). |
| [Content<T>(HttpStatusCode, T)](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.content?view=aspnet-webapi-5.2#system-web-http-apicontroller-content-1(system-net-httpstatuscode-0)) | Creates a [NegotiatedContentResult<T>](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.negotiatedcontentresult-1?view=aspnet-webapi-5.2) with the specified values. |
| [InternalServerError()](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.internalservererror?view=aspnet-webapi-5.2#system-web-http-apicontroller-internalservererror) | Creates an [InternalServerErrorResult](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.internalservererrorresult?view=aspnet-webapi-5.2) (500 Internal Server Error). |
| [InternalServerError(Exception)](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.internalservererror?view=aspnet-webapi-5.2#system-web-http-apicontroller-internalservererror(system-exception)) | Creates an [ExceptionResult](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.exceptionresult?view=aspnet-webapi-5.2) (500 Internal Server Error) with the specified exception. |
| [NotFound()](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.notfound?view=aspnet-webapi-5.2#system-web-http-apicontroller-notfound) | Creates an [NotFoundResult](https://learn.microsoft.com/en-us/dotnet/api/microsoft.aspnetcore.mvc.notfoundresult?view=aspnet-webapi-5.2) (404 Not Found). |
| [Ok()](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.ok?view=aspnet-webapi-5.2#system-web-http-apicontroller-ok) | Creates an [OkResult](https://learn.microsoft.com/en-us/dotnet/api/microsoft.aspnetcore.mvc.okresult?view=aspnet-webapi-5.2) (200 OK). |
| [Ok<T>(T)](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.ok?view=aspnet-webapi-5.2#system-web-http-apicontroller-ok-1(-0)) | Creates an [OkObjectResult](https://learn.microsoft.com/en-us/dotnet/api/microsoft.aspnetcore.mvc.okobjectresult?view=aspnet-webapi-5.2) (200 OK) with the specified values. |
| [Redirect(String)](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.redirect?view=aspnet-webapi-5.2#system-web-http-apicontroller-redirect(system-string)) | Creates a [RedirectResult](https://learn.microsoft.com/en-us/dotnet/api/microsoft.aspnetcore.mvc.redirectresult?view=aspnet-webapi-5.2) (302 Found) with the specified value. |
| [Redirect(Uri)](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.redirect?view=aspnet-webapi-5.2#system-web-http-apicontroller-redirect(system-uri)) | Creates a [RedirectResult](https://learn.microsoft.com/en-us/dotnet/api/microsoft.aspnetcore.mvc.redirectresult?view=aspnet-webapi-5.2) (302 Found) with the specified value. |
| [RedirectToRoute(String, Object)](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.redirecttoroute?view=aspnet-webapi-5.2#system-web-http-apicontroller-redirecttoroute(system-string-system-object)) | Creates a [RedirectToRouteResult](https://learn.microsoft.com/en-us/dotnet/api/microsoft.aspnetcore.mvc.redirecttorouteresult?view=aspnet-webapi-5.2) (302 Found) with the specified values. |
| [ResponseMessage(HttpResponseMessage)](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.responsemessage?view=aspnet-webapi-5.2#system-web-http-apicontroller-responsemessage(system-net-http-httpresponsemessage)) | Creates a [ResponseMessageResult](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.responsemessageresult?view=aspnet-webapi-5.2) with the specified response. |
| [StatusCode(HttpStatusCode)](https://learn.microsoft.com/en-us/dotnet/api/system.web.http.apicontroller.statuscode?view=aspnet-webapi-5.2#system-web-http-apicontroller-statuscode(system-net-httpstatuscode)) | Creates a [StatusCodeResult](https://learn.microsoft.com/en-us/dotnet/api/microsoft.aspnetcore.mvc.statuscoderesult?view=aspnet-webapi-5.2) with the specified status code. |

# Routing

[Route("api/[controller]")] // /api/myfirst

[HttpPut] // /api/myfirst

[HttpPut("all")] // /api/myfirst/all

[HttpPut("{id}")] // /api/myfirst/id

[HttpPut("{id}")] // /api/myfirst/5

public ActionResult UpdateDish(string id)

# Data

## Record

## Validation

using System.ComponentModel.DataAnnotations;

[Required]

[MaxLength]

[MinLength]

[Phone]

[Email]

[CreditCard]

[Range]

[Compare]

Return Problem

“Errors”:

“Title”: “Title is required”

# JSON Patch

Update individual properties

Unlike Update