HttpResponseMessage In WebAPI

ASK A QUESTION

Naresh Joshi   Sep 12 2014   Article

7   10   235.3k

[Download Free Office API](#)

HttpResponseMessage

A HttpResponseMessage allows us to work with the HTTP protocol (for example, with the headers property) and unifies our return type. In simple words an HttpResponseMessage is a way of returning a message/data from your action.

The following is a quick glimpse of that:

```
01.   // GetEmployee action
02.   public HttpResponseMessage GetEmployee(int id)
03.   {
04.       // Do Something
05.   }
```

Why to return a HttpResponseMessage

Since we can return primitive types or complex types to the user, why HttpResponseMessage?

Let's create a simple get method that will return the Employee data for the id provided.

```
01.   public Employee GetEmployee(int id)
02.   {
03.       return EmployeeContext.Employees.Where(e => e.Id == id).FirstOrDefault();
04.   }
```

As you can see, the method above is fulfilling the requirement; it is returning the Employee details for the Id provided. But what if no such employee exists for the Id provided, it will return the null value with suc response. Rather it would be more efficient if we return 404 error, with message like "Employee not found".

CONTRIBUTE

Using HttpResponseMessage

Now let's modify our previous example to return a HttpResponseMessage for the Employee data for the id provided.

```
01.   // GetEmployee action
02.   public HttpResponseMessage GetEmployee(int id)
03.   {
04.       Employee emp = EmployeeContext.Employees.Where(e => e.Id == id).FirstOrDefault();
05.       if (emp != null)
06.       {
```

```
10.    {
11.       return Request.CreateErrorResponse(HttpSt          oyee Not Found");
12.    }
13.
14.  }
```

Now as you can see above, we have used a HttpResponseMessage as the return type for our get method that will now "CreateResponse" that will return the employee data and "HttpStatusCode.OK" if the employee exists for the Id provided and if no such employee exists then it will create a "CreateErrorResponse" and that will be returning the message "Employee Not Found" and "HttpStatusCode.NotFound".

Using HttpResponseMessage with Try Catch

Now let's further modify the same example by adding try/catch blocks for exception handling.

```
01.  // GetEmployee action
02.  public HttpResponseMessage GetEmployee(int id)
03.  {
04.     try
05.     {
06.        Employee emp = EmployeeContext.Employees.Where(e => e.Id == id).FirstOrDefault();
07.
08.        if (emp != null)
09.        {
10.           return Request.CreateResponse<Employee>(HttpStatusCode.OK, emp);
11.        }
12.        else
13.        {
14.           return Request.CreateErrorResponse(HttpStatusCode.NotFound, " Employee Not Found");
15.        }
16.     }
17.     catch (Exception ex)
18.     {
19.        // Log exception code goes here
20.        return Request.CreateErrorResponse(HttpStatusCode.InternalServerError, "Error occured while
21.     }
22.
23.  }
```

This makes our code more robust by returning a custom error message with "HttpStatusCode.InternalServerError" if an exception occurs.

Summary

This article showed how to use HttpResponseMessage with raw HTTP responses for returning a message/data with "HttpStatusCode" from our WebApi action.

(HttpResponseMessage)   (WebAPI)

Naresh Joshi

https://www.c-sharpcorner.com/members/naresh-joshi

7 C#C10ner   ASK A QUESTION

Type your comment here and press Enter Key (Minimum 18 characters)

Hello Request.CreateResponse getting error : Severity Code Description Project File Line
Suppression StateError CS0103 The name 'Request' does not exist in project

Chris H   Apr 18, 2018
   1559 **1** **0**   0   0   Reply

I apreciate, very good job !

tupac amaru   Jan 17, 2018
   1559 **1** **0**   0   0   Reply

Awesome post, but how to display the "return Request.CreateResponse<Employee>
(HttpStatusCode.OK, emp); " in view or catch it on console.log? Please help

chatay gur   May 24, 2017
   1556 **4** **257**   0   0   Reply

Pretty useful and keep posting new topics
Lokesh K   Feb 21, 2017
   1512 **48** **6.9k**   0   0   Reply

Good how can post data by using HttpResponseMessage

siva prasad   Jan 21, 2017
   1553 **7** **0**   1   0   Reply

Can you explain how to post the details using HttpResponseMessage
Anjali Kumari   Dec 09, 2016
   1530 **30** **5.6k**   0   0   Reply

I have a question dear throwing the return
Request.CreateErrorResponse(HttpStatusCode.NotFound, " Employee Not Found"); will return the
404 not found exception as we will se it in the console. i want to know this is the best approach or
is there any thing which not throw exception or it will cost us.

Muhammad Aqib Shehzad   Nov 15, 2016
   223 **7k** **1.3m**   0   0   Reply

In our project previously they have used web api for xml report generation without any
authentication (anonymously). All the things they have handled through normal asp.net mvc
controller and using like " localhost/Abc/WebApi/Controller/Export _ parameters Localhost-server,
ABC- Project Folder, WebApi-Folder, Controller-Controller Name, Export - Method. Above are the
details to access xml report using URL. But for only one thing they have used Api controller. Like
Below, public virtual HttpResponseMessage ManExport(string ABC, string product, string Release,
bool includeInheritedData = false) { } How to access this webApi controller in URL? like normal

Rajesh Boopalan
1558   2   243

May 13, 2016

0   0   Reply

Simple and Great explanation

gowtham v
1553   7   0

Feb 18, 2015
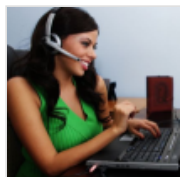
0   0   Reply

Nice aricle

Piyush Raghvani
1547   13   0

Sep 13, 2014

0   0   Reply

Hire a remote developer
Looking to add more bandwidth to your software team? Web Developers, designers, testers are now available on demand. Flexible hours, very competitive rates, expert team and High Quality work.

TRENDING UP

01   ASP.NET Web API Using MVC, Entity Framework And HttpClient For Retrieve Data - Part Four

02   Reuse The Model Classes Of Entity Data Model (.edmx) To Multiple Projects Using Class Library In ASP.NET Web API - Part Three

03   ASP.NET Web API Using MVC, Entity Framework And jQuery For Get and Post With Validation - Part Five

04   ASP.NET Web API Using MVC, Entity Framework And HttpClient For Get And Post With Validation - Part Six

05   ASP.NET Web API Using MVC And jQuery To Upload And Download Files - Part Seven

06   Getting Started With Angular 6.0

07   Starting Angular With Visual Studio Code

09　ASP.NET Core Blazor CRUD Using Entity Framework
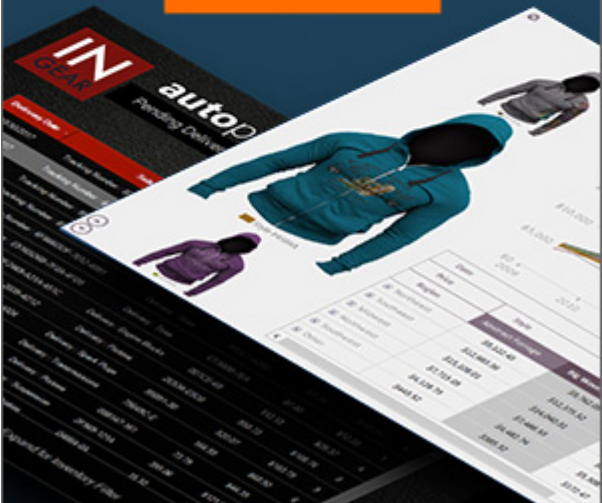
10　Configure TLS 1.2 On BizTalk Server

Philadelphia

New York

London

Delhi

JOIN C# CORNER

and millions of developer friends worldwide.

C# Corner

Learn ASP.NET MVC   Learn ASP.NET Core   Learn Python   Learn JavaScript   Learn Xamarin

Learn Oracle   More...

Home   Events   Consultants   Jobs   Career Advice   Stories   Partners

About Us   Contact Us   Privacy Policy   Terms   Media Kit   Sitemap   Report a Bug   FAQ