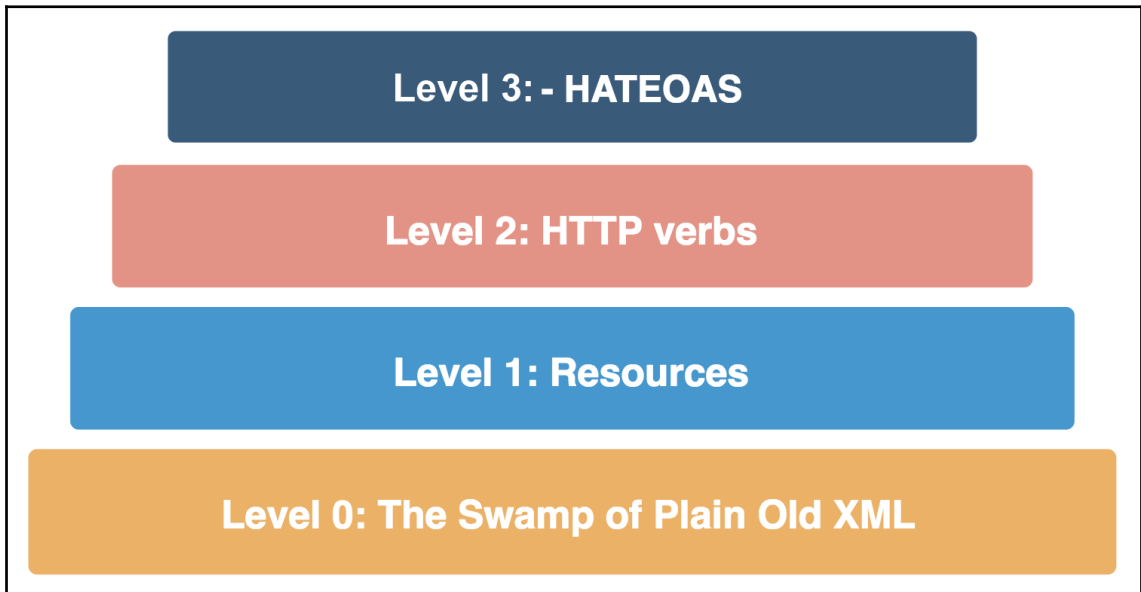
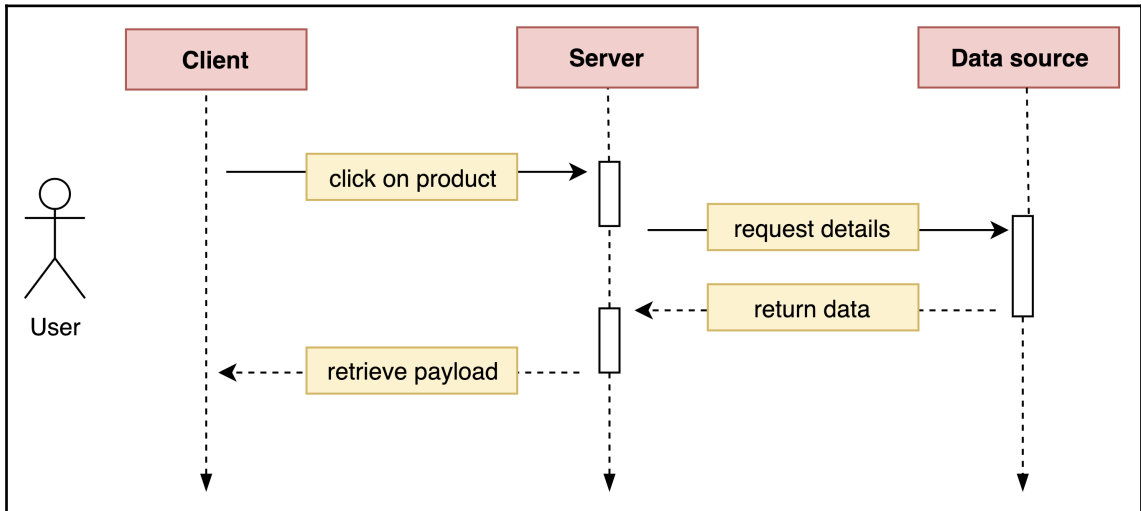
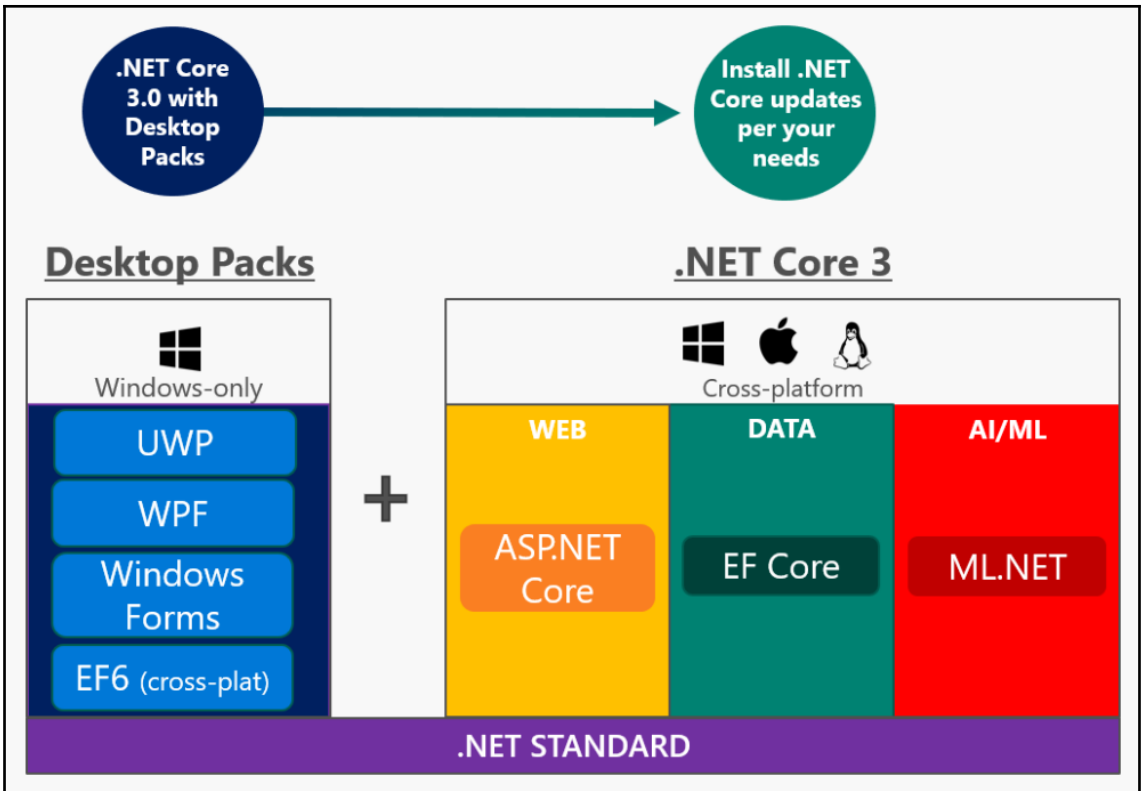


Chapter 1: REST 101 and Getting Started with ASP.NET Core





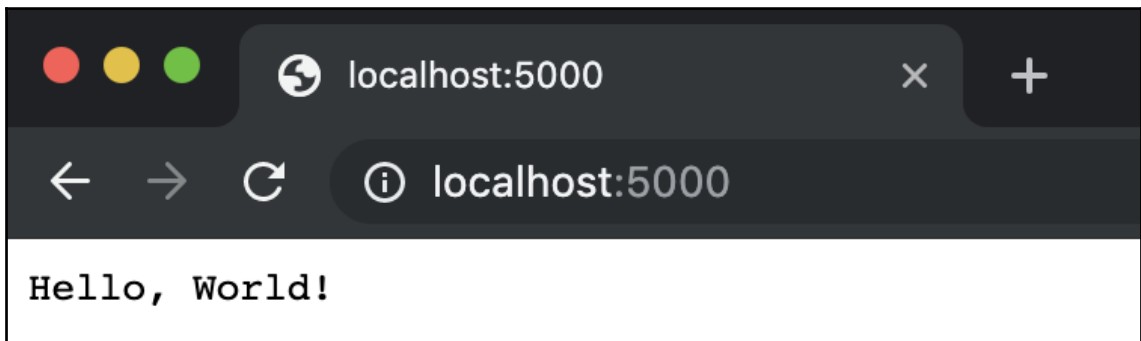
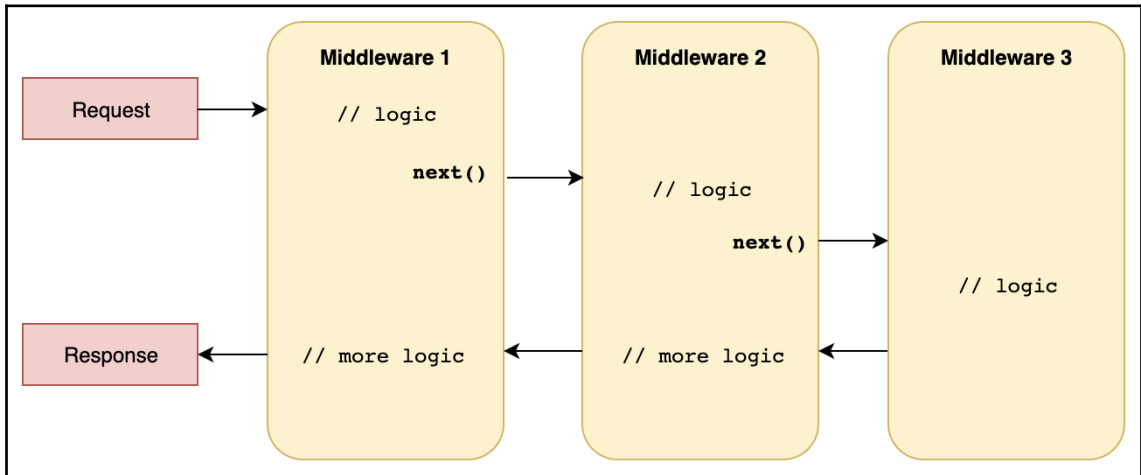
Chapter 2: Overview of ASP.NET Core

Templates	Short Name	Language	Tags
Console Application	console	[C#], F#, VB	Common/Console
Class library	classlib	[C#], F#, VB	Common/Library
WPF Application	wpf	[C#]	Common/WPF
Windows Forms (WinForms) Application	winforms	[C#], VB	Common/WinForms
Worker Service	worker	[C#]	Common/Worker/Web
Unit Test Project	mstest	[C#], F#, VB	Test/MSTest
NUnit 3 Test Project	nunit	[C#], F#, VB	Test/NUnit
NUnit 3 Test Item	nunit-test	[C#], F#, VB	Test/NUnit
xUnit Test Project	xunit	[C#], F#, VB	Test/xUnit
Razor Component	razorcomponent	[C#]	Web/ASP.NET
Razor Page	page	[C#]	Web/ASP.NET
MVC ViewImports	viewimports	[C#]	Web/ASP.NET
MVC ViewStart	viewstart	[C#]	Web/ASP.NET
Blazor (server-side)	blazorserverside	[C#]	Web/Blazor
ASP.NET Core Empty	web	[C#], F#	Web/Empty
ASP.NET Core Web App (Model-View-Controller)	mvc	[C#], F#	Web/MVC
ASP.NET Core Web App	webapp	[C#]	Web/MVC/Razor Pages
ASP.NET Core with Angular	angular	[C#]	Web/MVC/SPA
ASP.NET Core with React.js	react	[C#]	Web/MVC/SPA
ASP.NET Core with React.js and Redux	reactredux	[C#]	Web/MVC/SPA
Razor Class Library	razorclasslib	[C#]	Web/Razor/Library/Razor Class Library
ASP.NET Core Web API	webapi	[C#], F#	Web/WebAPI
ASP.NET Core gRPC Service	grpc	[C#]	Web/gRPC
global.json file	globaljson		Config
NuGet Config	nugetconfig		Config
Dotnet local tool manifest file	tool-manifest		Config
Web Config	webconfig		Config
Solution File	sln		Solution

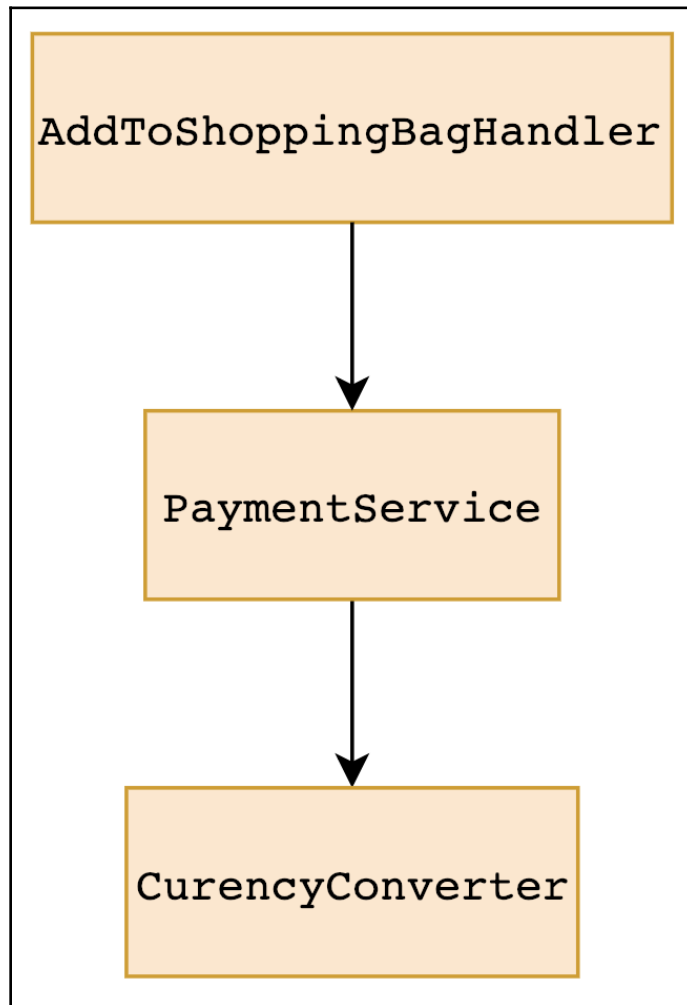
Examples:

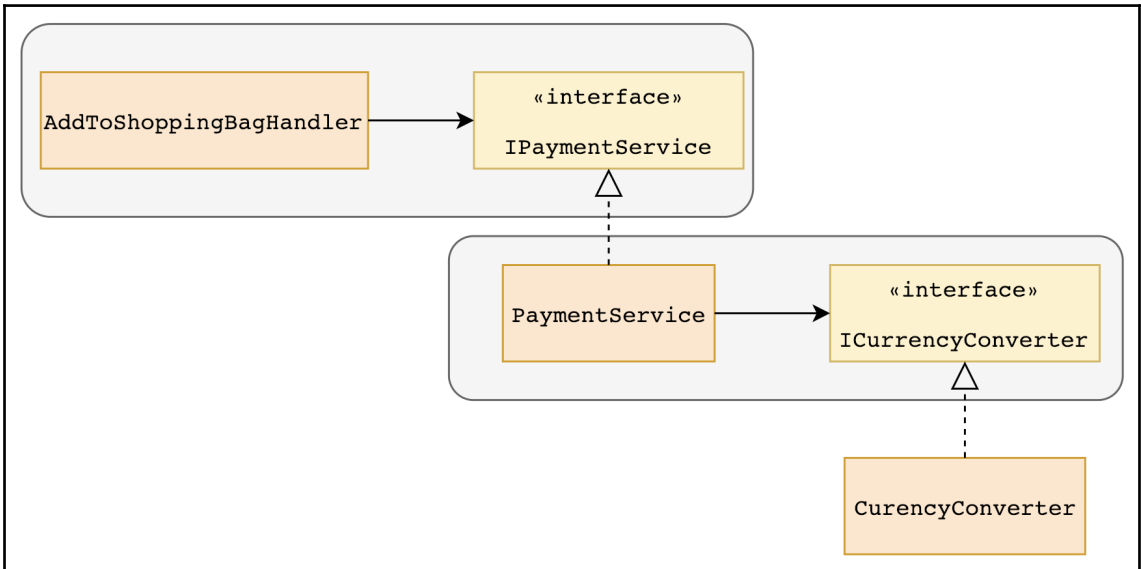
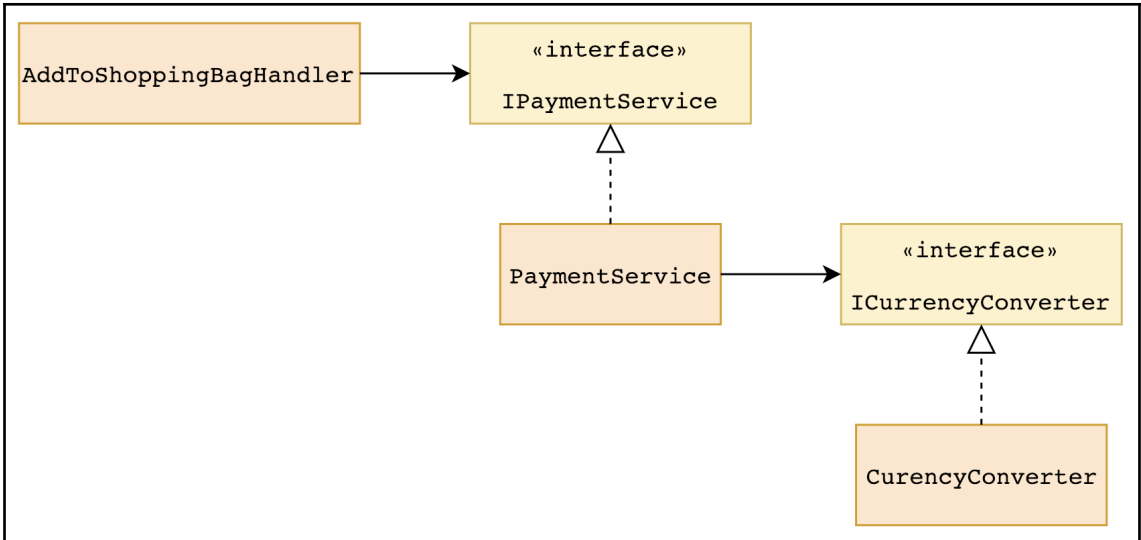
```
dotnet new mvc --auth Individual
dotnet new page
dotnet new --help
```

Chapter 3: Working with the Middleware Pipeline

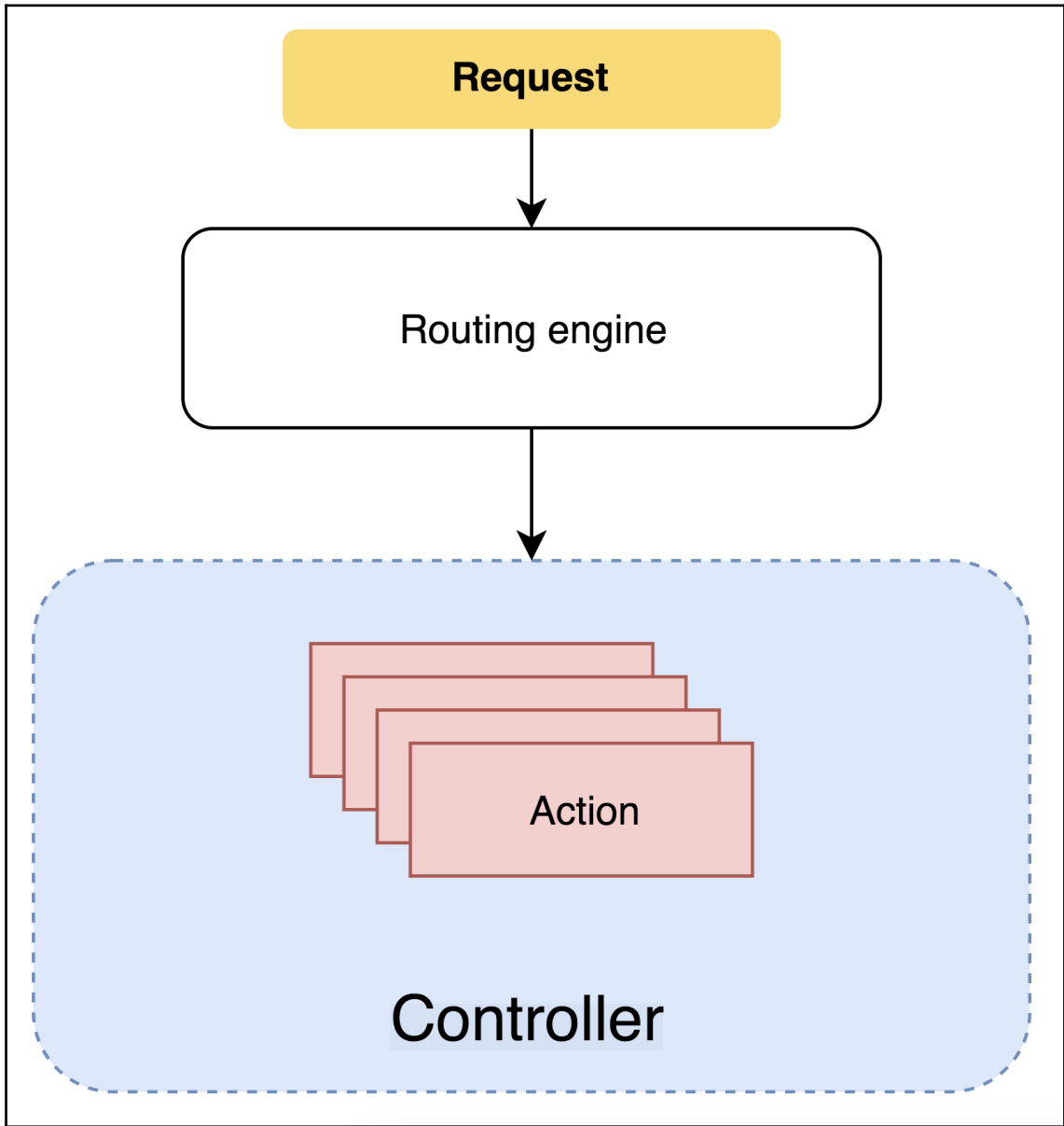


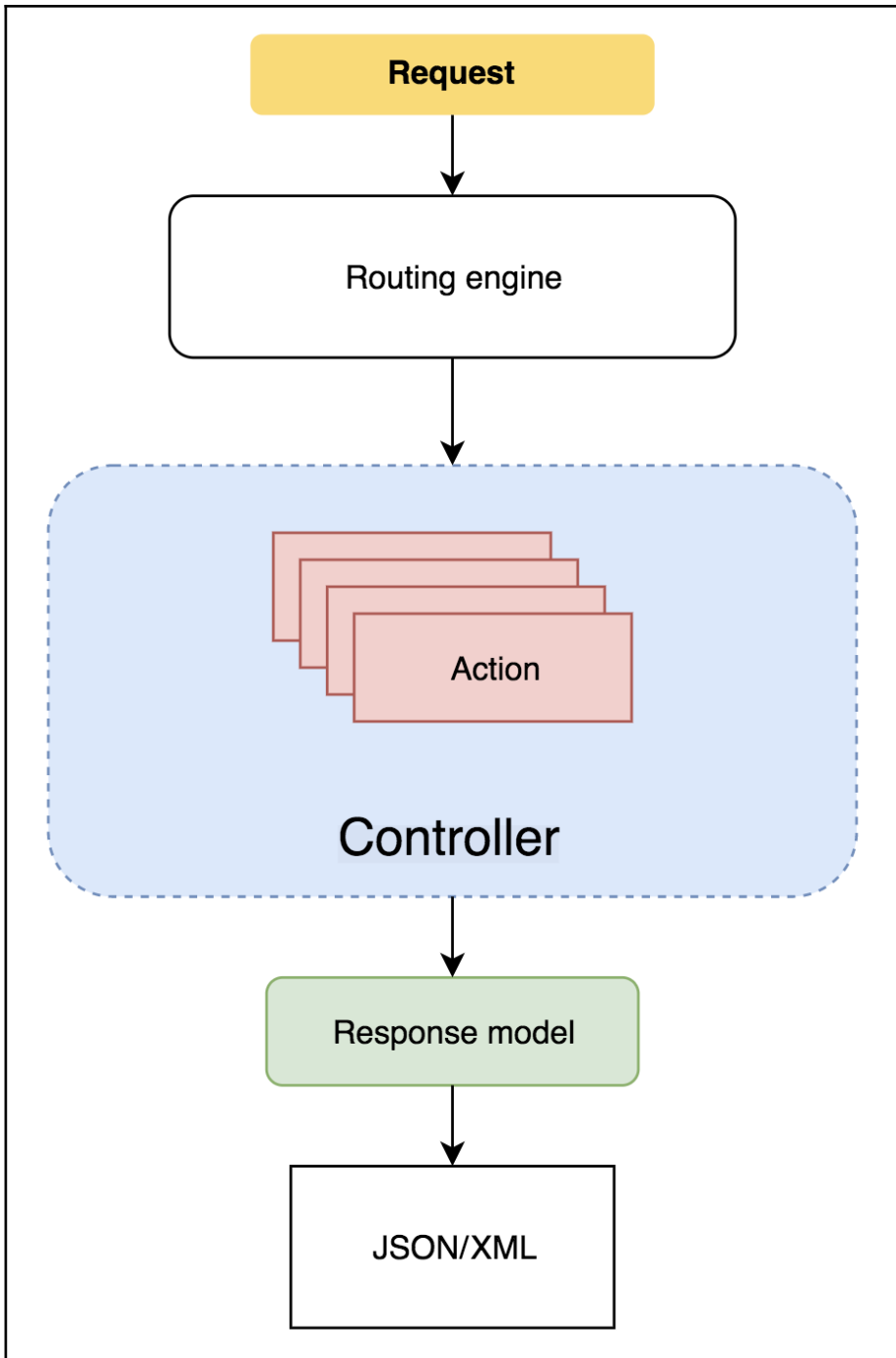
Chapter 4: Dependency Injection System

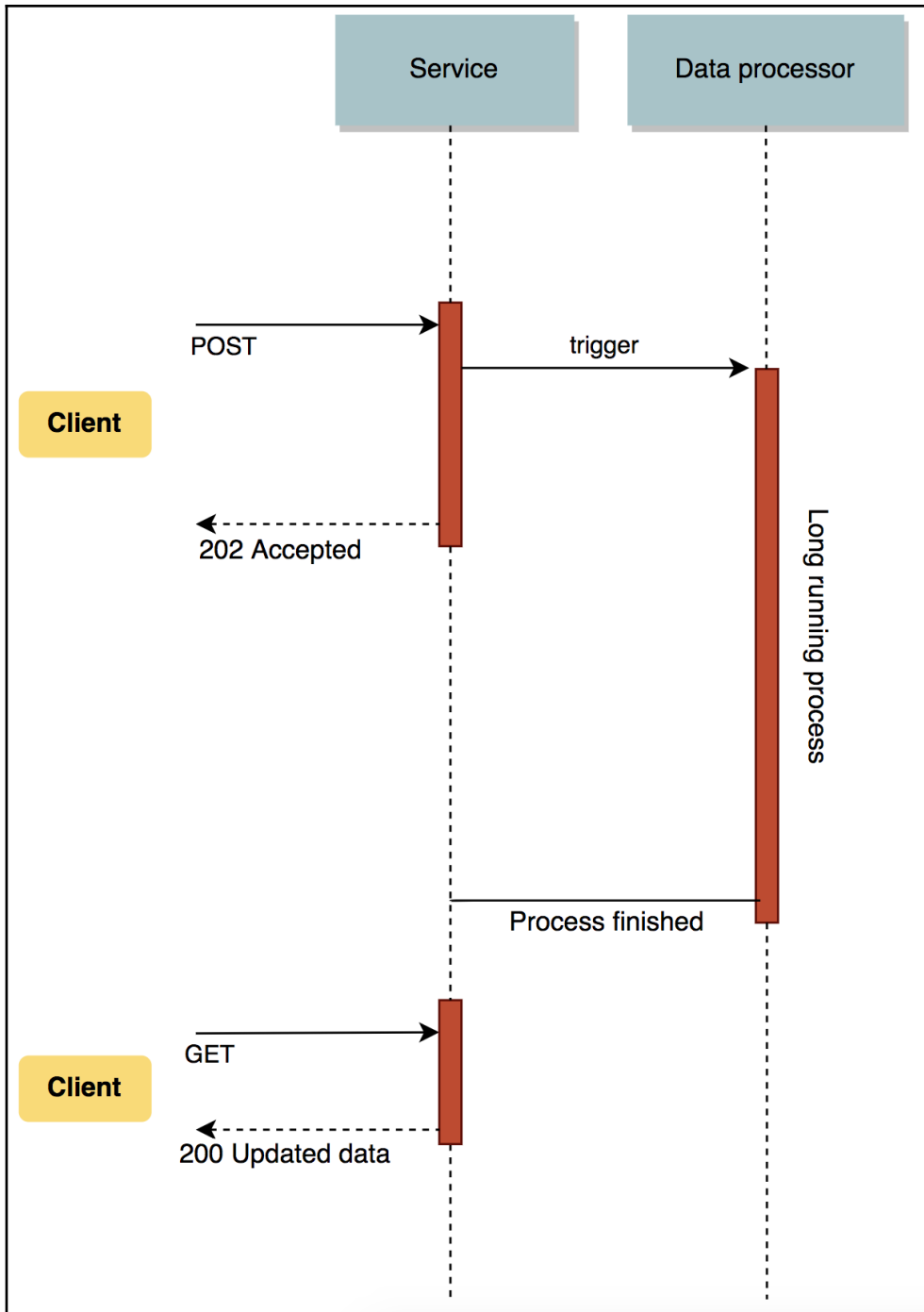


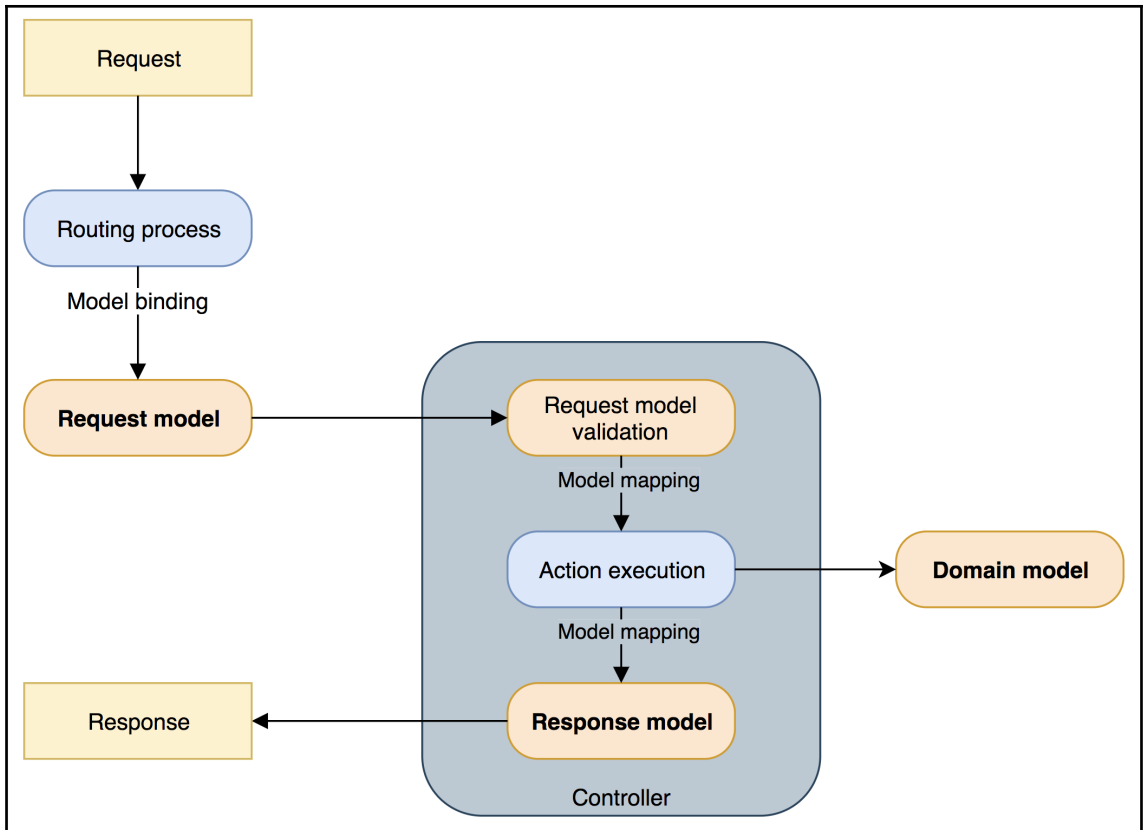


Chapter 5: Web Service Stack in ASP.NET Core

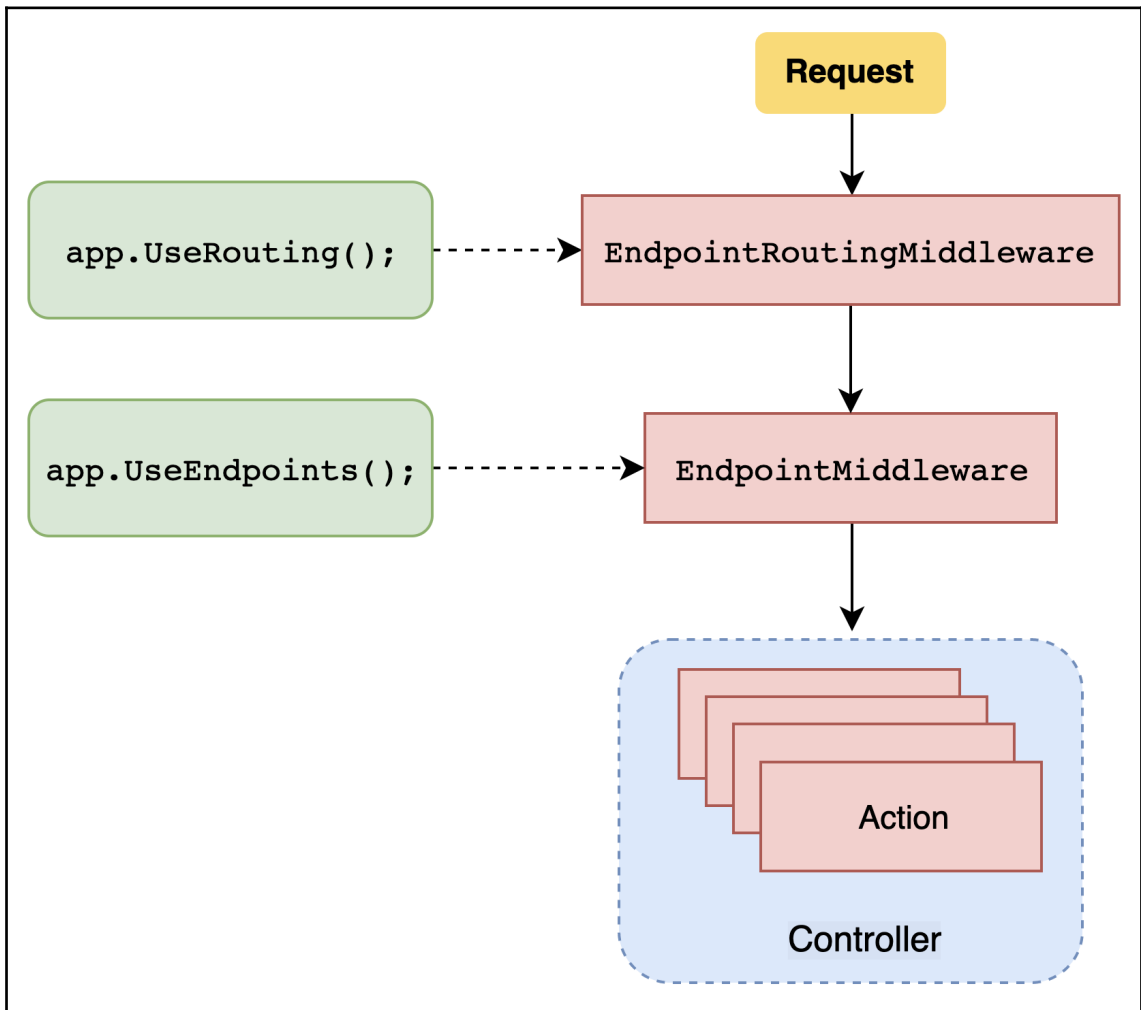




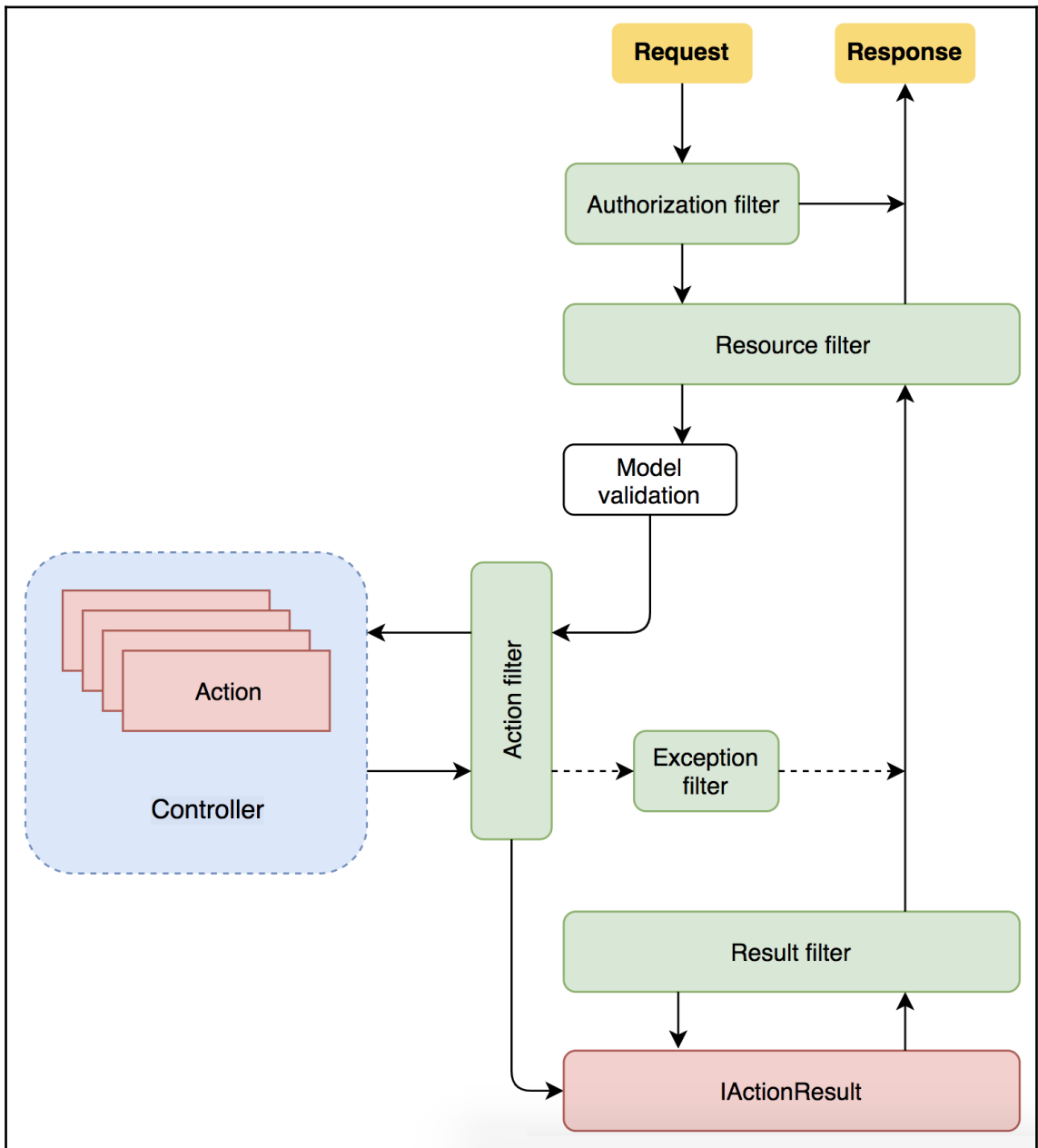




Chapter 6: Routing System



Chapter 7: Filter Pipeline



An unhandled exception occurred while processing the request.

Exception: My custom exception

HandsOnRest.HandlingRequests.Controllers.OrdersController.Get() in OrdersController.cs, line 29

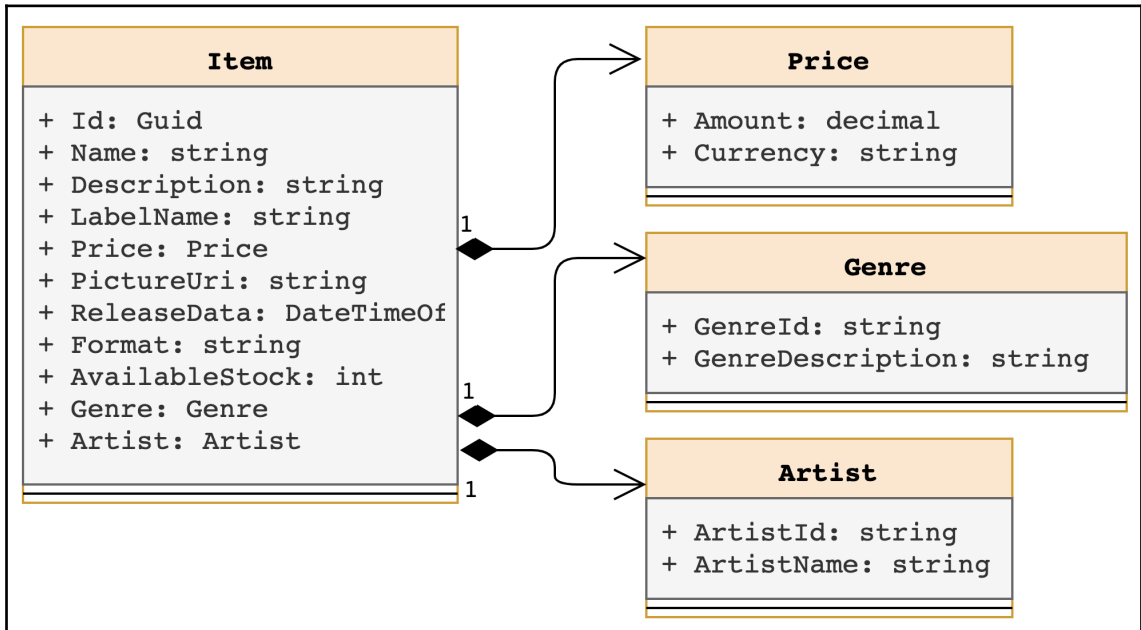
Stack Query Cookies Headers

Exception: My custom exception

HandsOnRest.HandlingRequests.Controllers.OrdersController.Get() in OrdersController.cs

```
+ 23.
    24.     }
    25.
    26.     [HttpGet]
    27.     public IActionResult Get()
    28.     {
    29.         throw new Exception("My custom exception");
    30.         return Ok(Map(_ordersRepository.Get()));
    31.     }
    32.
    33.     [HttpGet("{id:guid}")]
    34.     [OrderExists]
    35.     public IActionResult GetById(Guid id)
lambda_method(Closure , object , object[] )
```

Chapter 8: Building the Data Access Layer



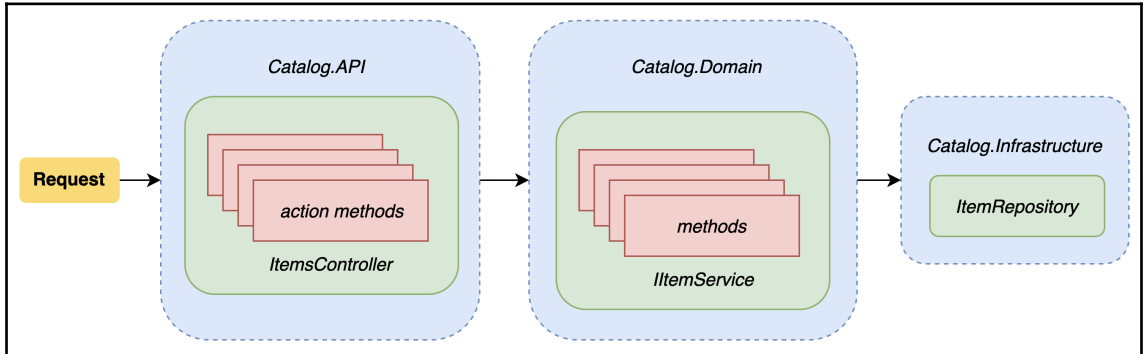
Chapter 9: Implementing the Domain Logic

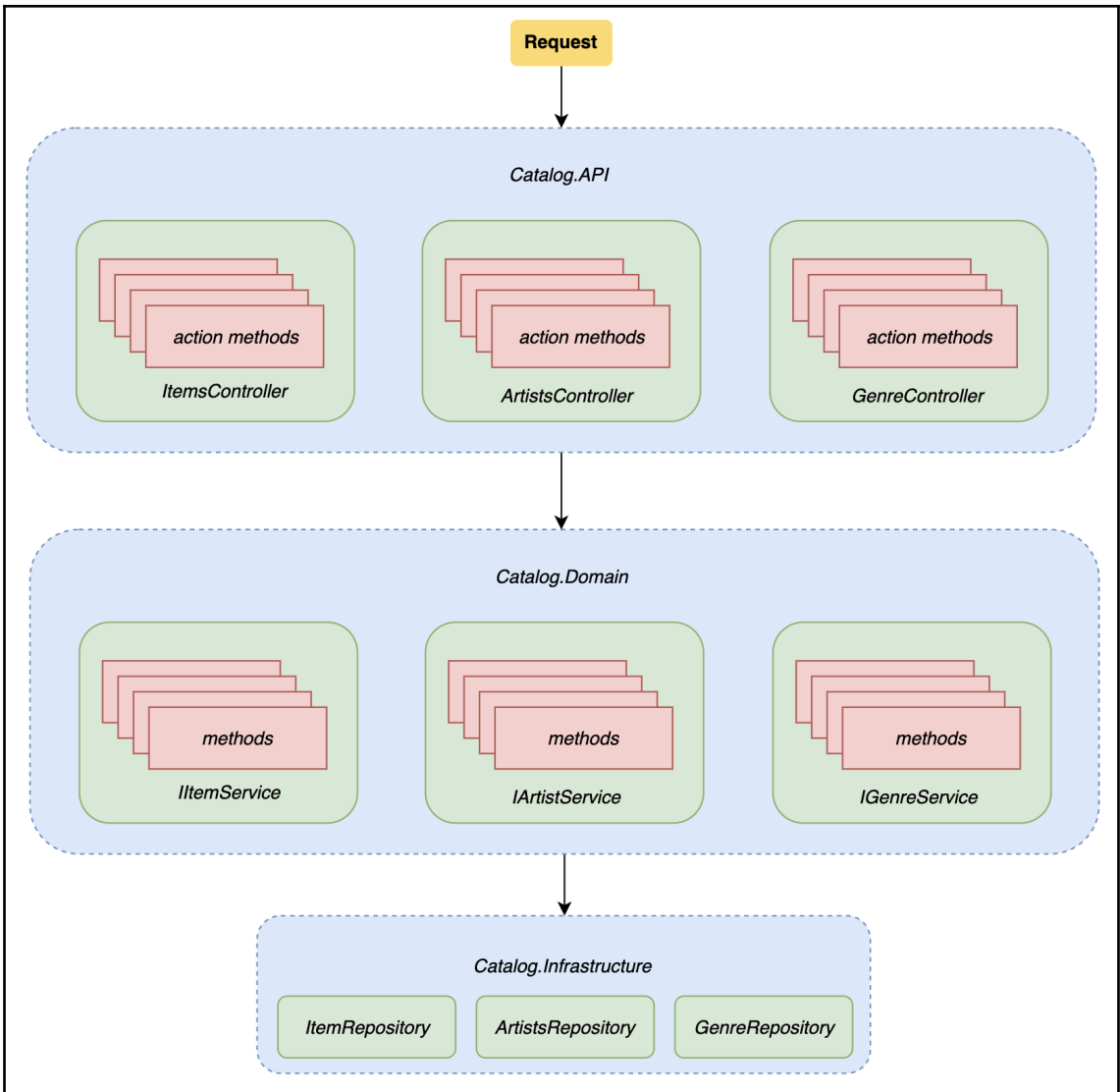
```
[xUnit.net 00:00:01.92] Finished: Catalog.Infrastructure.Tests

✓ Catalog.Domain.Tests.Services.ItemServiceTests.getitems_should_return_right_data [137ms]
✓ Catalog.Domain.Tests.Services.ItemServiceTests.edititem_should_add_right_entity [112ms]
✓ Catalog.Domain.Tests.Services.ItemServiceTests.additem_should_add_right_entity [15ms]
✓ Catalog.Domain.Tests.Services.ItemServiceTests.getitem_should_return_right_data(guid: "b5b05534-9263-448c-a69e-0bbd8b3eb90e") [5ms]
✓ Catalog.Domain.Tests.Services.ItemServiceTests.getitem_should_throw_exception_with_null_id [4ms]

Test Run Successful.
Total tests: 10
Passed: 10
```

Chapter 10: Implementing the RESTful HTTP Layer

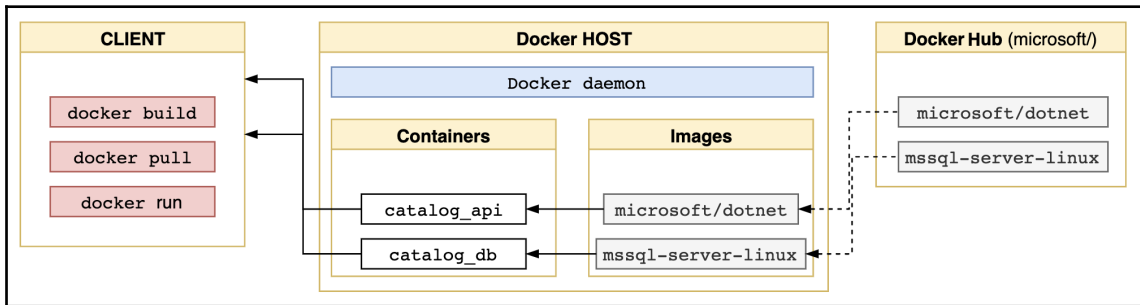
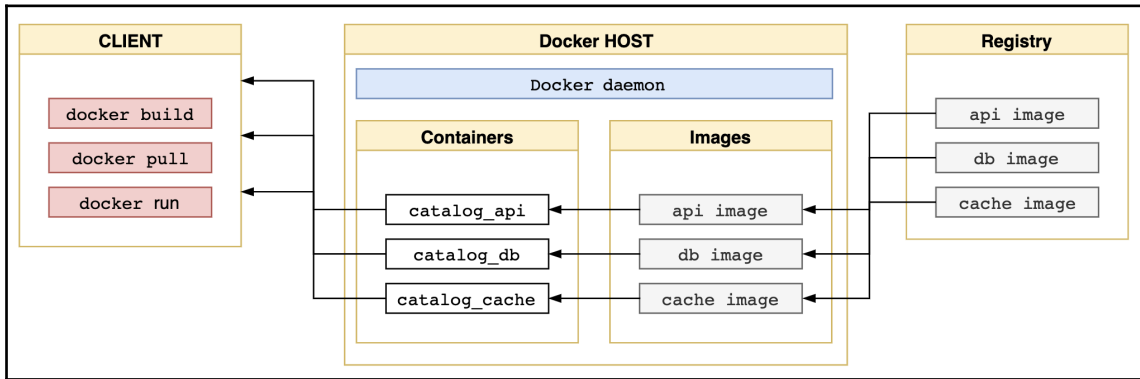




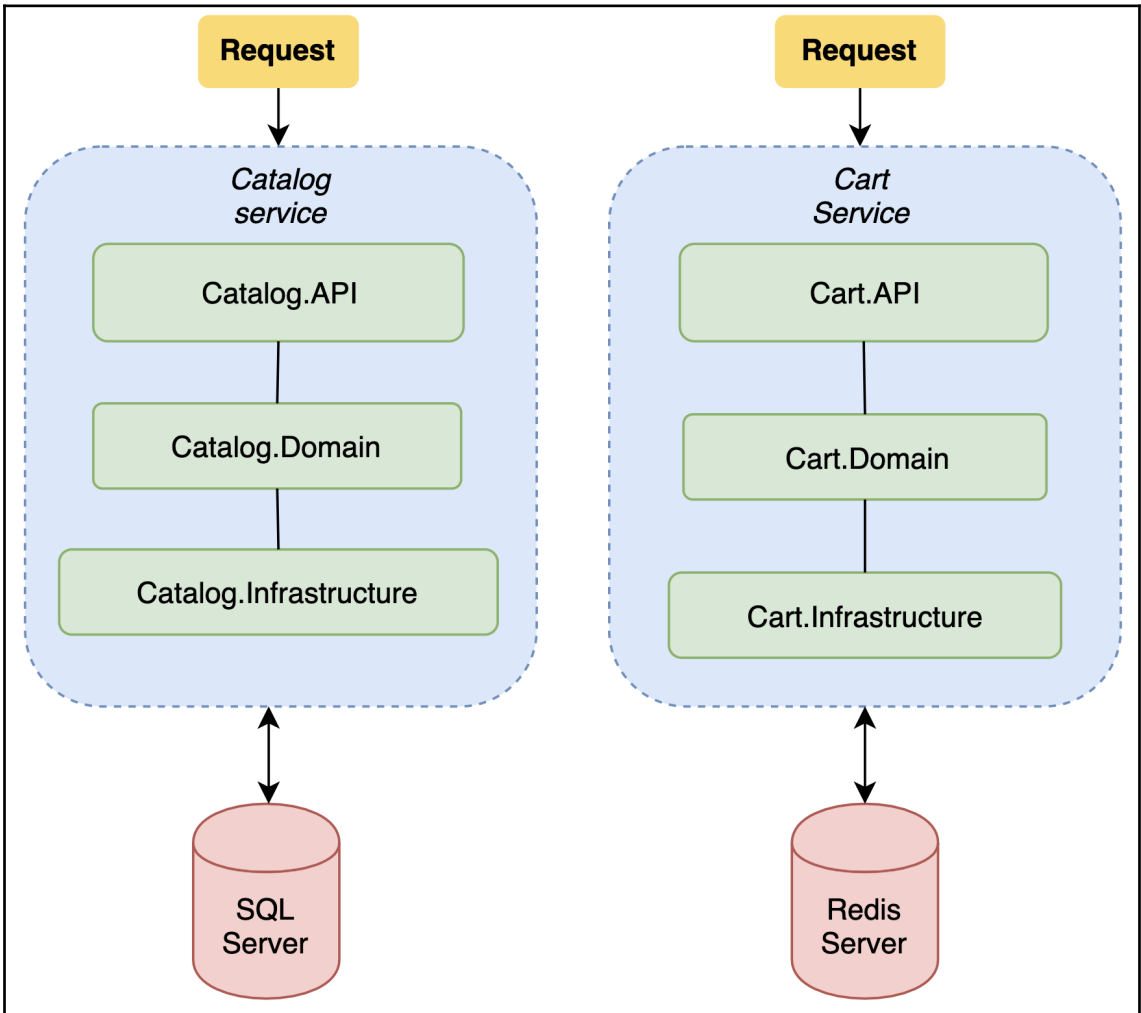
Chapter 11: Advanced Concepts of Building an API

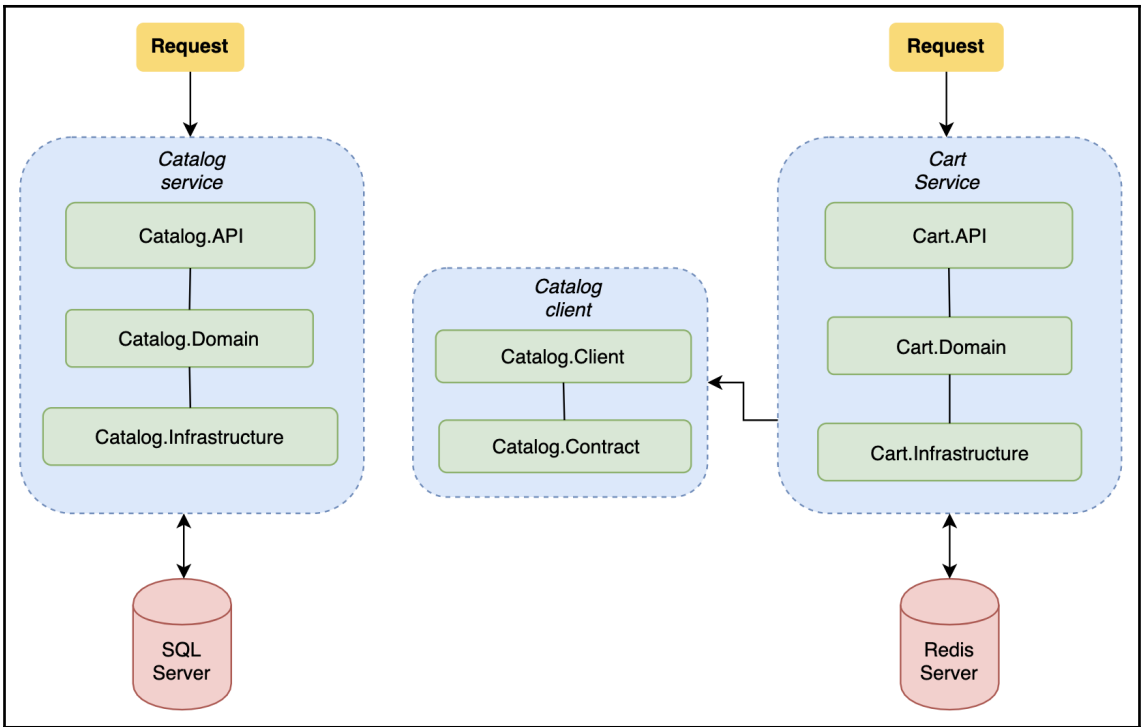
No images...

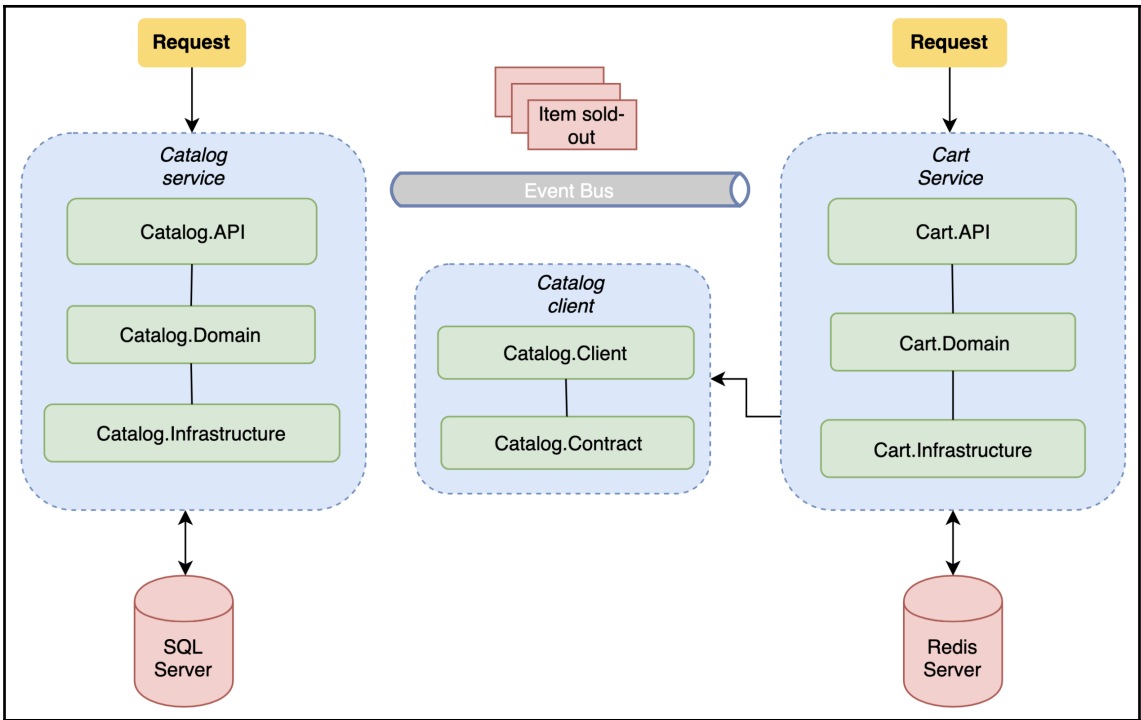
Chapter 12: The Containerization of Services



Chapter 13: Service Ecosystem Patterns



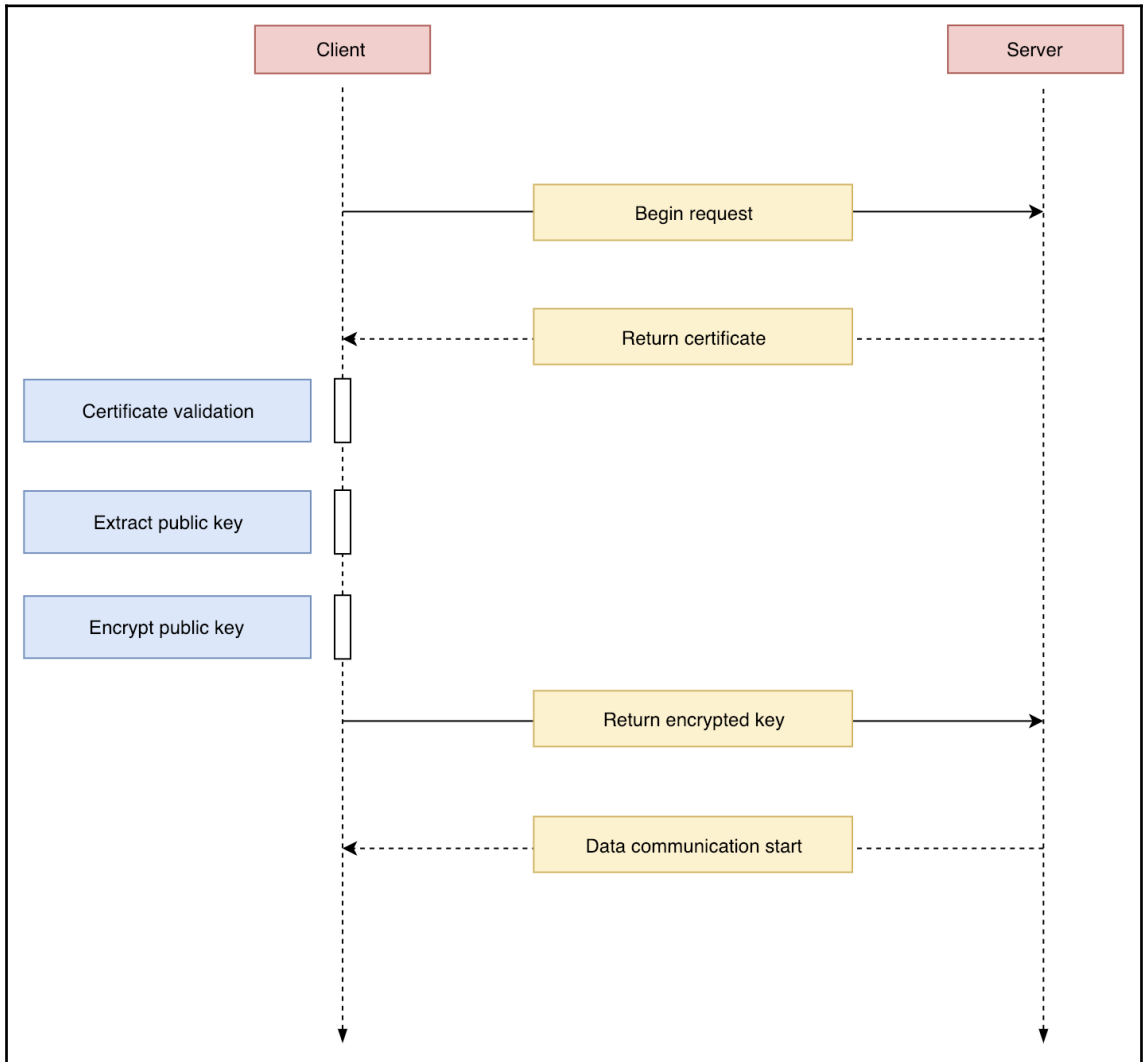


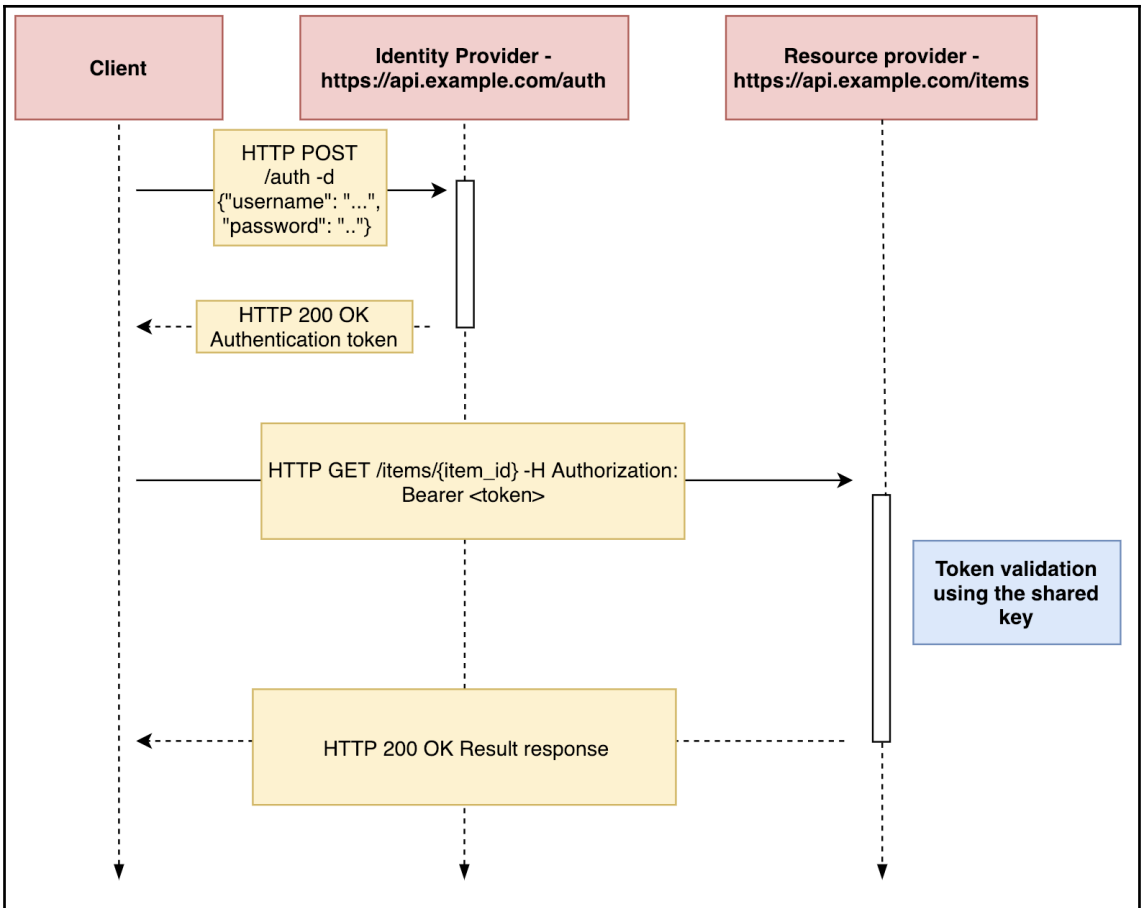


Chapter 14: Implementing Worker Services Using .NET Core

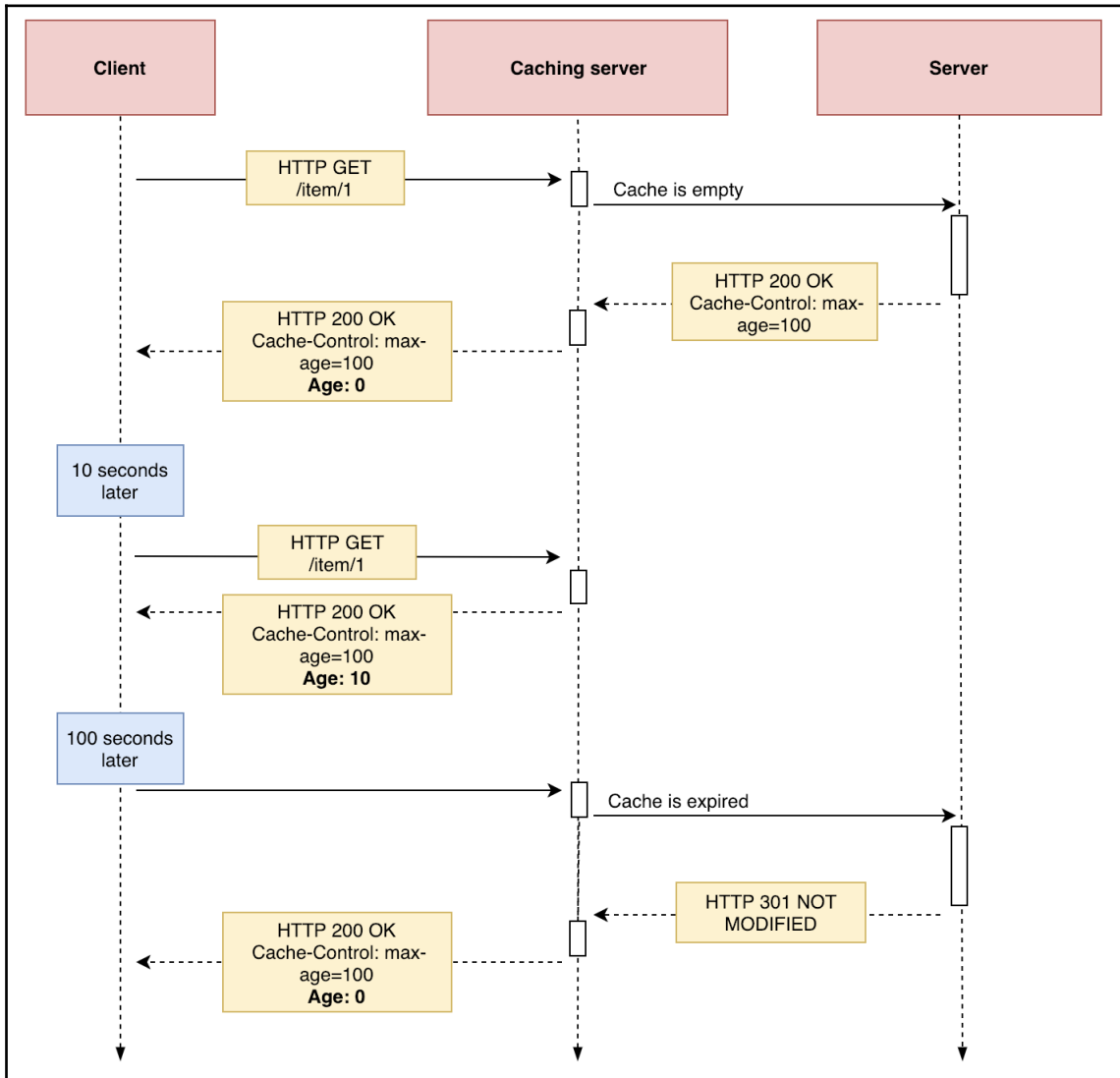
No images...

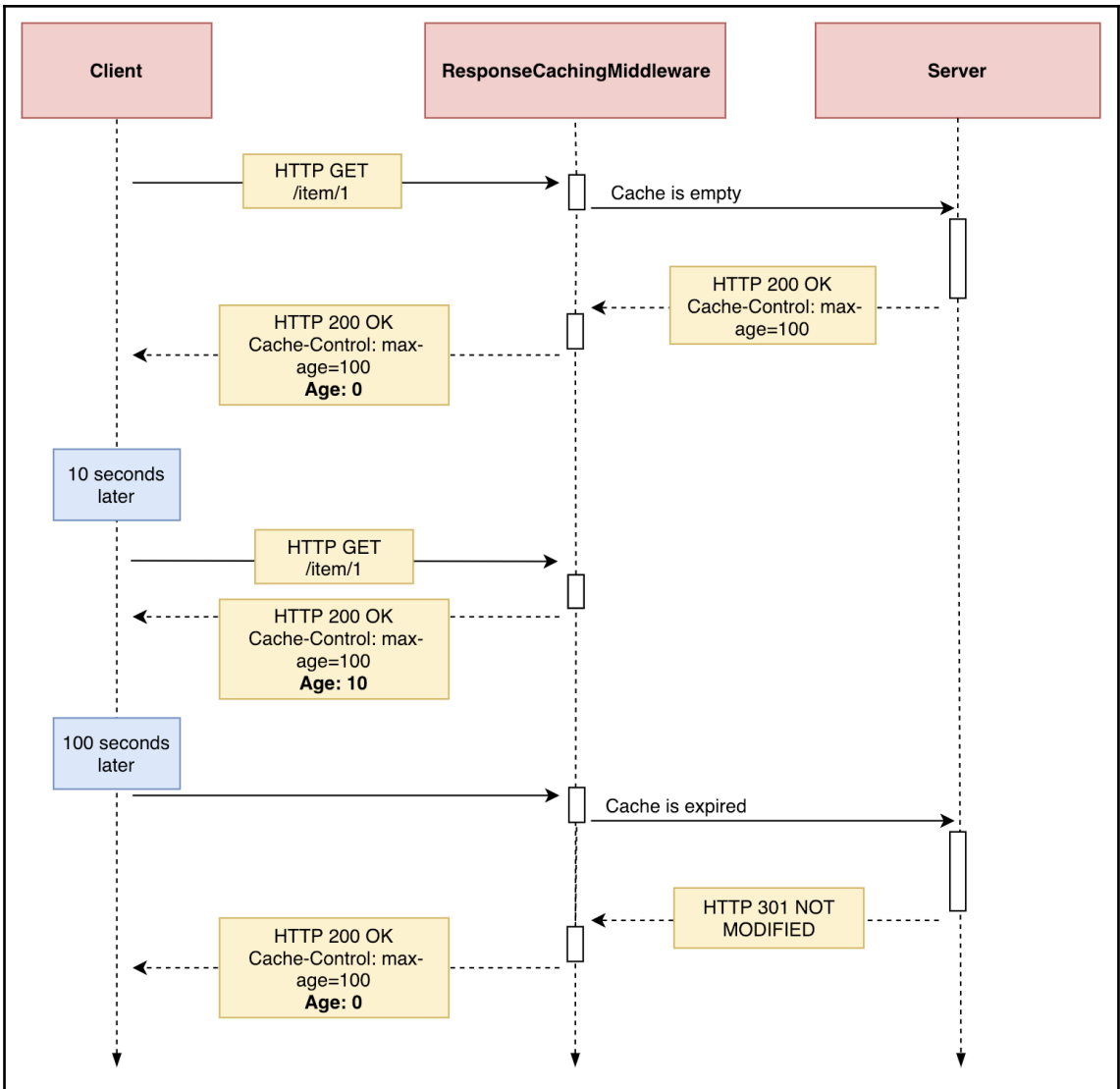
Chapter 15: Securing Your Service



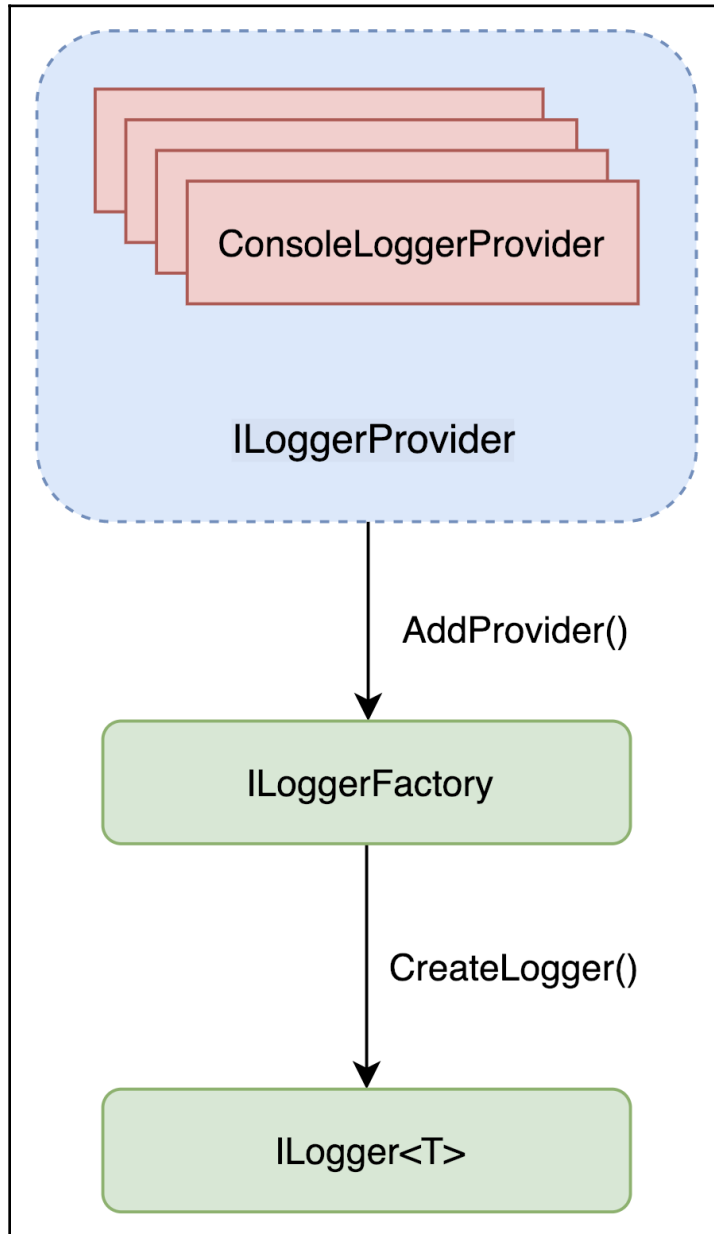


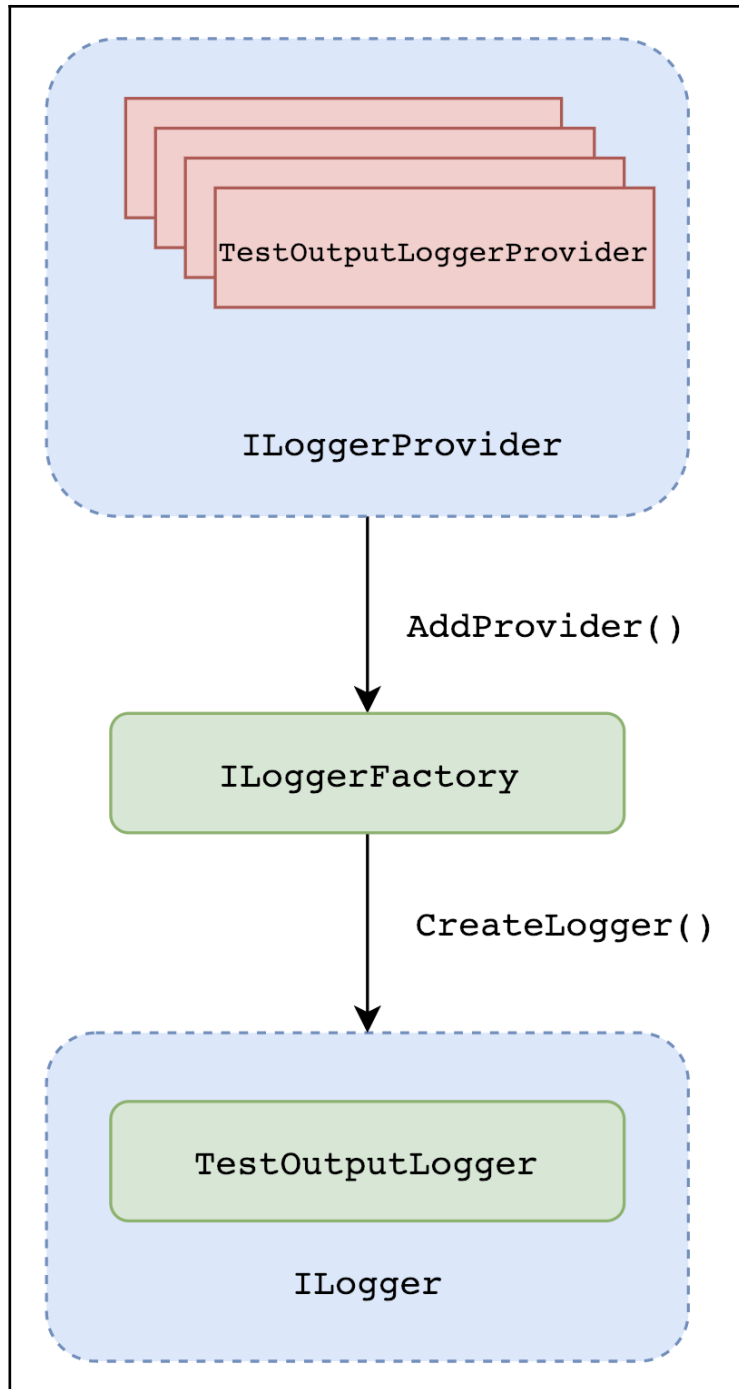
Chapter 16: Caching Web Service Responses



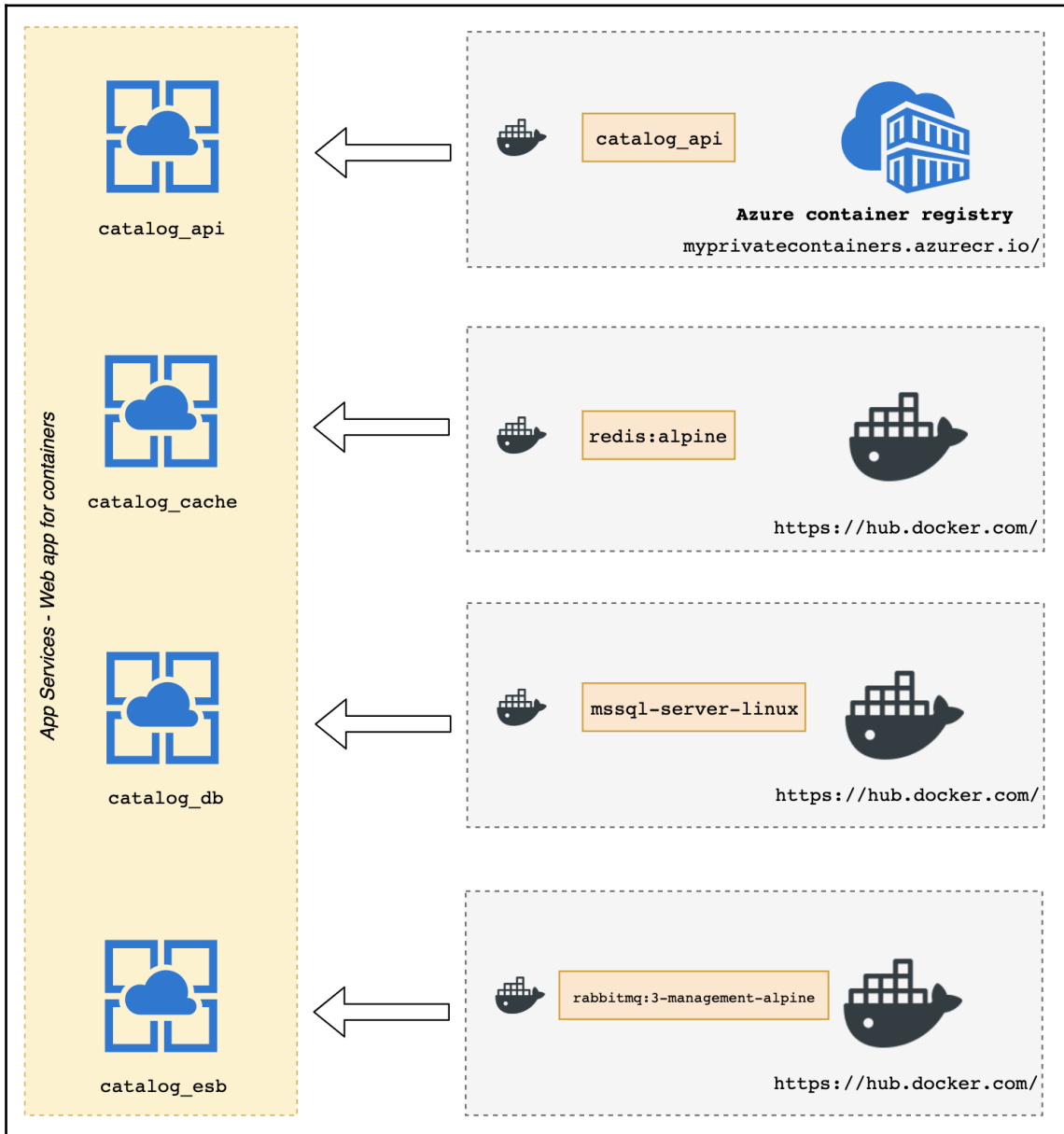


Chapter 17: Logging and Health Checking





Chapter 18: Deploying Services on Azure



Microsoft Azure Search resources, services, and docs (G+)

Home > Container registries

Container registries

Directory predefinita

+ Add Edit columns Refresh Assign tags

[Build, Run, Push and Patch containers in Azure with ACR Tasks](#)

Subscriptions: All 2 selected – Don't see a subscription? [Open Directory + Subscription settings](#)

Filter by name... All subscriptions All resource groups All locations

1 items

Name	Type	Resource group	Location
handsonaspnetcoreacr	Container registry	handsOn	West Europe

Container instances

Directory predefinita

+ Add Edit columns Refresh Assign tags

Subscriptions: Versione di valutazione gratuita

Filter by name... All resource groups All locations All tags No grouping

4 items

NAME	RESOURCE GROUP	LOCATION	STATUS	OS TYPE	TOTAL CONTAINERS	SUBSCRIPTION
catalogapi	catalogServiceGroup	West Europe	Running	Linux	1	Versione di valutazione... ⋮
catalog-cache	catalogServiceGroup	West Europe	Running	Linux	1	Versione di valutazione... ⋮
catalog-db	catalogServiceGroup	West Europe	Running	Linux	1	Versione di valutazione... ⋮
catalog-esb	catalogServiceGroup	West Europe	Running	Linux	1	Versione di valutazione... ⋮

Start Restart Stop Delete Refresh

Resource group (change) : [catalogServiceGroup](#) OS type : Linux
Status : Running IP address : 52.137.28.245
Location : West Europe FQDN : [catalogapi.westeurope.azurecontainer.io](#)
Subscription (change) : [Versione di valutazione gratuita](#) Container count : 1
Subscription ID : 37a34233-576e-4c69-8f44-4e556a7b94f1
Tags (change) : [Click here to add tags](#)

^

CPU

CPU Usage (Avg)
catalogapi
1,26

Memory

Memory Usage (Avg)
catalogapi
116,05 MB

Microsoft Azure

Search resources, services, and docs (G+)

Home > App Services > catalog-srv

catalog-srv
App Service

Resource group (change) : handsOnAppService URL : https://catalog-srv.azurewebsites.net
 Status : Running App Service Plan : catalogServicePlan (F1 - Free)
 Location : West Europe FTP/deployment userna... : catalog-srv\samueler
 Subscription (change) : Visual Studio Enterprise FTP hostname : ftp://waws-prod-am2-189.ft.azurewe
 Subscription ID : FTSP hostname : ftps://waws-prod-am2-189.ft.azurewe
 Tags (change) : [Click here to add tags](#)

Diagnose and solve problems

Our self-service diagnostic and troubleshooting experience helps you identify and resolve issues with your web app.

App Service Advisor

App Service Advisor provides insights for improving app experience on the App Service platform. Recommendations are sorted by freshness, priority and impact to your app.

Http 5xx

Http Server Errors (Sum) catalog-srv
0

Data In

Data In (Sum) catalog-srv
6.78 kB

Data Out

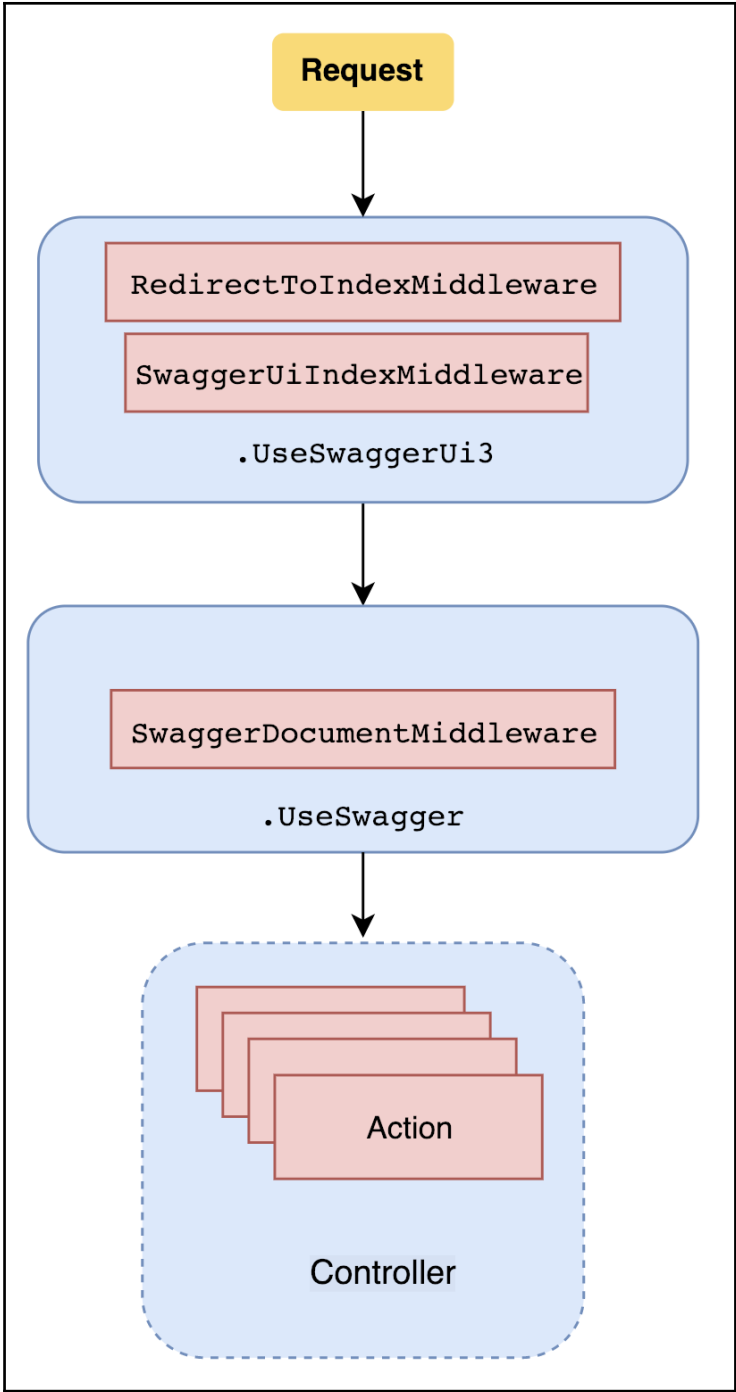
Data Out (Sum) catalog-srv
1.09 kB

Chapter 19: Documenting Your API Using Swagger

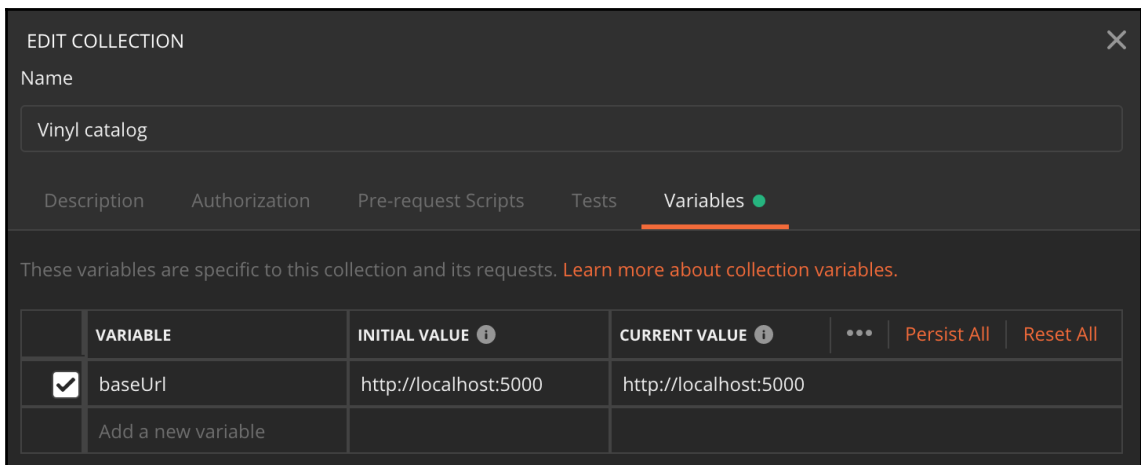
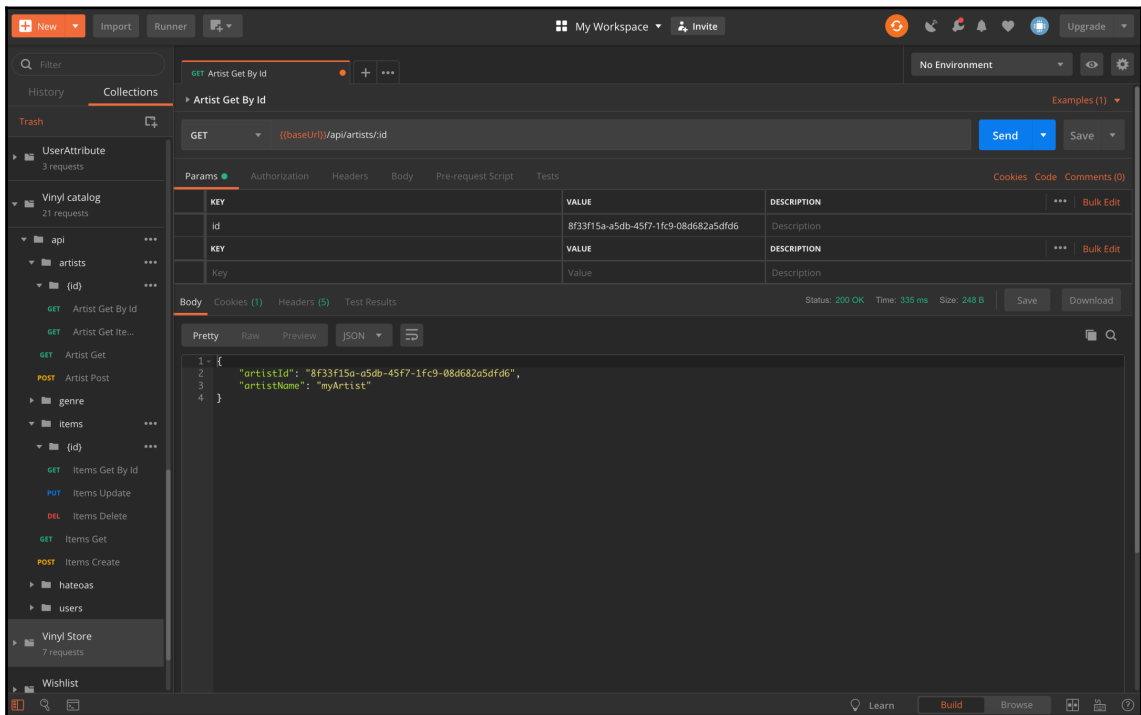
The screenshot shows the Swagger UI interface for a service named "catalog service" (version 1.0.0). The top navigation bar is green and contains the Swagger logo, the text "swagger", and a "Select a spec" dropdown menu currently set to "v1". Below the header, the service name "catalog service" is displayed in large bold text, with a version badge "1.0.0" to its right. Underneath, the base URL is shown as "[Base URL: localhost:5000]" and a link to the Swagger JSON file is provided: "/swagger/v1/swagger.json".

A "Schemes" dropdown menu is set to "HTTP". The main content area is divided into sections for different API resources:

- Artist** (with a downward arrow):
 - GET /api/artists
 - POST /api/artists
 - GET /api/artists/{id}
 - GET /api/artists/{id}/items
- Genre** (with a rightward arrow)
- Items** (with a rightward arrow)
- ItemsHateoas** (with a rightward arrow)
- Users** (with a rightward arrow)



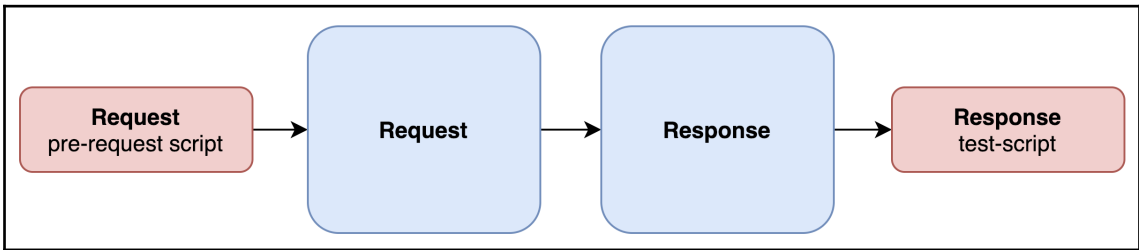
Chapter 20: Testing Services Using Postman



Body Cookies (1) Headers (5) Test Results Status: 200 OK Time: 335 ms Size: 248 B Save Download

Pretty Raw Preview JSON ↕

```
1 - {
2   "artistId": "8f33f15a-a5db-45f7-1fc9-08d682a5dfd6",
3   "artistName": "myArtist"
4 }
```



▶ Artist Get By Id

GET `{{baseUrl}}/api/artists/:id`

Params ● Authorization Headers Body Pre-request Script Tests ●

```
1 pm.test("response is ok", function () {
2   pm.response.to.have.status(200);
3 });
```

Params Authorization Headers Body Pre-request Script **Tests** Cookies Code Comments (0)

```

1 pm.test("response is ok", () => {
2   pm.response.to.have.status(200)
3 })

```

Test scripts are written in JavaScript, and are run after the response is received.

SNIPPETS

Get an environment variable

Get a global variable

Body Cookies Headers (5) **Test Results (1/1)** Status: 200 OK Time: 23 ms Size: 291 B Save Download

All Passed Skipped Failed

PASS response is ok

Postman

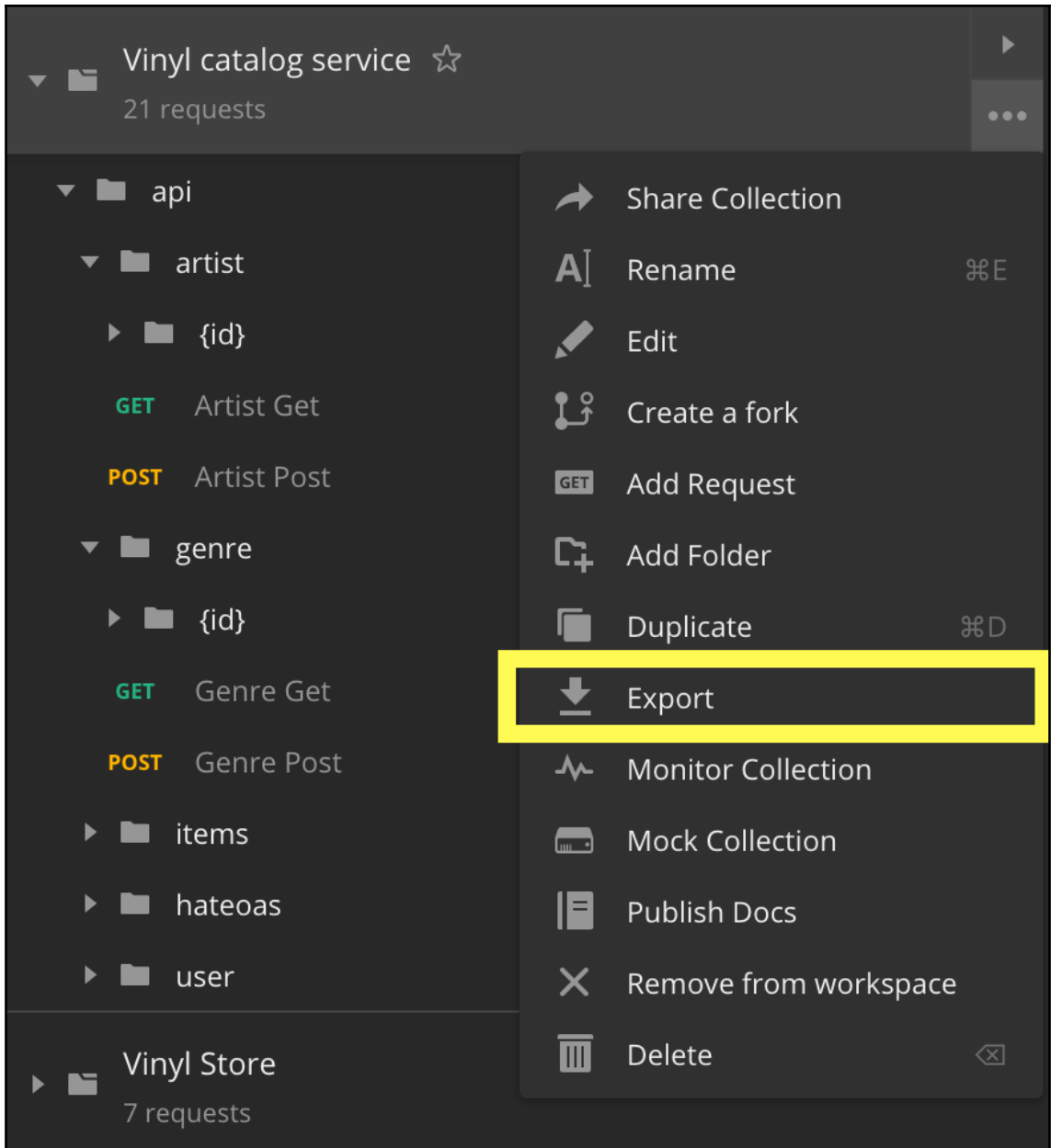
New Import **Runner** My Workspace Invite Upgrade

Collection Runner Run Results My Workspace Run In Command Line Docs Examples (1) Save

1 PASSED 0 FAILED Vinyl catalog No Environment 4:21 PM Run Summary Export Results New

Iteration 1

GET	Artist Get By Id	http://localhost:5000/api/.../artists/(id)/Artist Get By Id	200 OK	253 ms	75 B
	PASS	response is ok			
GET	Artist Get Items By Id	http://localhost:5000/api/.../artists/(id)/Artist Get Items By Id	404 Not Found	4 ms	0
	This request does not have any tests.				
GET	Artist Get	http://localhost:5000/api/.../catalog/api/artists/Artist Get	400 Bad Request	19 ms	104 B
	This request does not have any tests.				
POST	Artist Post	http://localhost:5000/api/.../catalog/api/artists/Artist Post	201 Created	45 ms	0
	This request does not have any tests.				
GET	Genre Get By Id	http://localhost:5000/api/.../api/genre/(id)/Genre Get By Id	404 Not Found	4 ms	0
	This request does not have any tests.				
GET	Genre Get Item By Id	http://localhost:5000/api/.../genre/(id)/Genre Get Item By Id	404 Not Found	5 ms	0
	This request does not have any tests.				
GET	Genre Get	http://localhost:5000/api/.../catalog/api/genre/Genre Get	400 Bad Request	6 ms	104 B
	This request does not have any tests.				
POST	Genre Post	http://localhost:5000/api/.../catalog/api/genre/Genre Post	201 Created	17 ms	0



Desktop — -bash — 80x24

↳ Users Sign In
POST http://localhost:5000/api/users/auth [400 Bad Request, 231B, 5ms]

	executed	failed
iterations	1	0
requests	21	0
test-scripts	1	0
prerequisite-scripts	0	0
assertions	1	0

total run duration: 720ms
total data received: 1.35KB (approx)
average response time: 17ms

FVFWX383HV2H:Desktop samuele.resca\$

The screenshot shows the Postman interface with the 'Import' dialog box open. The 'Import From Link' tab is selected, and the 'Import' button is highlighted. The background shows a collection of API requests under the 'Artist' folder.