.NET Framework

4.7   4.8

.NET Core

1.0   2.0   **3.0**   .NET 5   **.NET 6**   .NET 7

WPF, WinForms   EF Core 7

SOAP

CoreWCF 1.0

.NET Standard

Domain

.NET Framework		.NET Core				
IIS	Self Hosting	Windows	Linux	MacOS	Android	IOS
Windows		IIS	Apache ngnx	Apache ngnx		
Winforms	WPF	Winforms WPF UWP			Xamarin	
		WinUI				

MAUI	MAUI	MAUI

Avalonia UI

Blazor

.NET Core								
dotnet	Visual Studio		Visual Studio Code			Rider		
	Windows	MacOS	Windows	MacOS	Linux	Windows	MacOS	Linux

GET api/customers

GET api/customers/1

request (żądanie)

SQL

response (odpowiedź)

recordset

JSON / XML
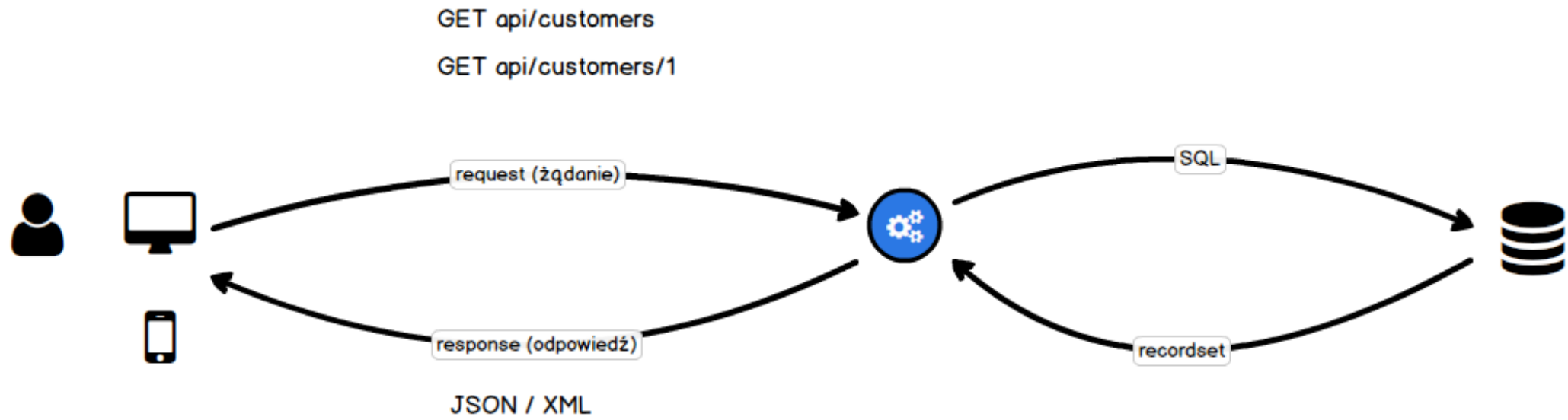
GET /api/customers/{customerId}?city={city}&street={street}
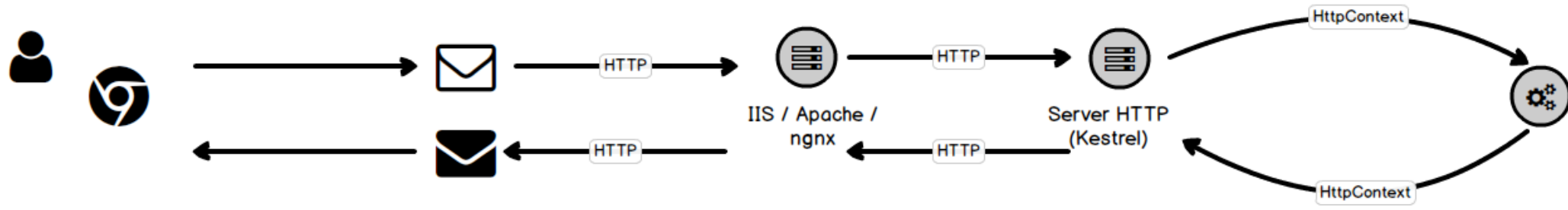
Verb

Route Params

Query Params

Url

GET /api/customers/1 HTTP/1.1
Host: localhost
Accept: application/json
\n\r

HttpContext
 - HttpRequest Request {get; set; }
 - HttpResponse Response {get; set; }
 - environment

http://localhost:5000/api/customers/1

HTTP

HTTP

HttpContext

IIS / Apache / ngnx

Server HTTP (Kestrel)

HTTP

HTTP

HttpContext

		request	response	

HEAD Pobierz nagłówek

```
HEAD /api/customers/1 HTTP/1.1
Host: localhost
\n\r
```

```
200 OK
```

```
404 Not Found
```

GET Pobierz

```
GET /api/customers/1 HTTP/1.1
Host: localhost
Accept: application/json
\n\r
```

```
200 OK
Content-Type: application/json
```

POST Utwórz

```
POST /api/customers HTTP/1.1
Host: localhost
Content-Type: application/json
Accept: application/json

{
  "FirstName":"John",
  "LastName":"Smith", "Salary":1000
}
\n\r
```

```
201 Created
Location: http://localhost:5000/
api/customers/1
Content-Type: application/json

{
  "Id":1, "FirstName":"John",
  "LastName":"Smith", "Salary":
1000
}
\n\r
```

PUT Zamień

```
PUT /api/customers/1 HTTP/1.1
Host: localhost
Content-Type: application/json
Accept: application/json

{
  "FirstName":"John",
  "LastName":"Smith",
  "Salary":1500
}
\n\r
```

```
204 NoContent
```

PATCH Zmień

```
PATCH /api/customers/1 HTTP/1.1
Host: localhost
Content-Type: application/json
Accept: application/json

{
  "Salary":1500
}
\n\r
```

```
204 NoContent
```

JSON Merge Patch

Content-Type: application/merge-patch+json

Morcatko.AspNetCore.JsonMergePatch

JSON Patch

Content-Type: application/json-patch+json

Microsoft.AspNetCore.JsonPatch

DELETE Usuń

```
DELETE /api/customers/1 HTTP/1.1
Host: localhost

\n\r
```

```
200 Ok
```

SOLID - Zasada Odwróconej zależności

Interface

ICustomerRepository

CSVCustomerRepository : ICustomerRepository

call

call

objects

InMemoryCustomerRepository : ICustomerRepository

SQL Server

DbCustomerRepository : ICustomerRepository
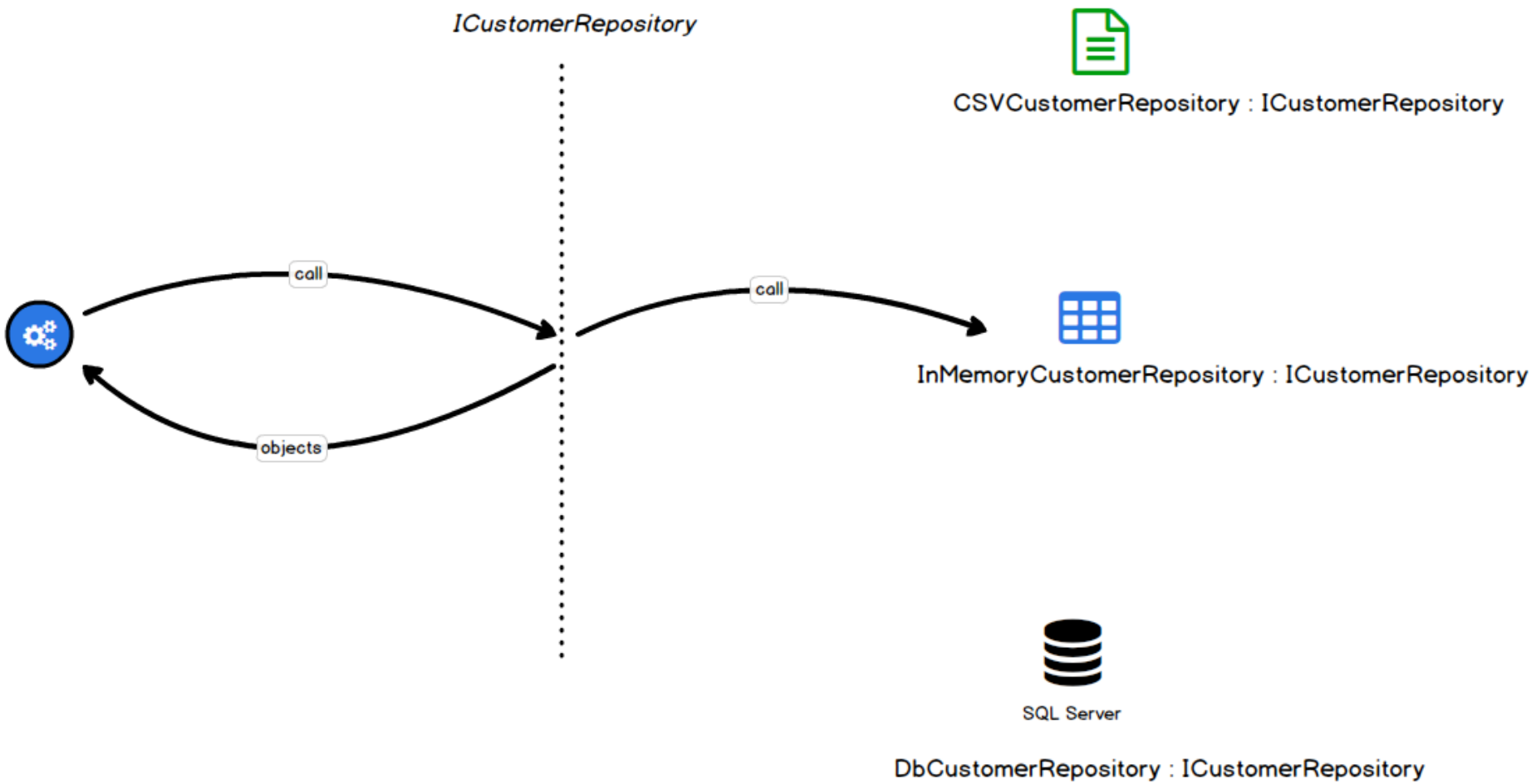
Type	Type
ICustomerRepository	InMemoryCustomerRepository
IProductRepository	DbProductRepository

http://

Name (job title)	Age	Nickname	Employee
Giacomo Guilizzoni Founder & CEO	40	Peldi	⦿
Marco Botton Tuttofare	38		☑
Mariah Maclachlan Better Half	41	Patata	⊟
Valerie Liberty Head Chef	:)	Val	☑
Data Grid Docs			☐

http://

Some text

Some text

Some text

Some text
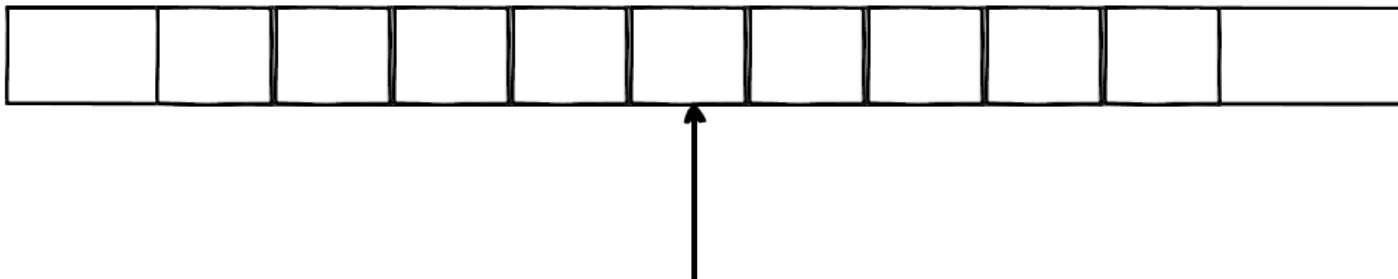
Some text

Some text

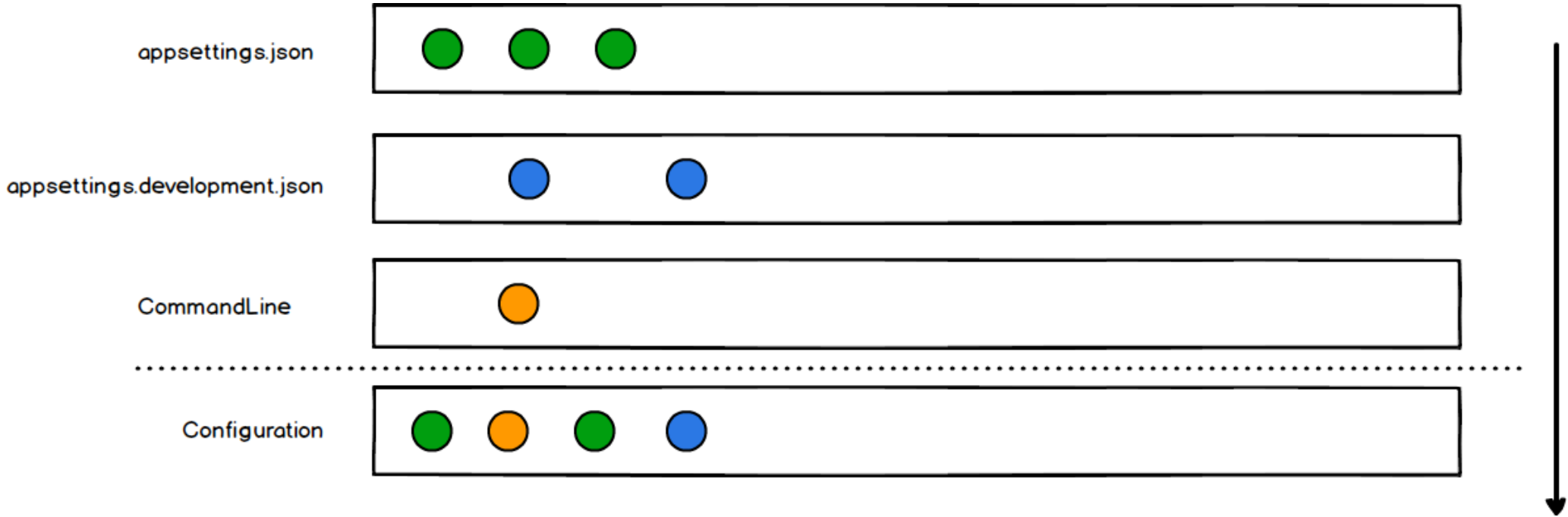Some text
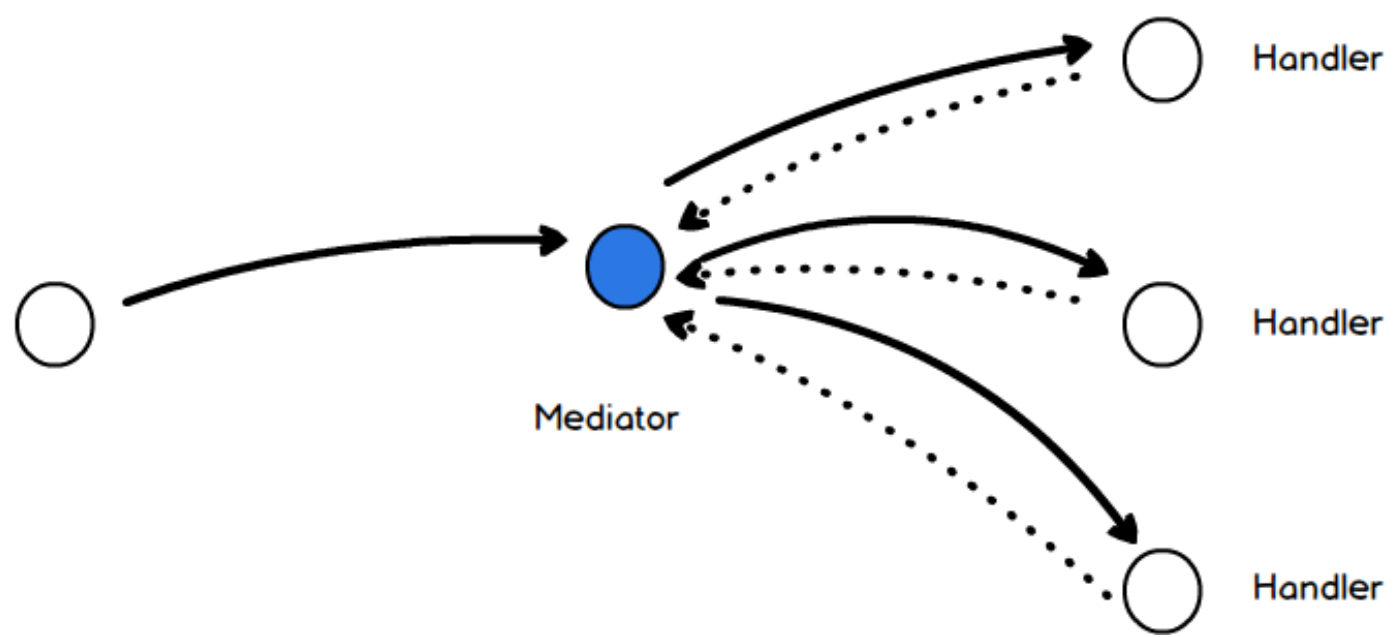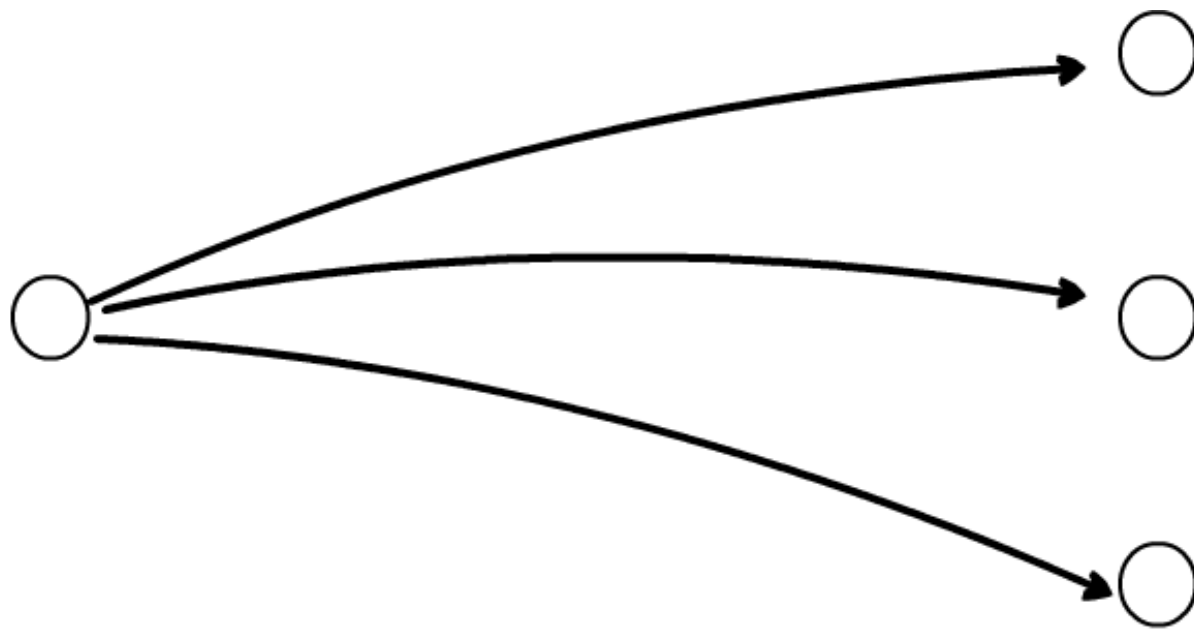
ComboBox

.Position

CopyToAsync()

Reader

Writer

.Position
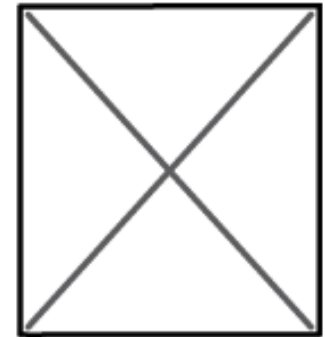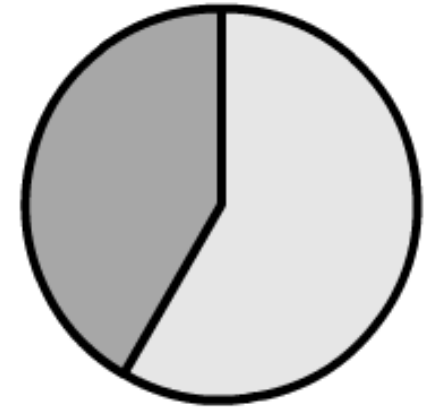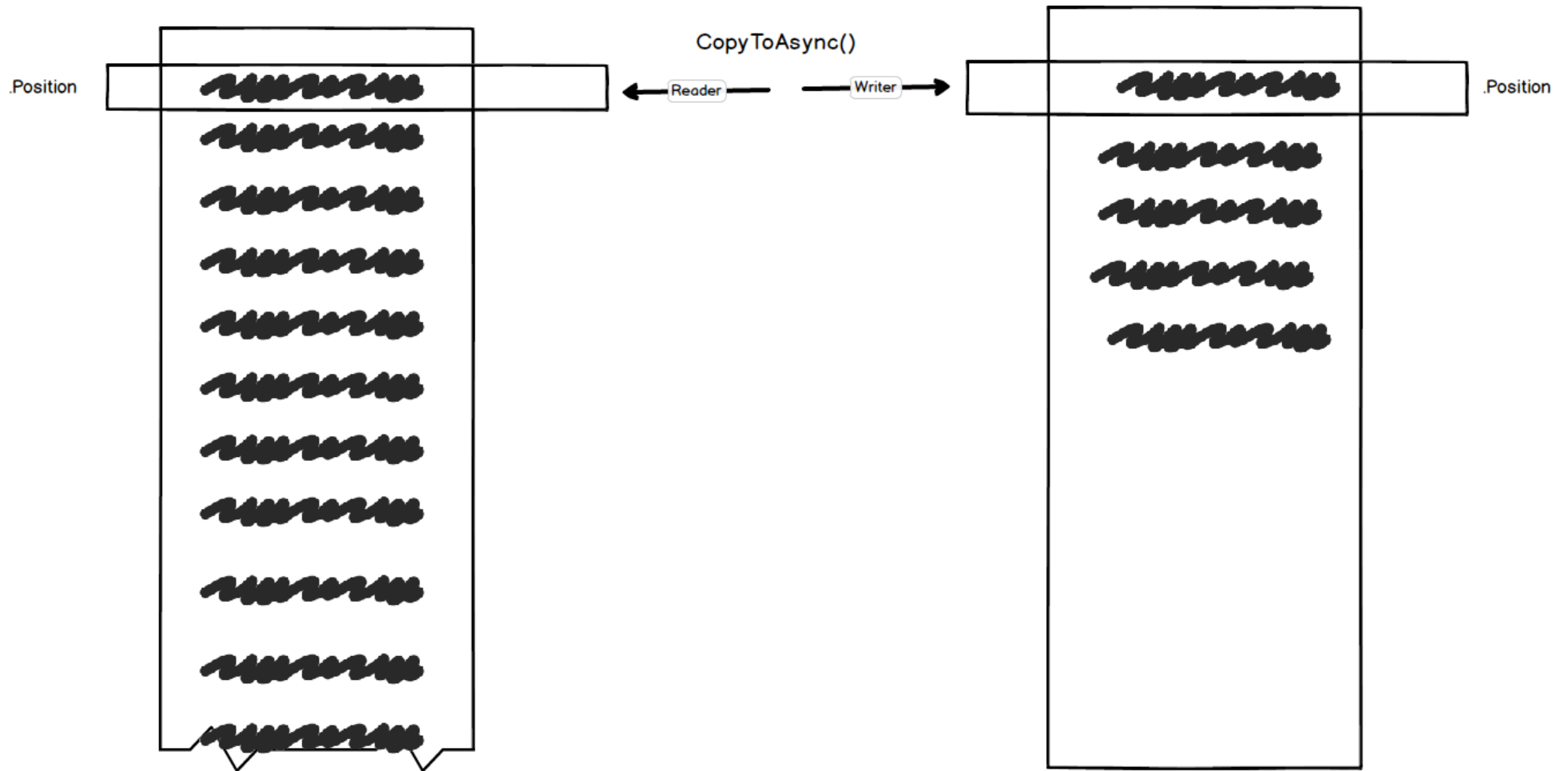
Customers.csv

Customers.xls

string[] lines = File.ReadAllText()

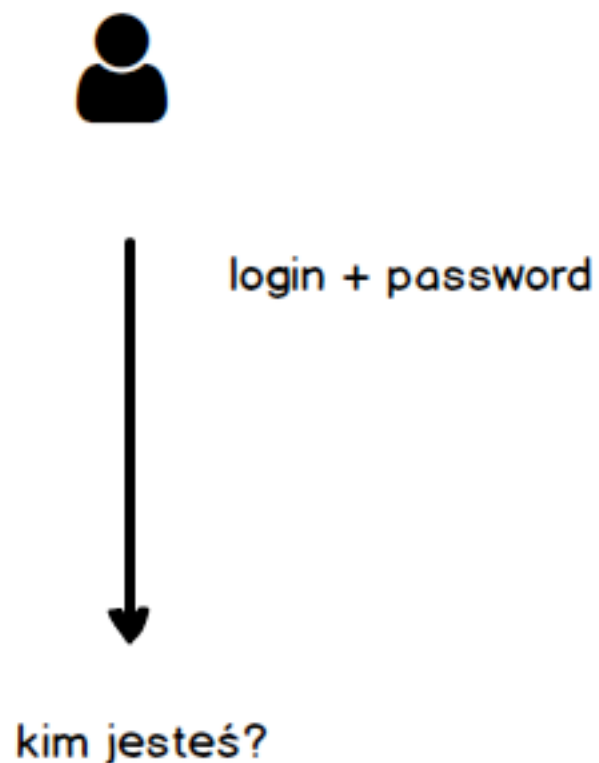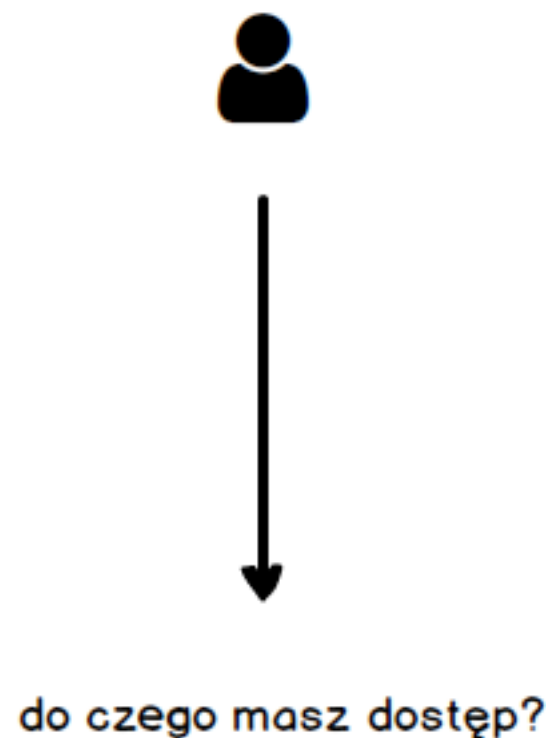appsettings.json

appsettings.development.json

CommandLine

Configuration

Mediator

Handler

Handler

Handler

api/customers/1

api/customers/1

api/customers/1
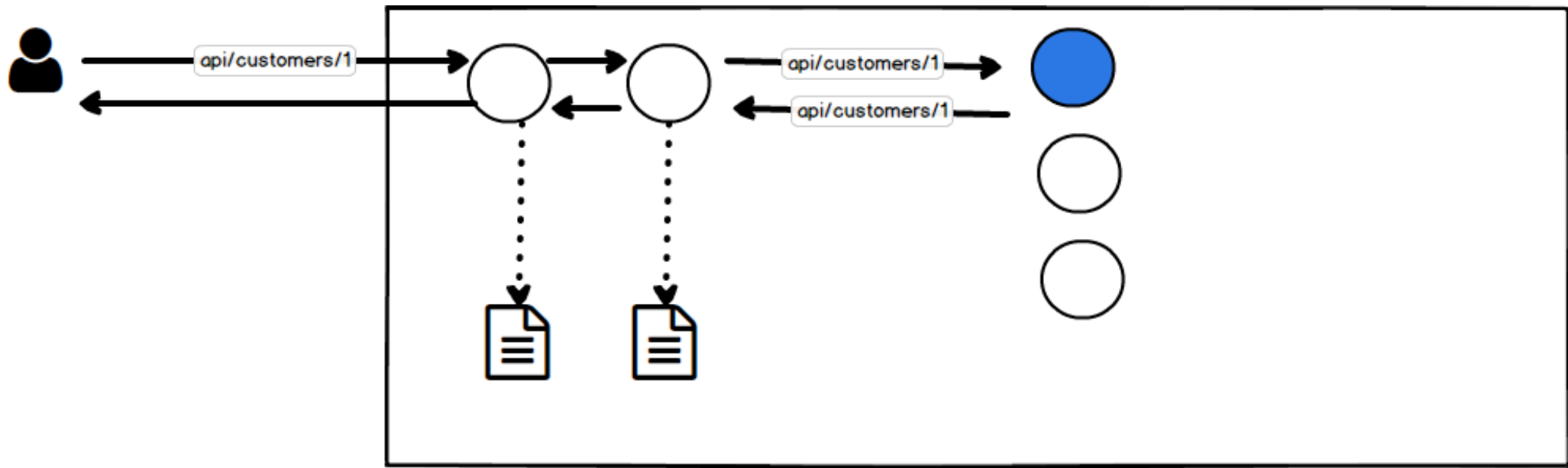
Uwierzytelnianie

Autoryzacja

login + password

kim jesteś?

do czego masz dostęp?

Identity (tożsamość)

IPrincipal (nadzorca) ← **ClaimsPrincipal**

.Claims

IIdentity Identity { get; }

bool IsInRole(string role);

Identity

IIdentity ← **ClaimsIdentity**
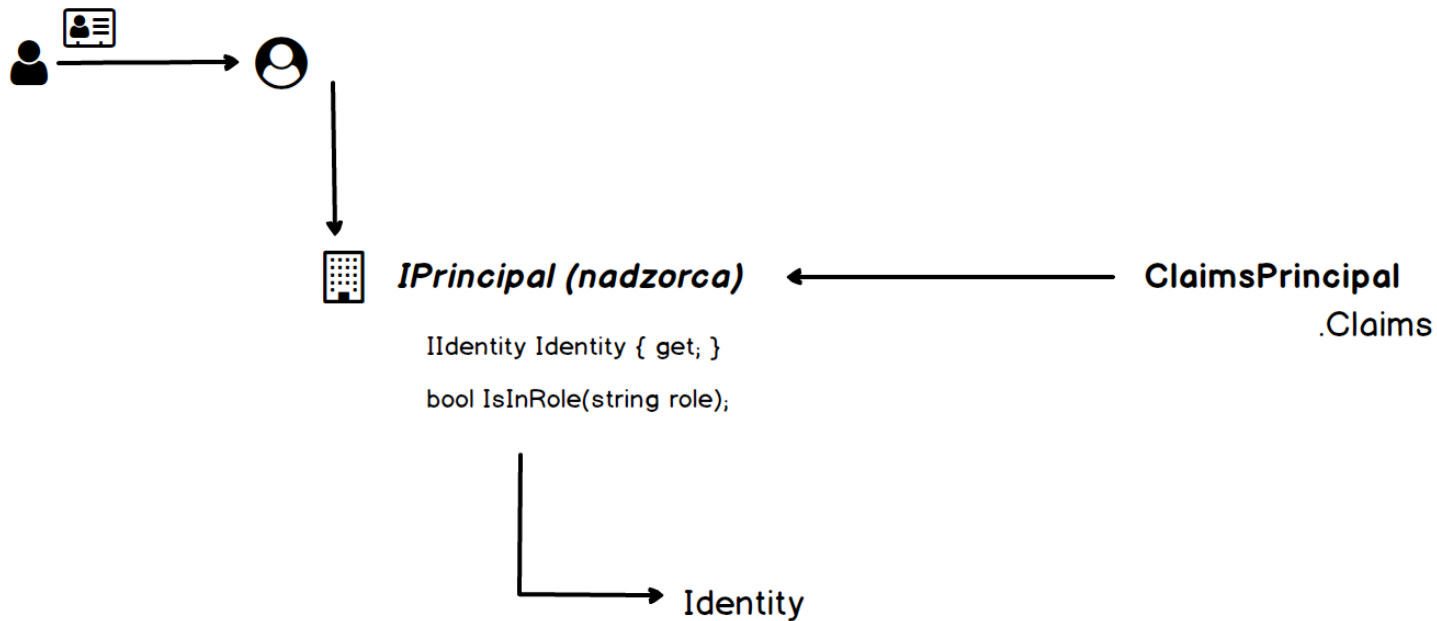
.Claims

string Name { get; }

string AuthenticationType { get; }

bool IsAuthenticated { get; }

Type	Value
kat	B
kat	C
ValidDate	bezterminowe
phone	555-123-321
role	developer
role	trainer

api/products

api/products/1

api/customers
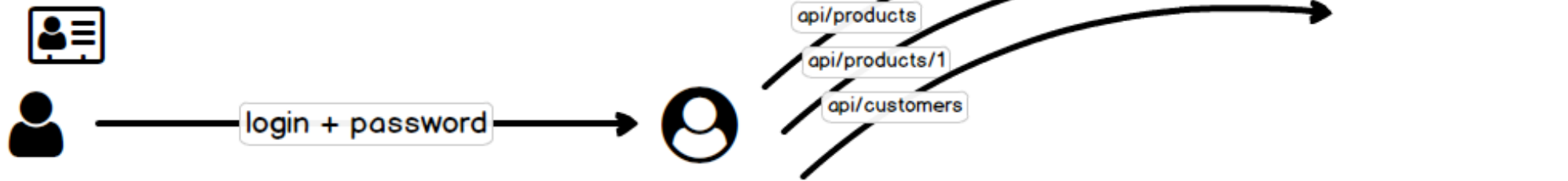
login + password

```
GET api/products HTTP/1.1
Host: localhost
Authorization: Basic base64({login}:{password})
```

key   schema   parametr

POST api/token/create

A%F%#%W$RFSEERFER%454

login + password

api/products

GET api/products HTTP/1.1
Host: localhost
Authorization: Bearer {token}

key   schema   parametr