Public network

Private network

request (json/xml/...)

HttpClient

response (json/xml/....)
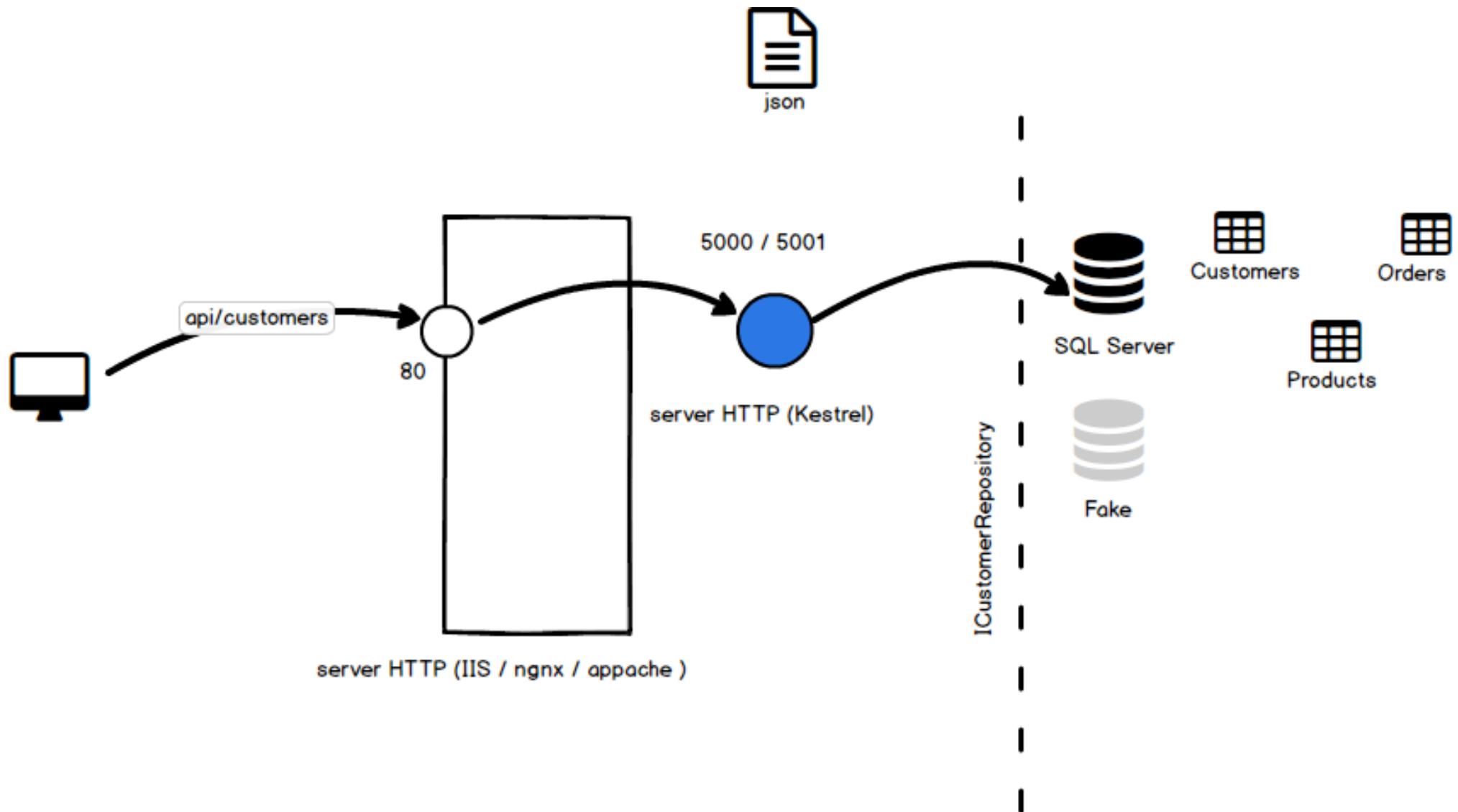
HTTP 80 / 443

OpenAPI (Swagger)

SQL Server

REST API

GET http://domain.com/customers

GET http://domain.com/api/customers

GET http://domain.com/api/orders

GET http://domain.com/api/customers/10

GET http://domain.com/api/customers?City=Warsaw&Street=Dworcowa

GET http://domain.com/api/customers/10/orders

OData
GET http://domain.com/api/customers?City=WarsawStreet=Dworcowasortby=City

json

api/customers

80

5000 / 5001

server HTTP (Kestrel)

server HTTP (IIS / ngnx / appache)

ICustomerRepository

SQL Server

Customers

Orders

Products

Fake

GET http://localhost:5000/api/ping

GET http://localhost:5000/api/customers

endpoints (punkty końcowe)

Factory

T Create<T>() { ... }

Dependency Injection

Type	Value	Life
CustomersController	CustomersController	Singleton
Faker<Customer>	CustomerFaker	Singleton
IProductRepository	DbProductRepository	
DbConnection	SqlConnection	
ICustomerRepository	FakeCustomerRepository	

IServiceCollection

GET api/customers

GET api/customers/{id}

GET api/customers/{pesel}

GET api/customers

GET api/customers/{id}

GET api/customers/{pesel}

GET api/customers?Gender=male&from=100

GET http://localhost:5000/api/customers

GET api/customers HTTP/1.1

metoda   zasób   protokół/wersja

Host: localhost

Accept: application/json

POST api/customers HTTP/1.1

metoda   zasób   protokół/wersja
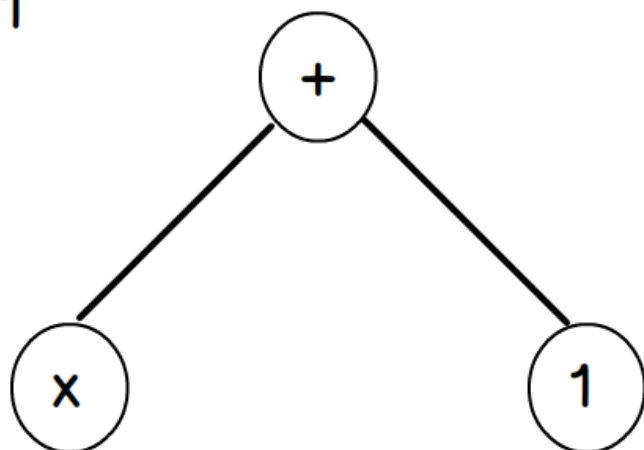
Host: localhost
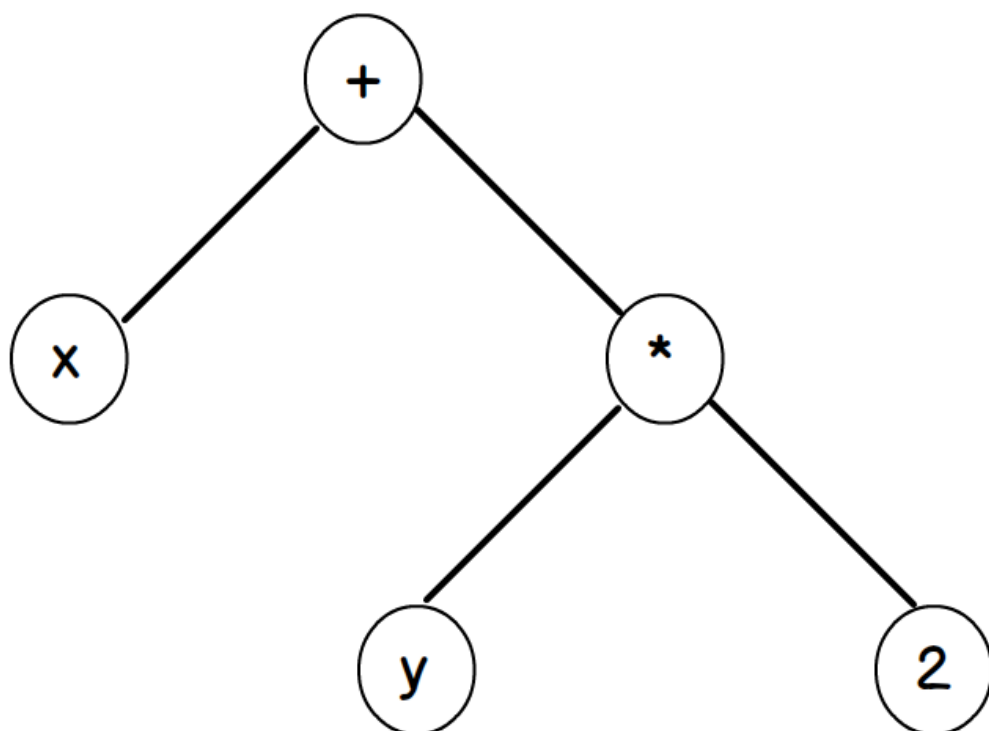
Accept: application/json

Content-Type: application/xml

<xml> ... </xml>

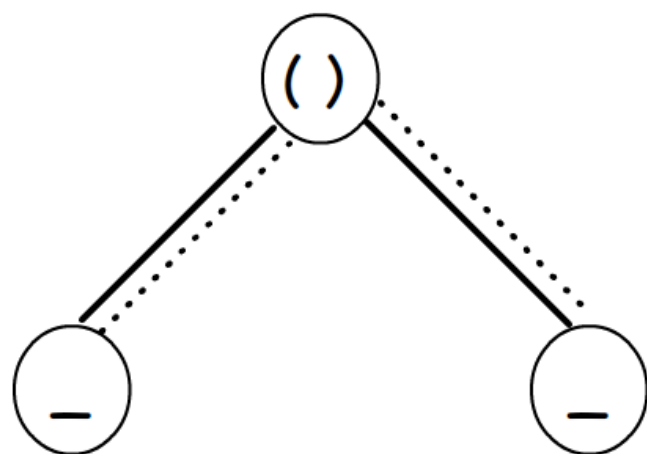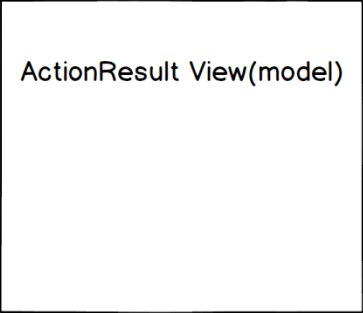|		200 - 299	300 - 399	400 - 499	500 - 599
GET	pobierz zasób	200 OK		404 Not Found	
POST	utwórz zasób	201 Created + header: Location: ... + body: object		400 BadRequest	
		202 Accepted			
PUT	zamień zasób	204 NoContent			
PATCH	zmień częściowo zasób	204 NoContent			
DELETE	usuń zasób	200 OK			
HEAD	sprawdź czy istnieje zasób	200 OK		404 Not Found	
OPTIONS	jakie operacje są dostępne na tym zasobie?	200 OK + body: GET,POST			

x + 1

x + y * 2
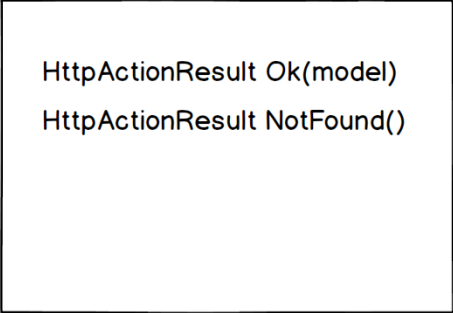

operator

lewy operand   prawy operand

x++

++x

!x

x!

ActionResult View(model)

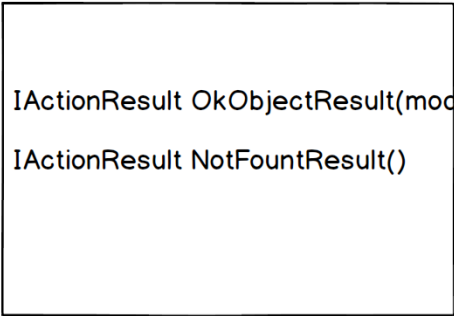HttpActionResult Ok(model)

HttpActionResult NotFound()

Controller

ApiController
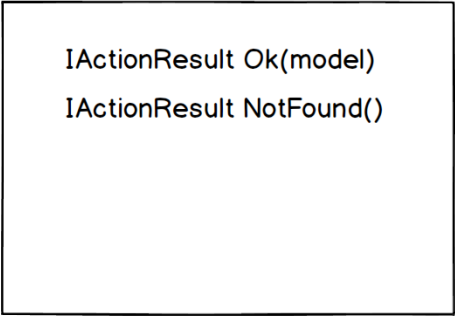
ASP.NET MVC (.NET Framework)

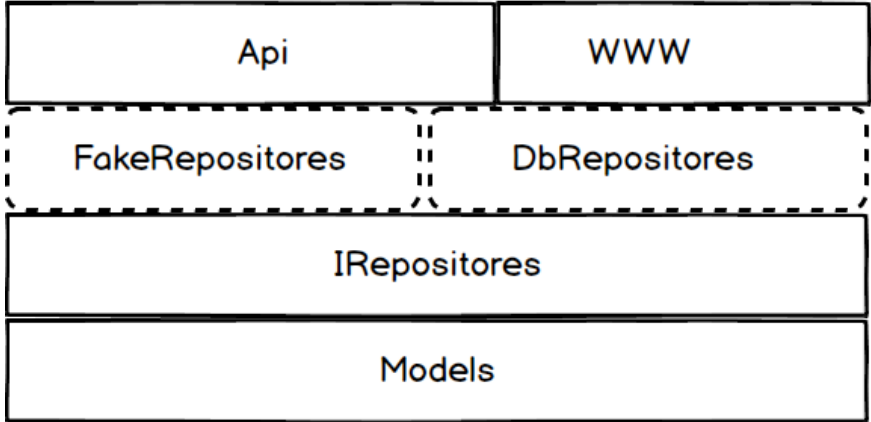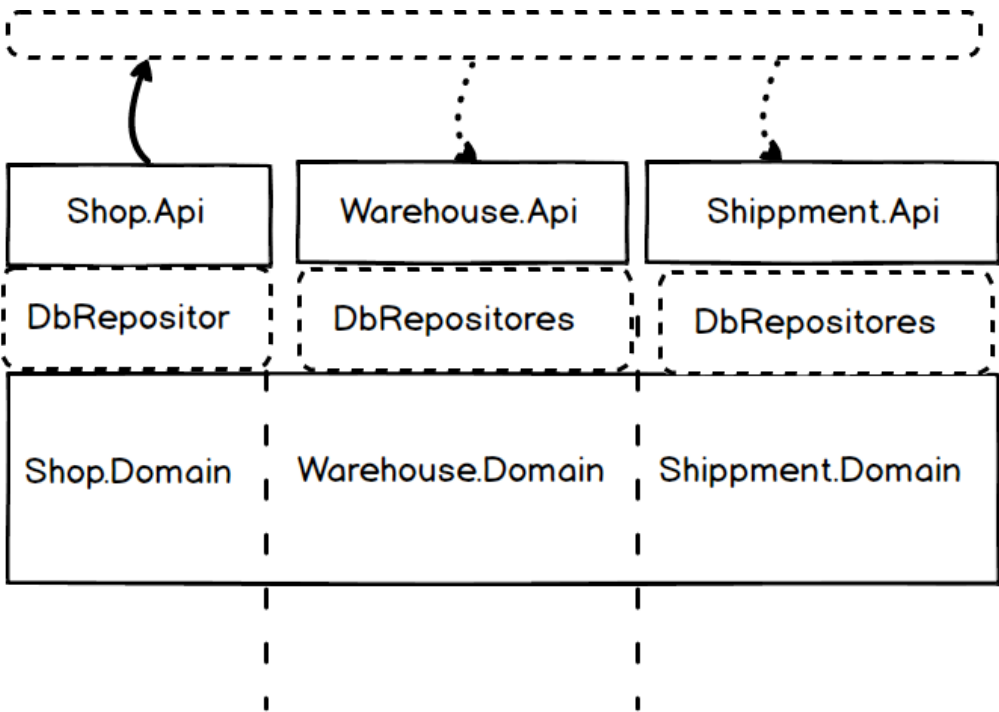ASP.NET MVC Core (.NET Core)

IActionResult OkObjectResult(model)

IActionResult NotFountResult()

POCO

IActionResult Ok(model)

IActionResult NotFound()

ControllerBase

IActionResult View(model)
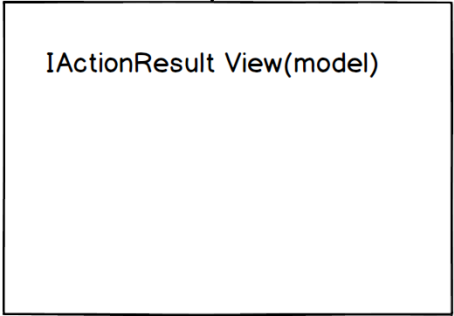
Controller

Monolit (leniwe)

Api	WWW
FakeRepositores	DbRepositores

IRepositores

Models

DDD (Domain Driven Development)

Shop.Api	Warehouse.Api	Shippment.Api
DbRepositor	DbRepositores	DbRepositores

Shop.Domain	Warehouse.Domain	Shippment.Domain

GET api/products

POST api/products

PUT api/products

PATCH api/products
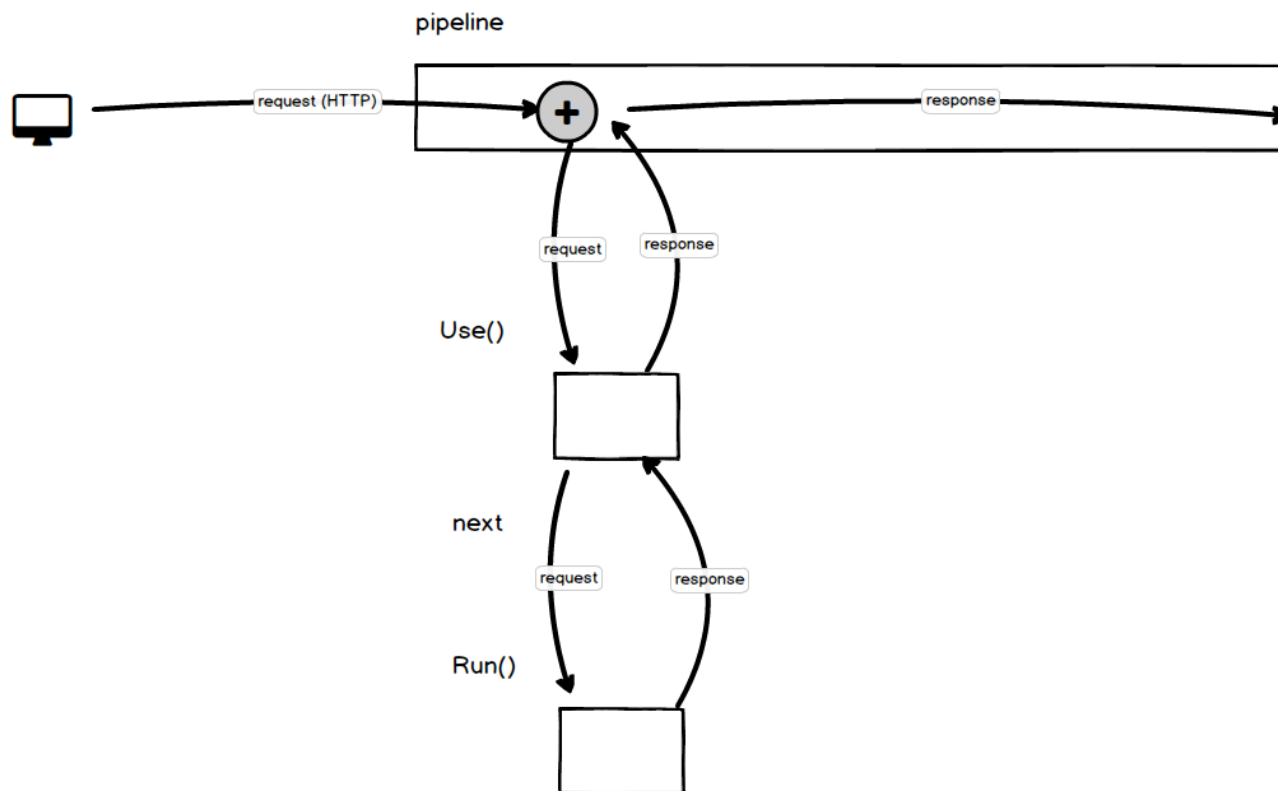
DELETE api/products

Product
Name
Color
UnitPrice
Size { S, M, L, XL }

GET api/customers/10/products

GET api/products/10/customers
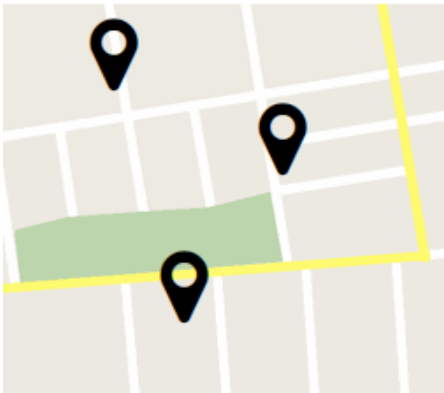
rezultat

GET api/customers/10/orders/2020/05

pipeline

request (HTTP)

response

request

response

Use()

next

request

response

Run()
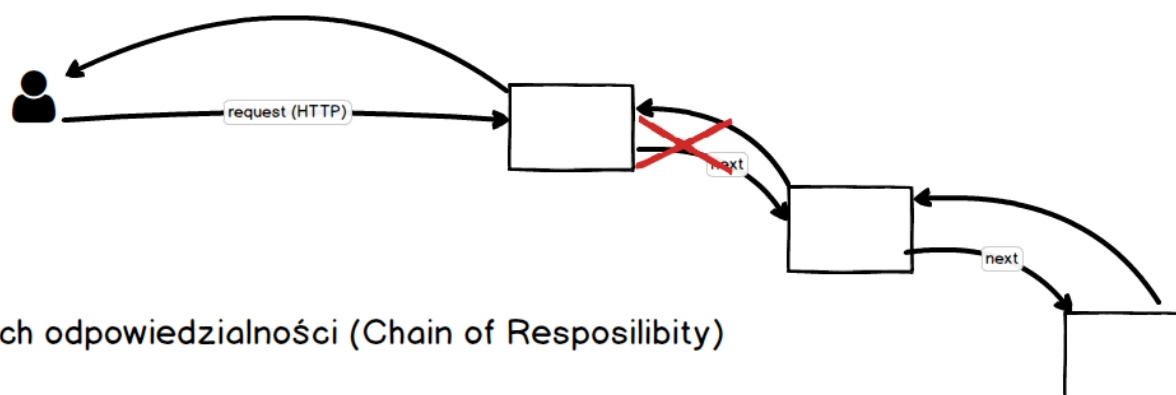
Łancuch odpowiedzialności (Chain of Resposilibity)

request (HTTP)

next

next
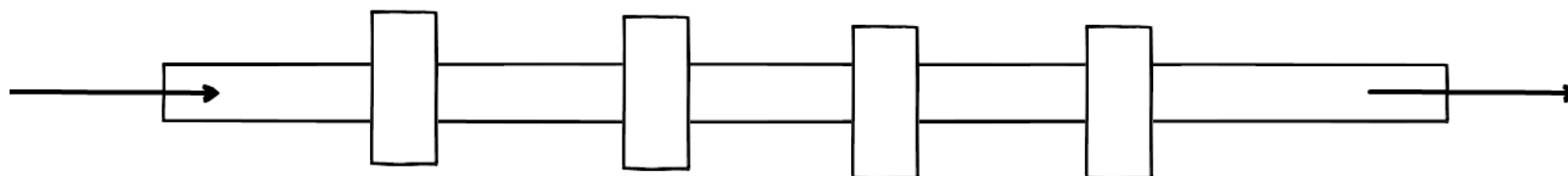
url: api/customers?format=kml

Content-Type: kml

format: kml

Customers

Signal-R

websocket (HTTP)

YouHaveGotCustomer

YouHaveGotCustomer

OnVehicleChange

Hub

Mediator

Publisher

Consument