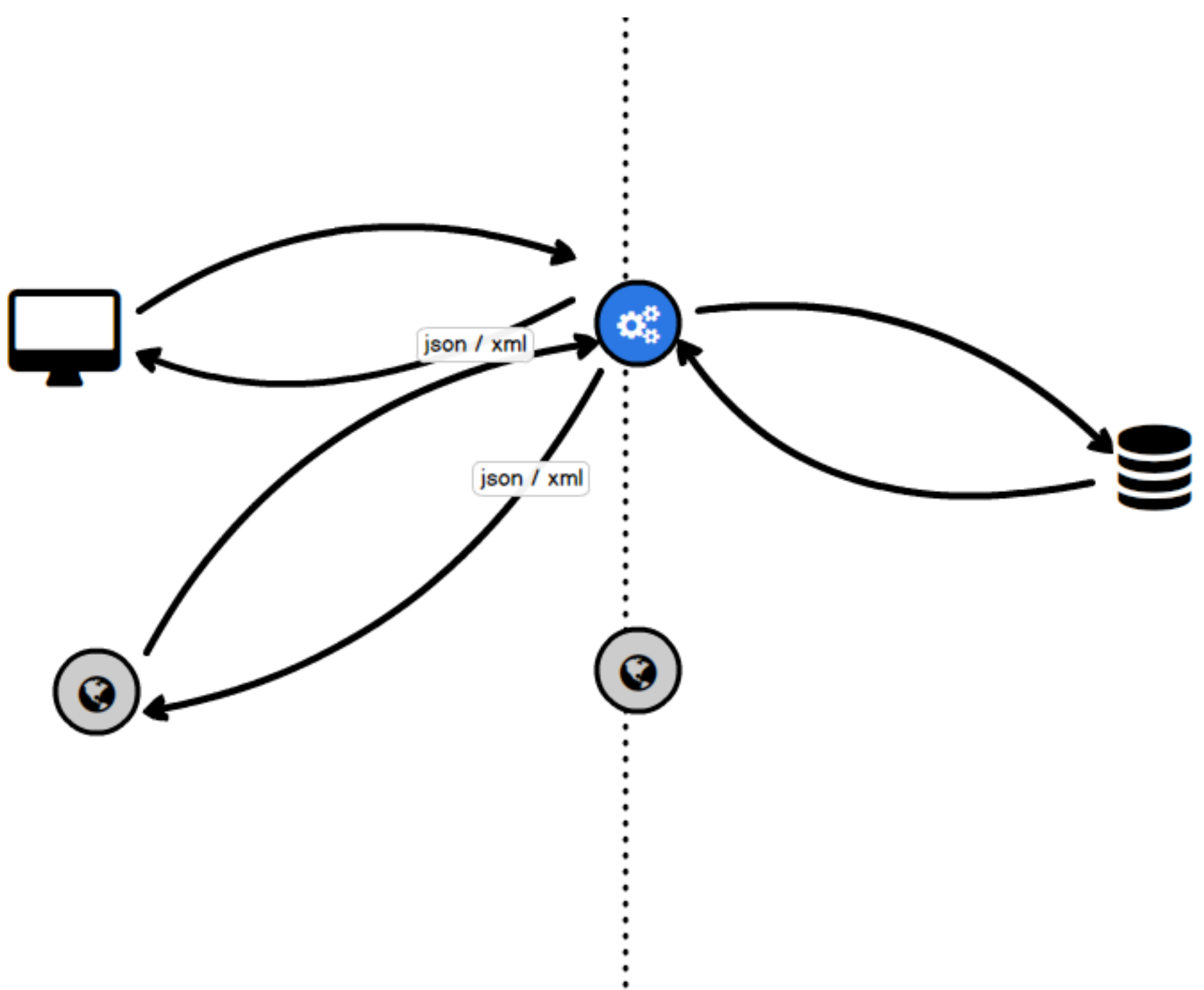| dotnet |
|---|

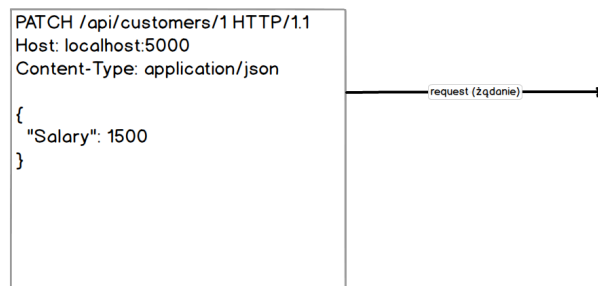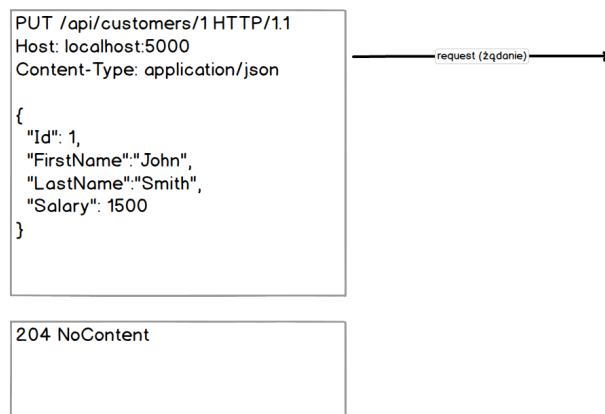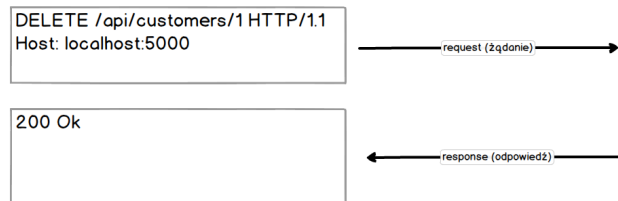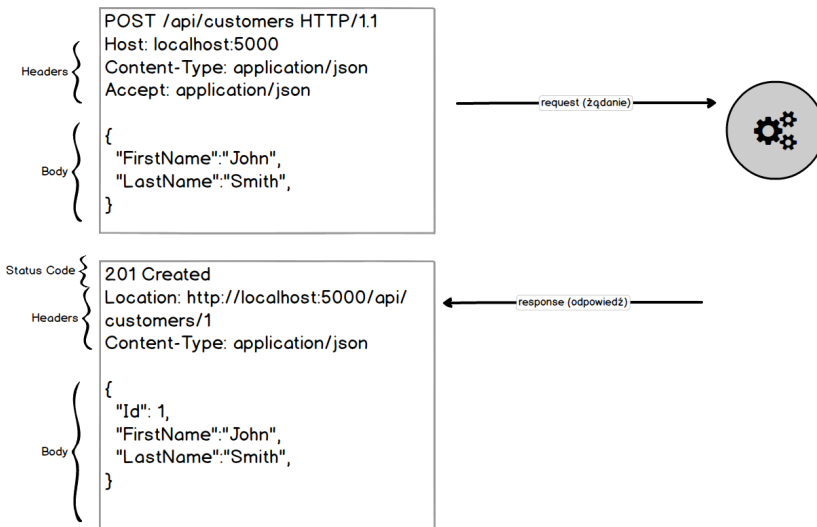| Visual Studio | Visual Studio Code | Rider |
|---|---|---|

json / xml

json / xml

*ICustomerRepository*

InMemoryCustomerRepository

Verb   Resource   Protocol

```
GET /api/customers/1 HTTP/1.1
Host: localhost:5000
Accept: application/json
```

Headers

request (żądanie) →

Status Code

Headers

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

← response (odpowiedź)

Body

```
{
  "FirstName":"John",
  "LastName":"Smith",
}
```

```
404 NotFound
```

←

.......................................................................................................

Headers

```
POST /api/customers HTTP/1.1
Host: localhost:5000
Content-Type: application/json
Accept: application/json
```

request (żądanie) →

Body

```
{
  "FirstName":"John",
  "LastName":"Smith",
}
```

Status Code

Headers

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

← response (odpowiedź)

Body

```
{
  "Id": 1,
  "FirstName":"John",
  "LastName":"Smith",
}
```

```
DELETE /api/customers/1 HTTP/1.1
Host: localhost:5000
```

request (żądanie) →

```
200 Ok
```

← response (odpowiedź)

```
PUT /api/customers/1 HTTP/1.1
Host: localhost:5000
Content-Type: application/json

{
  "Id": 1,
  "FirstName":"John",
  "LastName":"Smith",
  "Salary": 1500
}
```

request (żądanie) →

```
204 NoContent
```

```
PATCH /api/customers/1 HTTP/1.1
Host: localhost:5000
Content-Type: application/json

{
  "Salary": 1500
}
```

request (żądanie) →

| | |
|---|---|
| HEAD | Pobierz tylko nagłówek wiadomości HTTP |
| **GET** | Pobierz zasób |
| **POST** | Utwórz zasób |
| **PUT** | Zamień zasób |
| PATCH | Zmodyfikuj zasób |
| **DELETE** | Usuń zasób |
| OPTIONS | |

```
GET /api/products

GET /api/products/{id}

GET /api/products/{code}

POST /api/products

PUT /api/products/{id}

DELETE /api/products/{id}
```
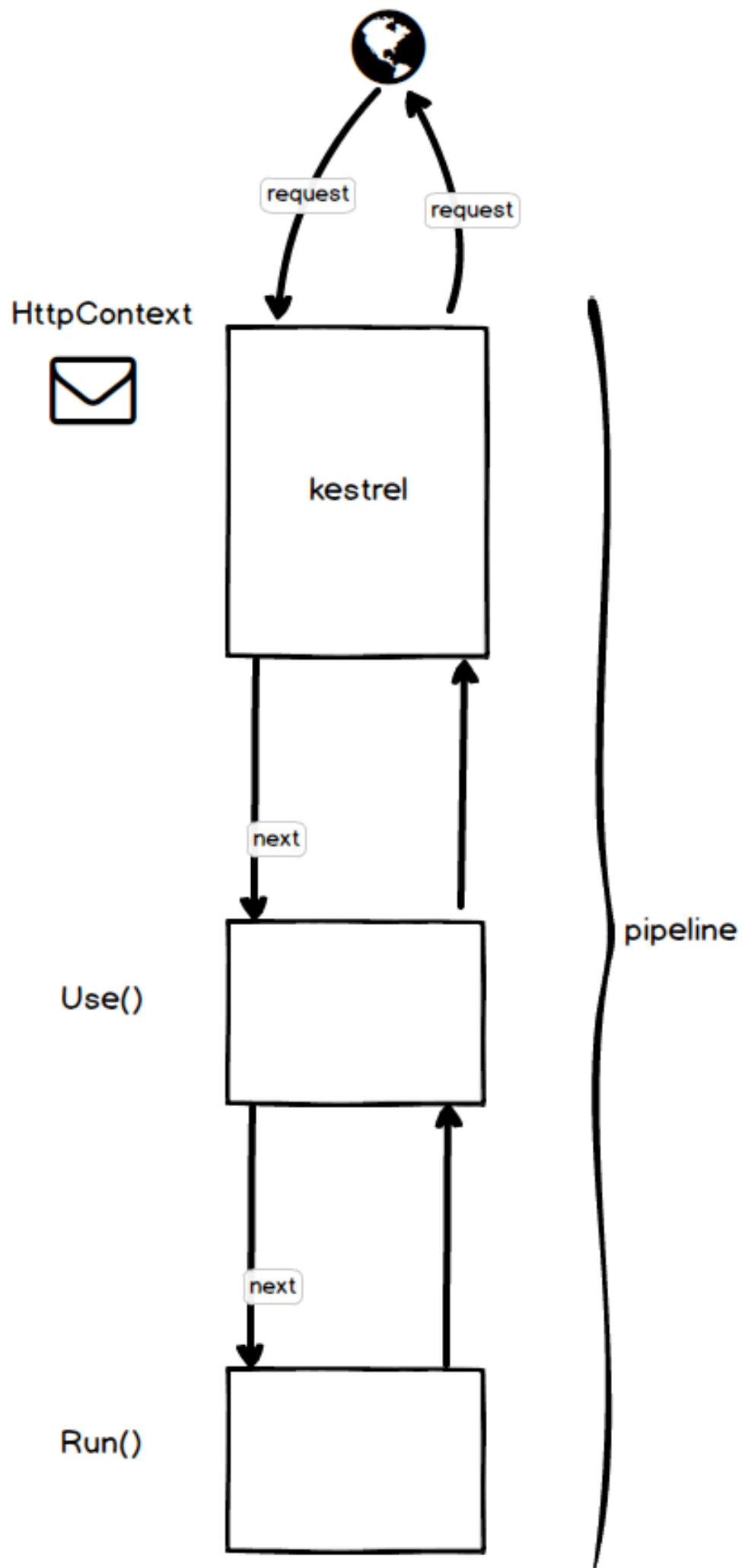
**Product**

Id

Name

Code

Color

Price

Domain

Position

reader

writer

Position
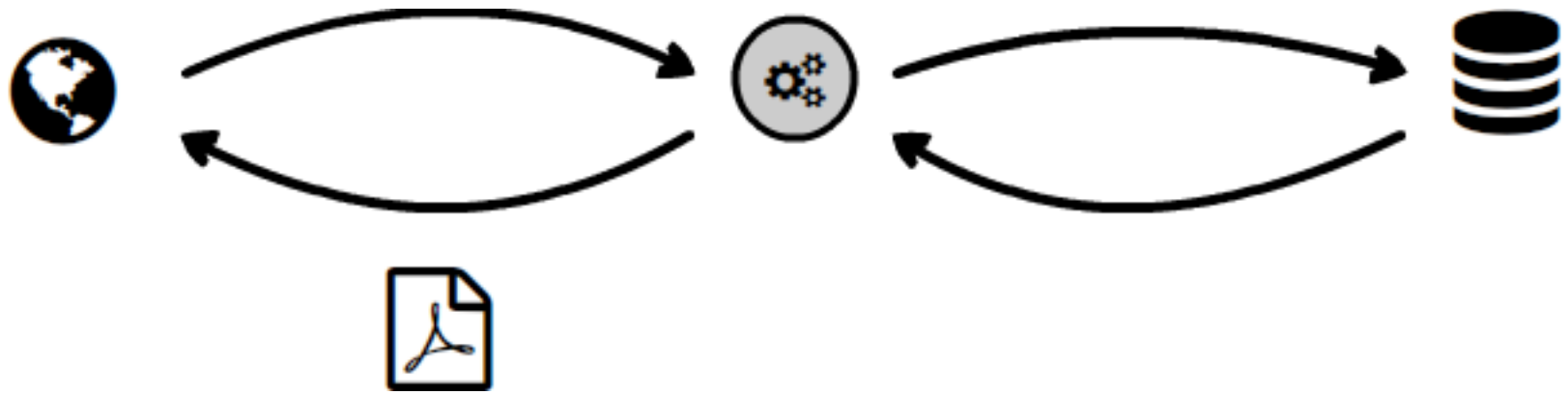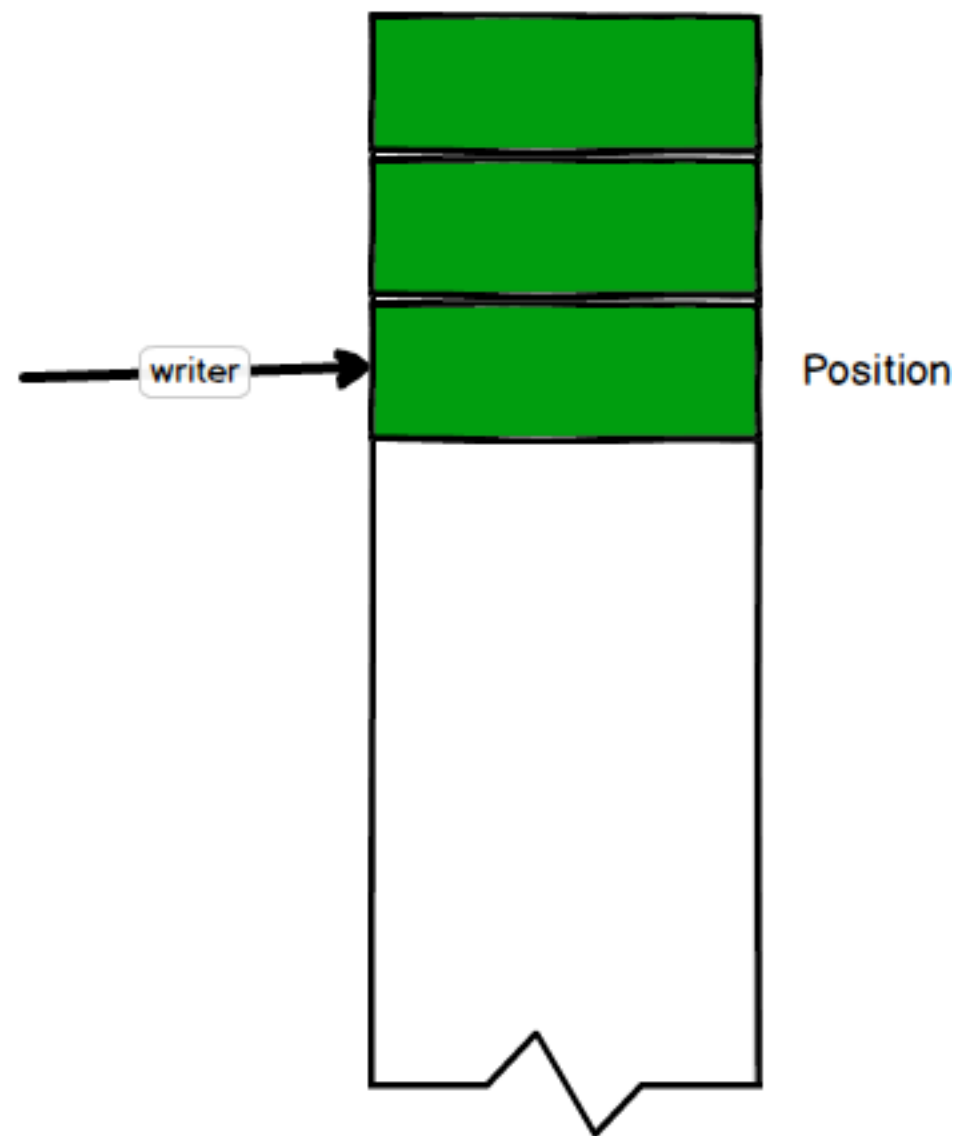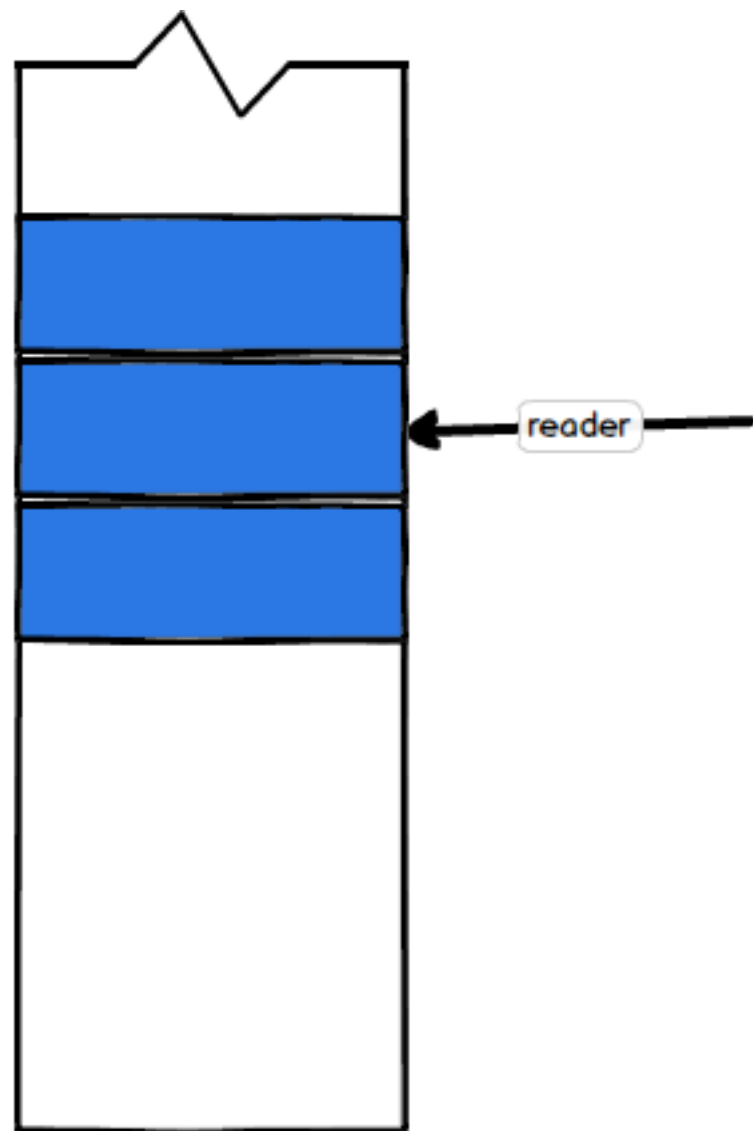
appsettings.json

appsettings.Testing.json

appsettings.xml

appsettings.ini

Configuration

```
GET /api/products

GET /api/products/{id}

GET /api/products/{code}

POST /api/products

PUT /api/products/{id}

DELETE /api/products/{id}
```

request

request

HttpContext

kestrel

next

Use()

next

Run()

pipeline

**IPrincipal**

IIdentity Identity{ get; }

bool IsInRole(string role)

**ClaimsPrincipal**

**_IIdentity_**

string Name { get; }

bool IsAuthenticated { get; }

string AuthenticationType {get; }

Claims

| Typ | Value |
|---|---|
| kat | B |
| kat | C |
| termin | bezterminowe |
| role | developer |
| role | administrator |

# Generowanie tokena JWT

POST api/tokens/create

SQL

token

GET api/customers

SQL

schema

Authorization: Bearer {token}
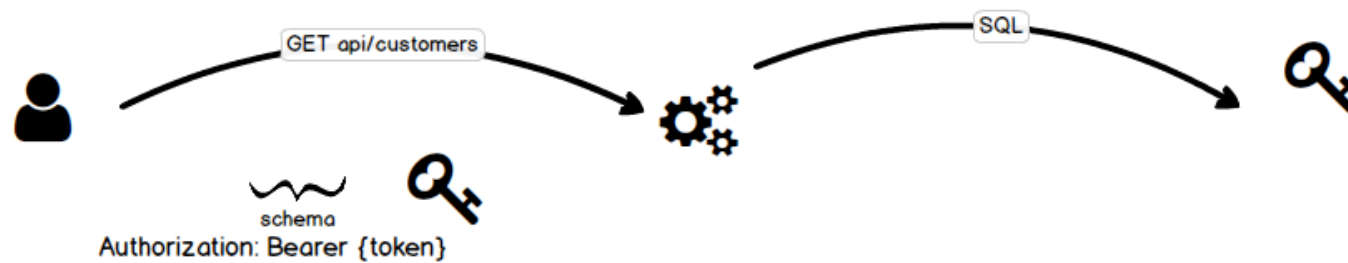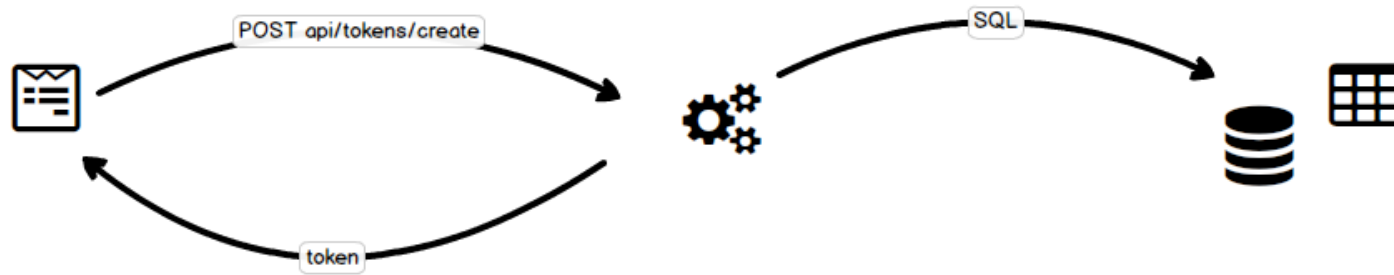
**Token JWT (Json Web Token)**

eyJhbGcieyJhbGci.kwIiwkwIiwkwIiw.U2KskCXw2KskCXw

Header       Payload       Signature