

Język C#

Co mogę w nim zrobić?



Desktop

Windows Forms / WPF



Web

MVC / Razor Pages / Blazor



Mobile

Xamarin / MAUI



Command Line

C#



Games



C# 1.0

C# 11

.NET Framework

.NET Core

>_ dotnet CLI



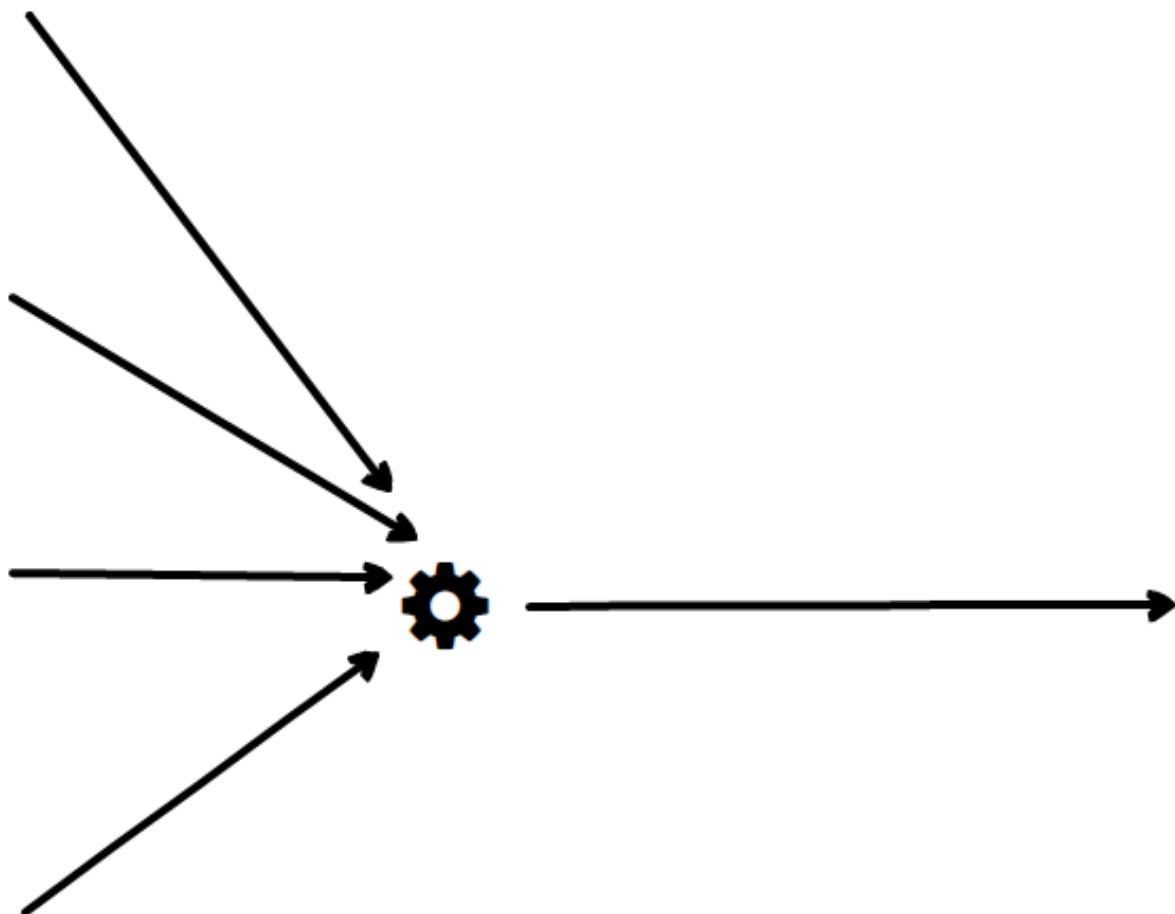
Visual Studio



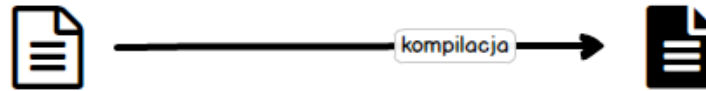
Visual Studio Code



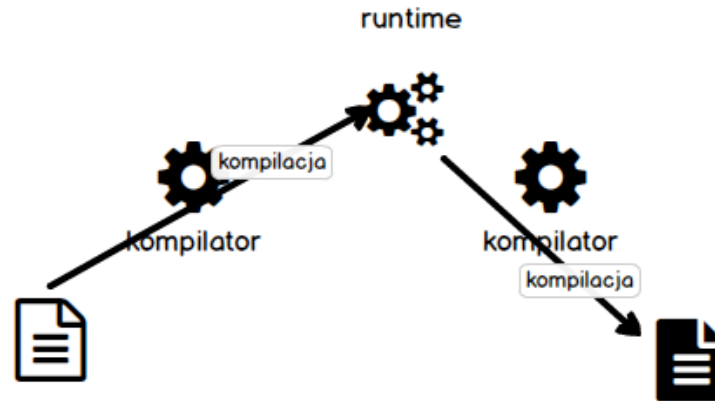
Rider



C++ / Pascal

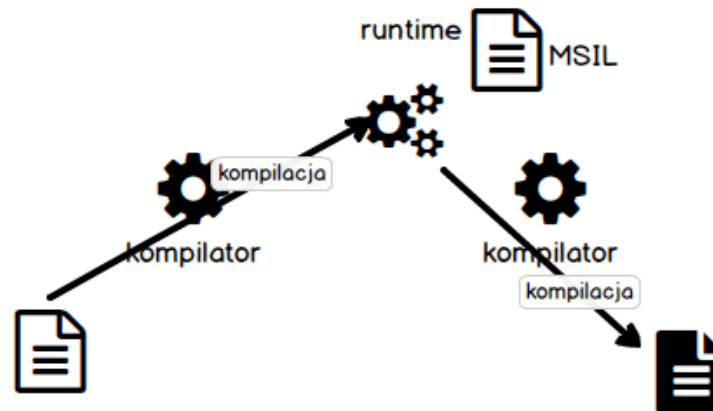


Java



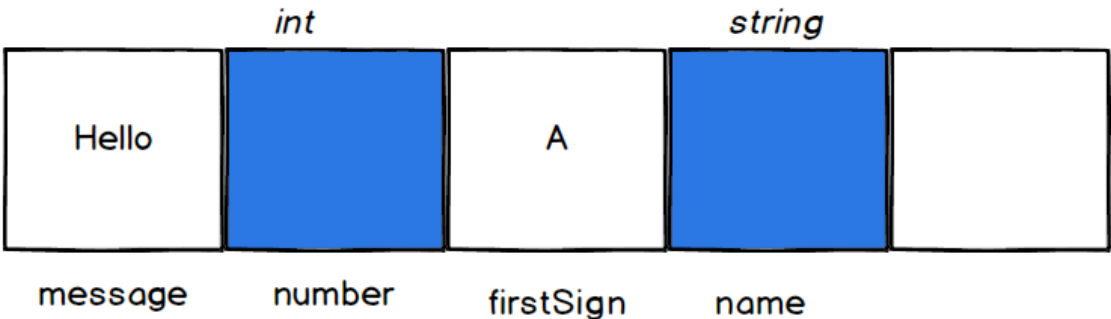
.....

C#
VB
F#



.NET Framework / .NET Core

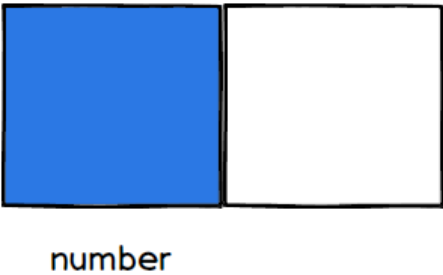
static typing (C#)



```
int number = 1;  
number = "ABC";
```

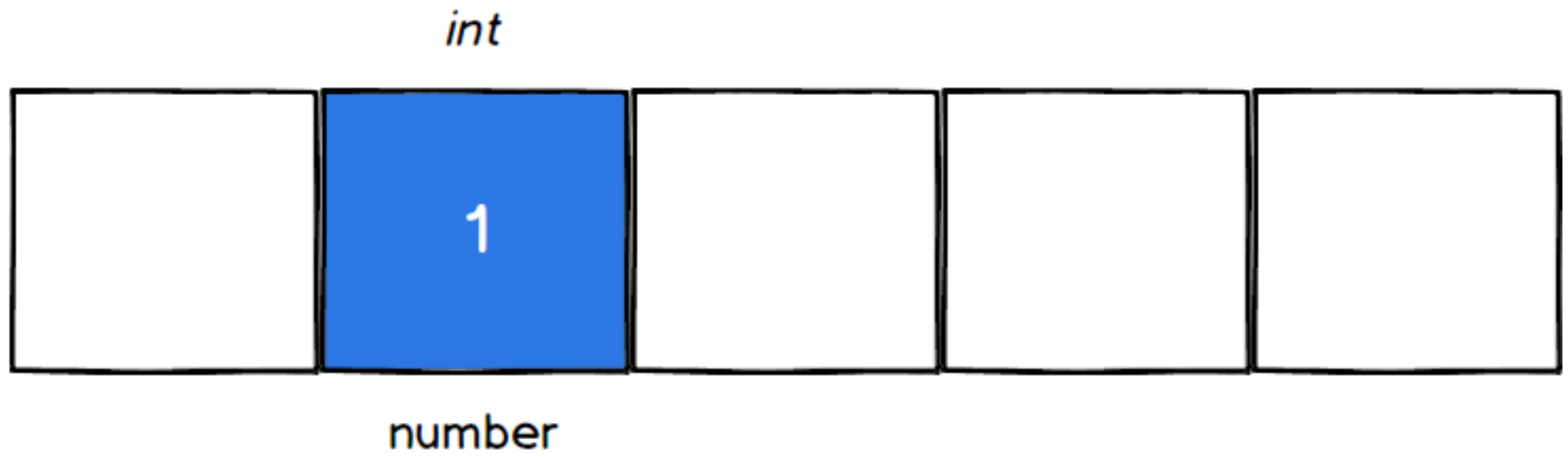
dynamic typing (JavaScript)

string / number



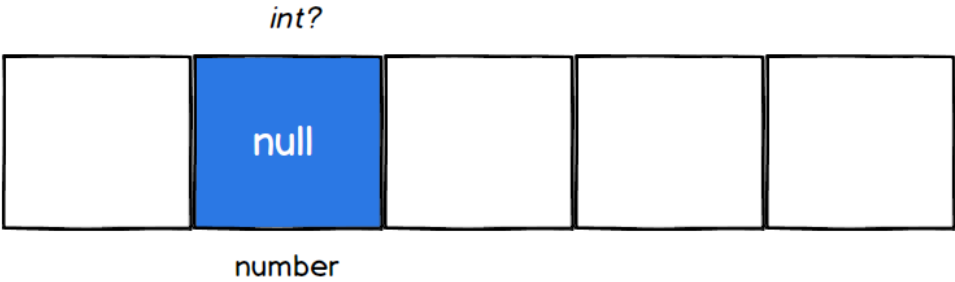
```
var number = 1;  
number = "ABC";
```

Constants

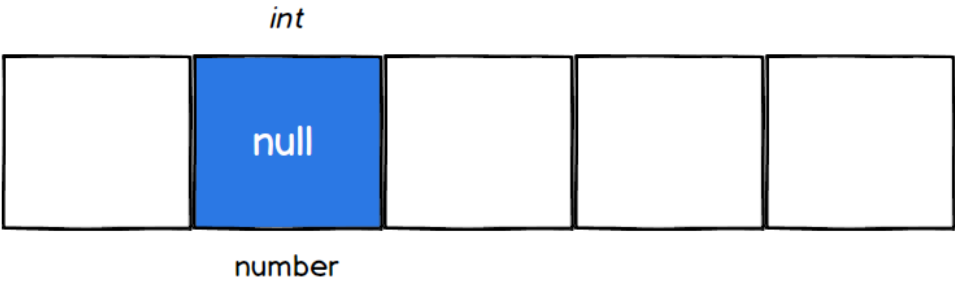


```
const int number = 1;  
number = 2; .
```

Nullable Value Types



```
int? number = null;  
if (number.HasValue) ...
```



```
*int number = null*;
```

1 + 1 = 2

0 + 1 = 1

NULL + 1 = NULL

NULL * NULL = NULL

! NULL = NULL

WHERE salary IS NULL

SQL: SELECT SUM(salary) FROM Employees

SQL: SELECT AVG(ISNULL(salary, 0)) FROM Employees

string[5]



index

0

1

2

3

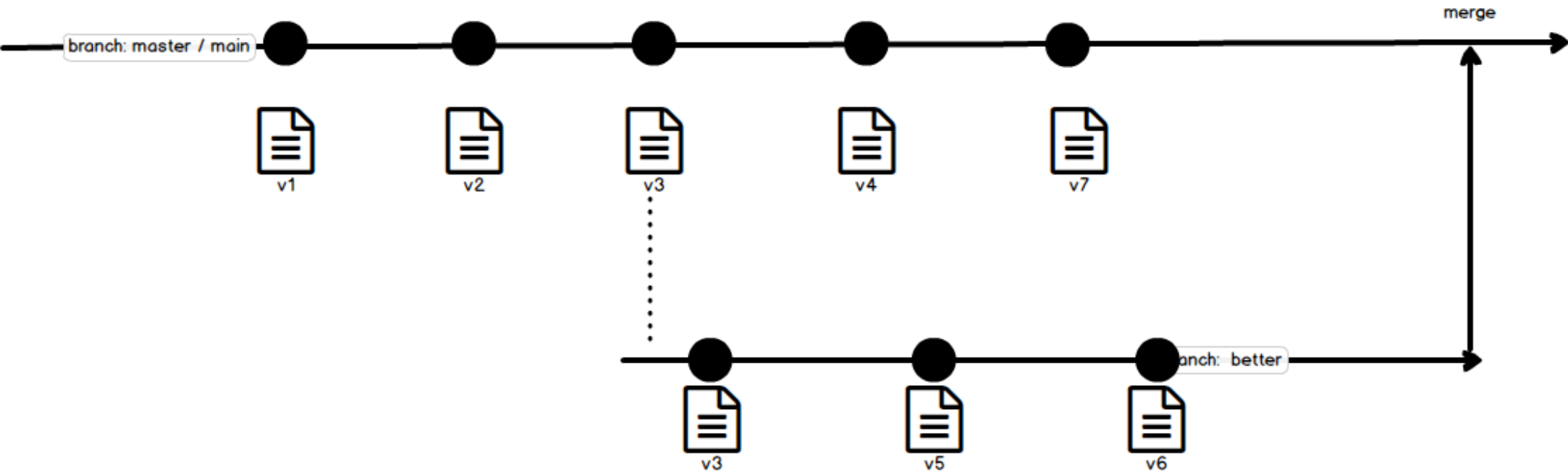
4



board[wiersz, kolumna]

GIT

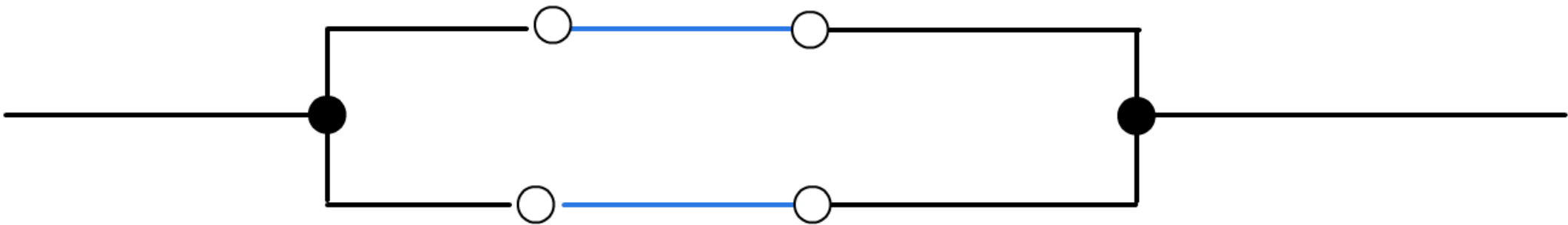
GitHub / GitLab



AND



OR



8

4

2

1

Read

 $=4$

Write

 $=2$

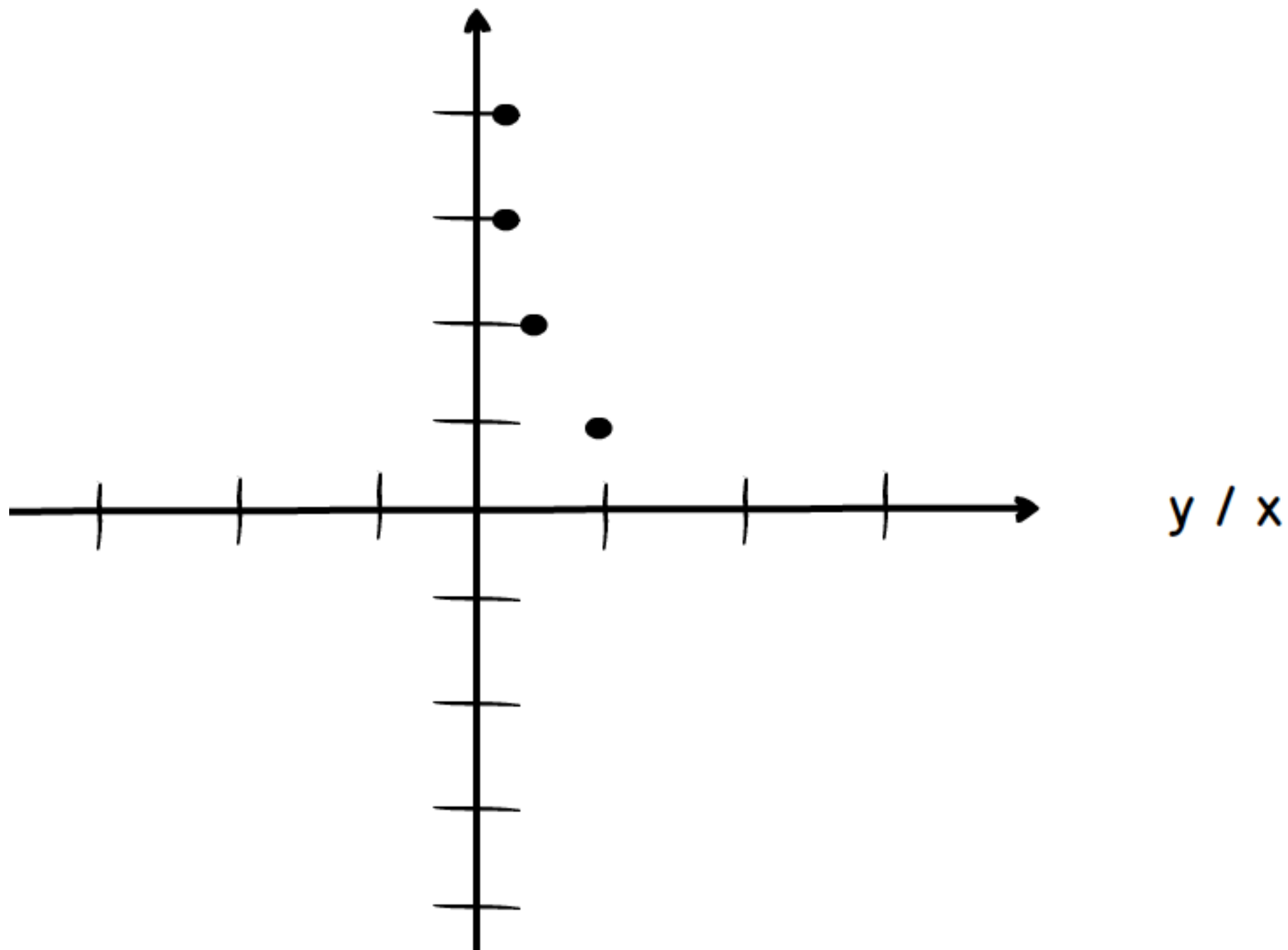
.....

OR

 $=6$

AND

 $== \text{READ}$



Person

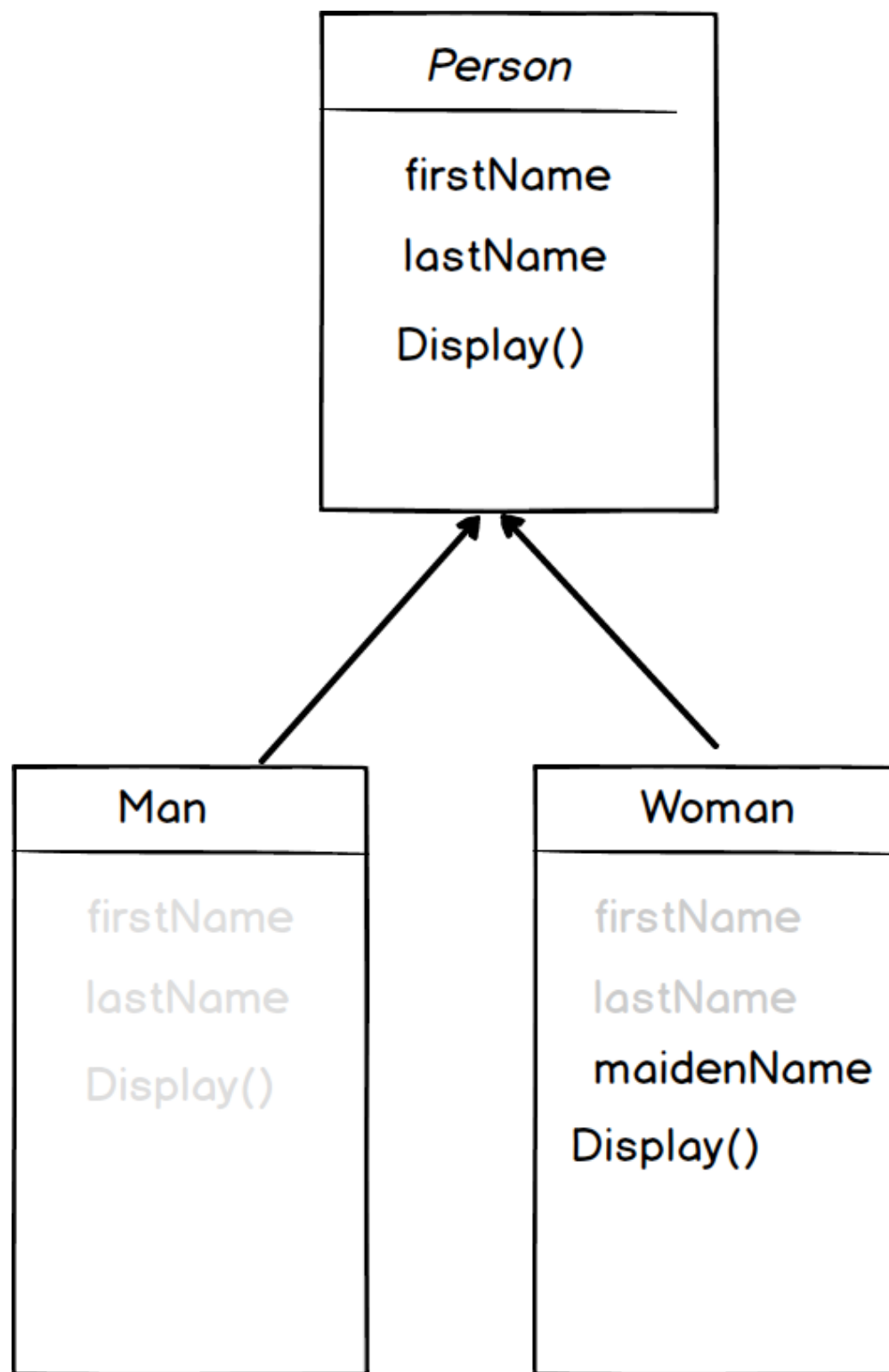
firstName

lastName

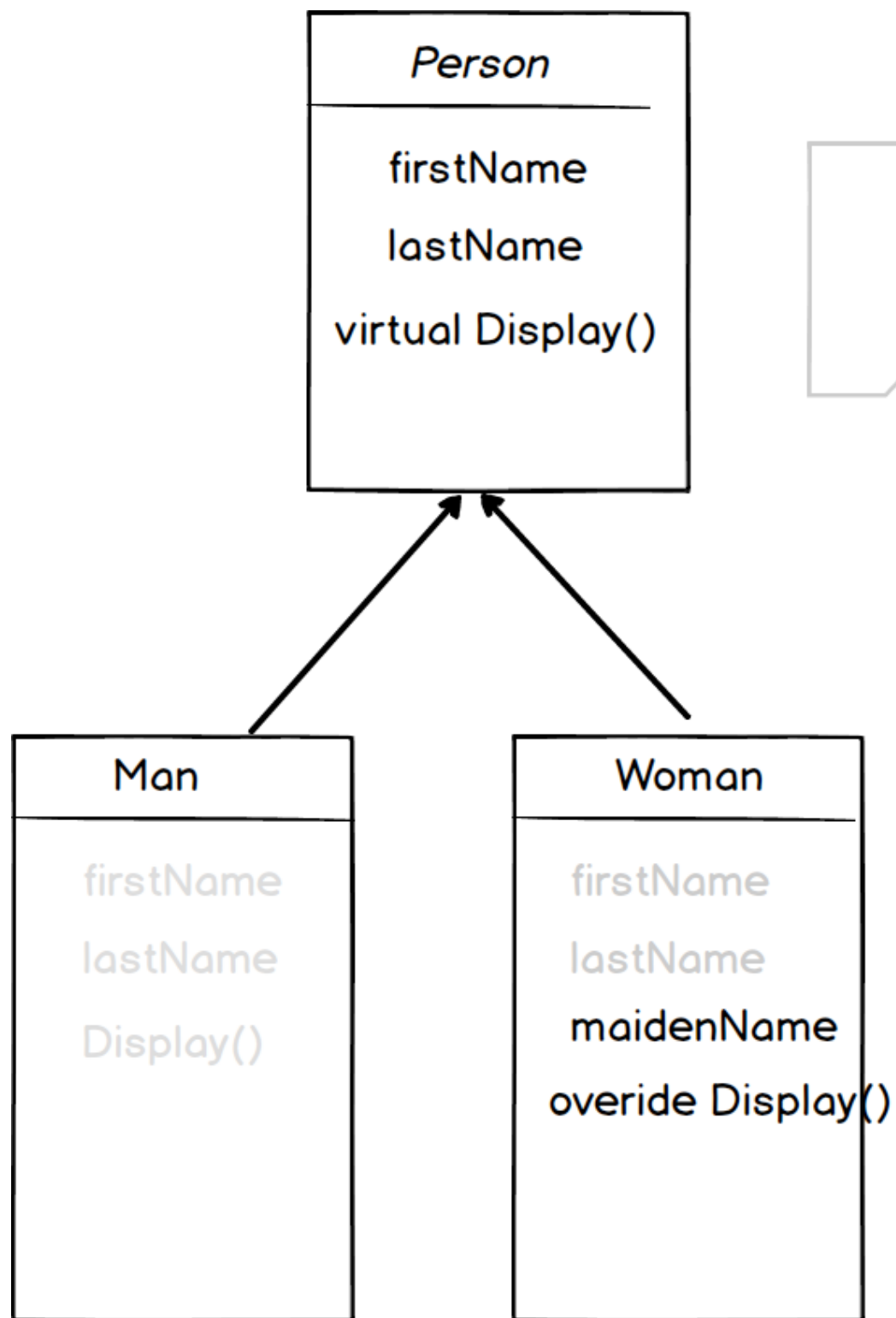
Display()

CalculateSalary()

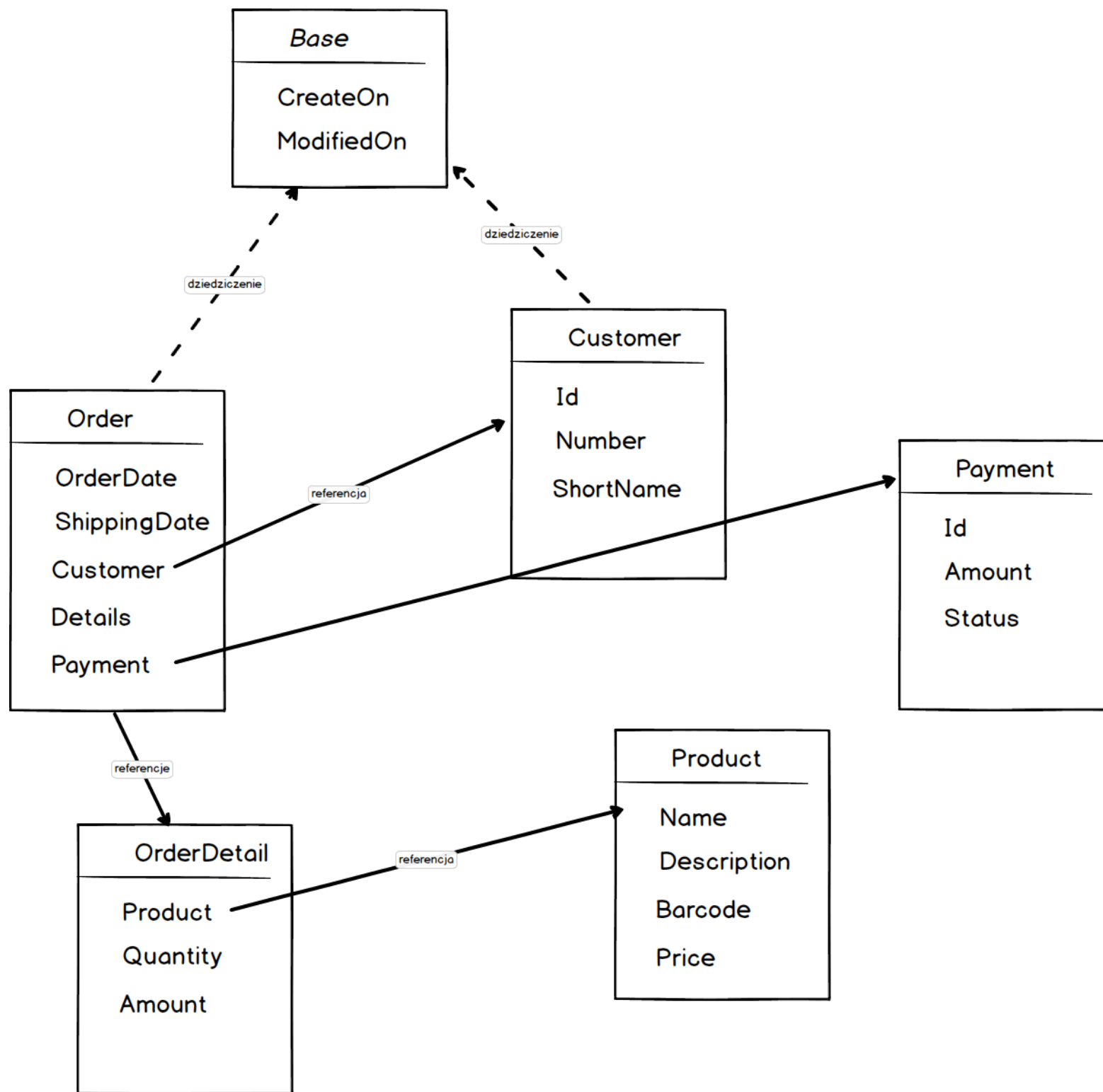
```
Person person = new Person();  
person.FirstName = "John";  
person.LastName = "Smith";  
person.Display();
```



```
Woman person = new Woman();
person.Display();
```

```
Person person = new Woman();
person.Display();
```



Client

Server



SQL



ODBC



OleDb



Native



TSQL



SQL Server



PL/pgSQL

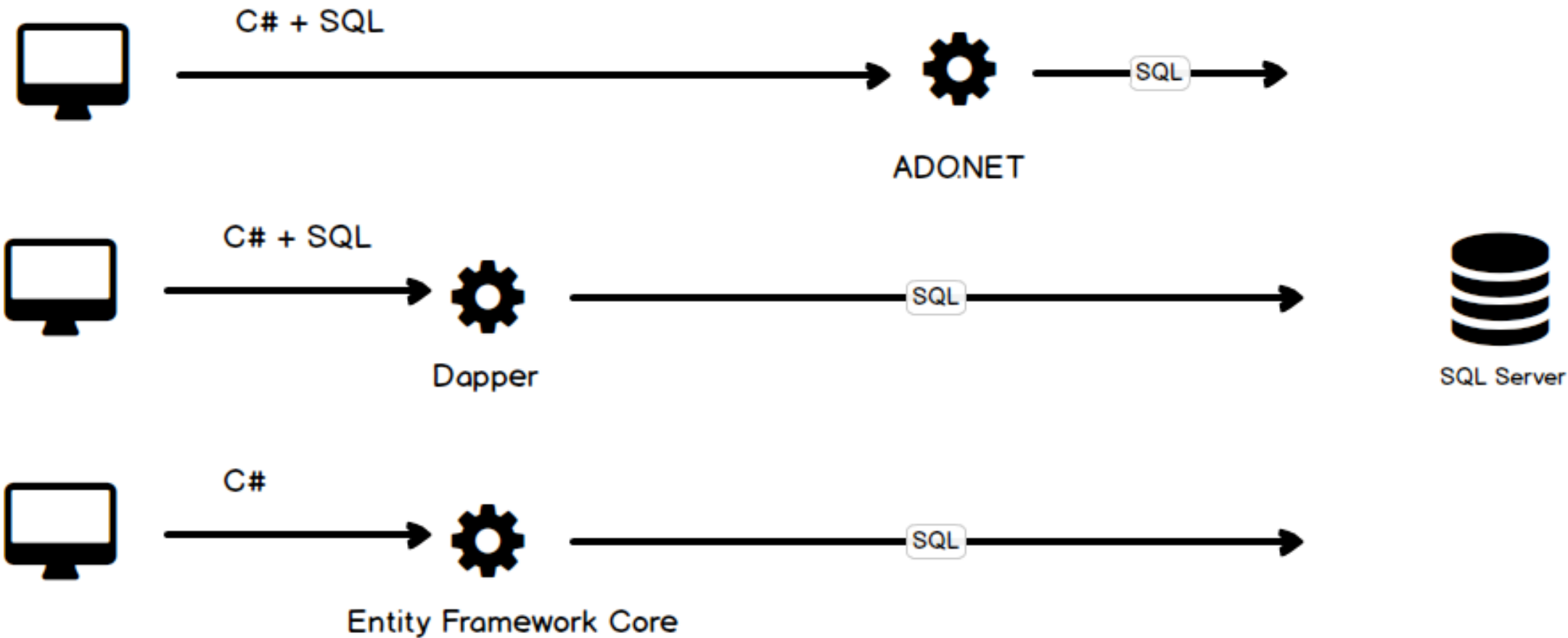
Postgress



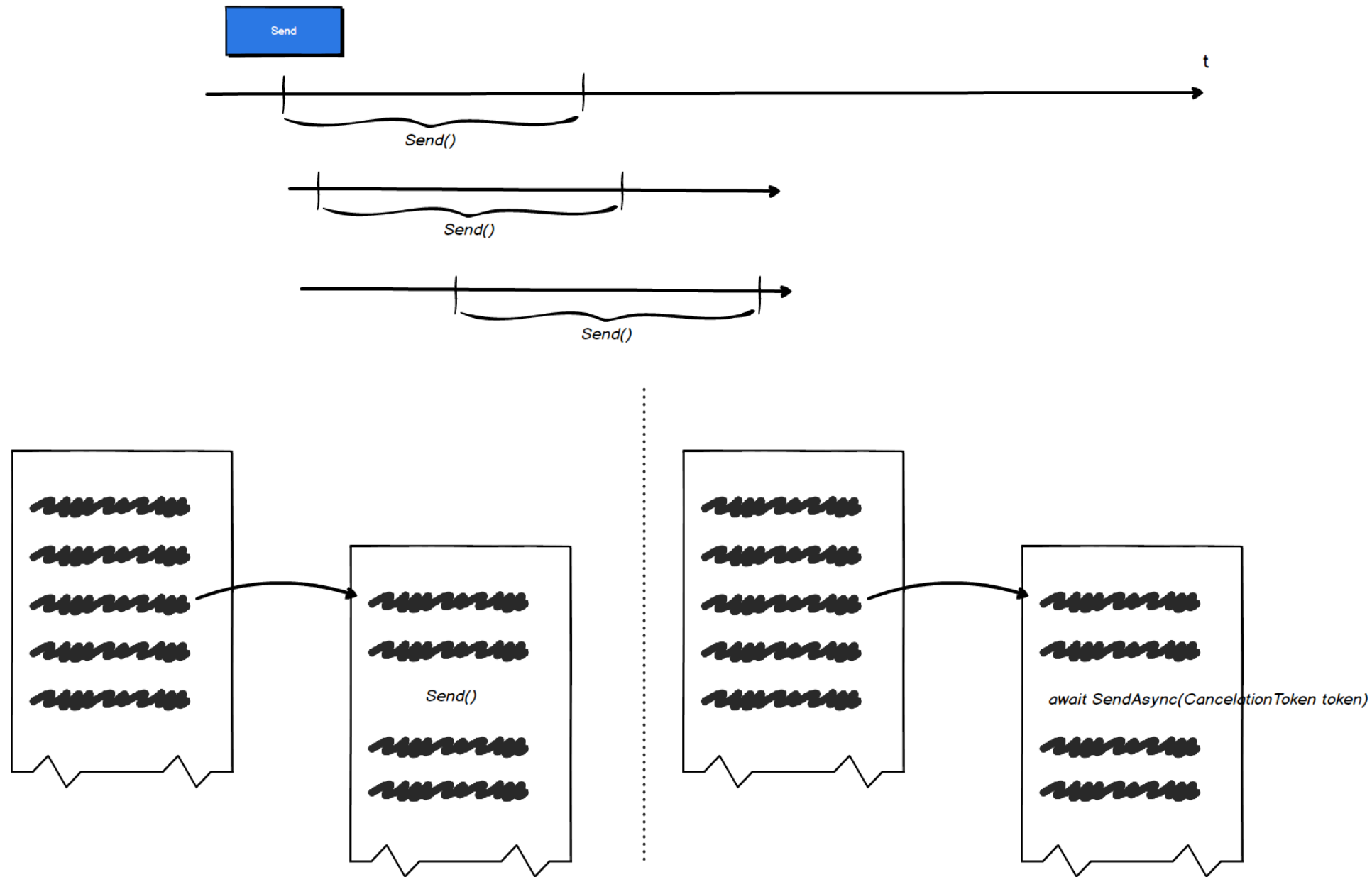
Access

Client

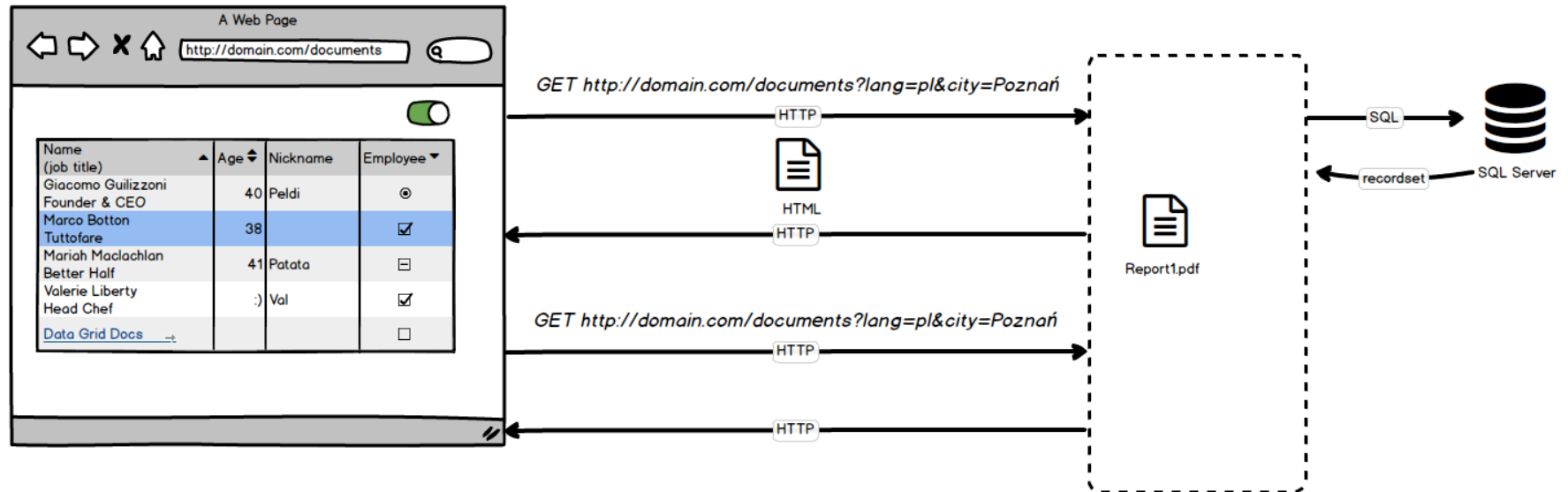
Server



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



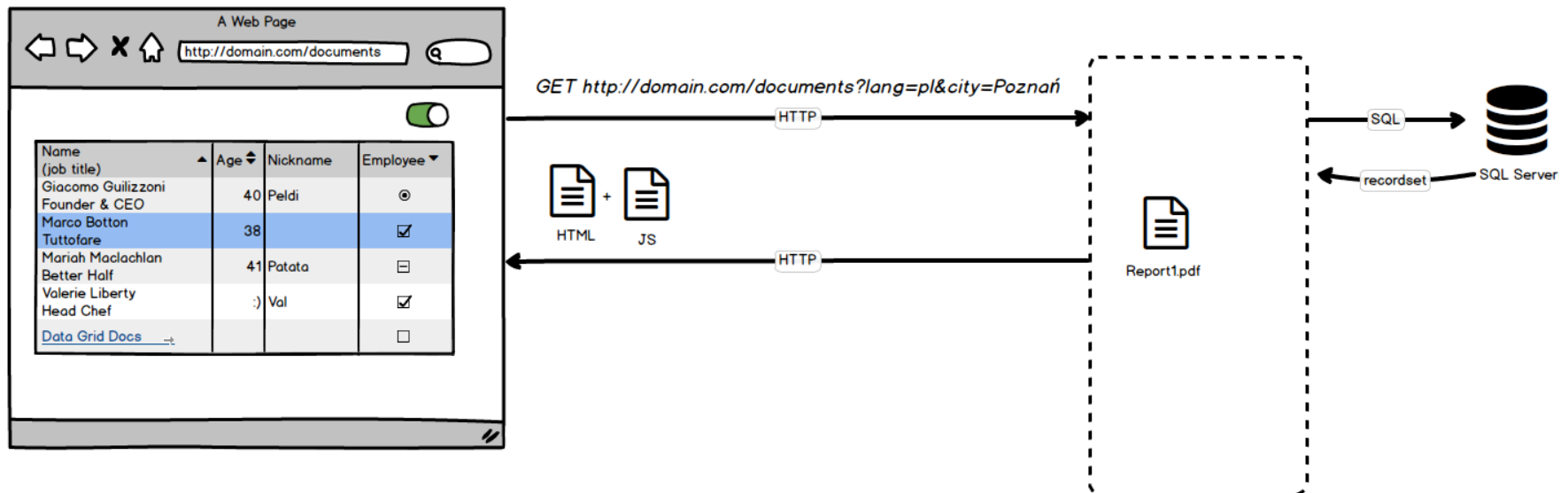
Server Side

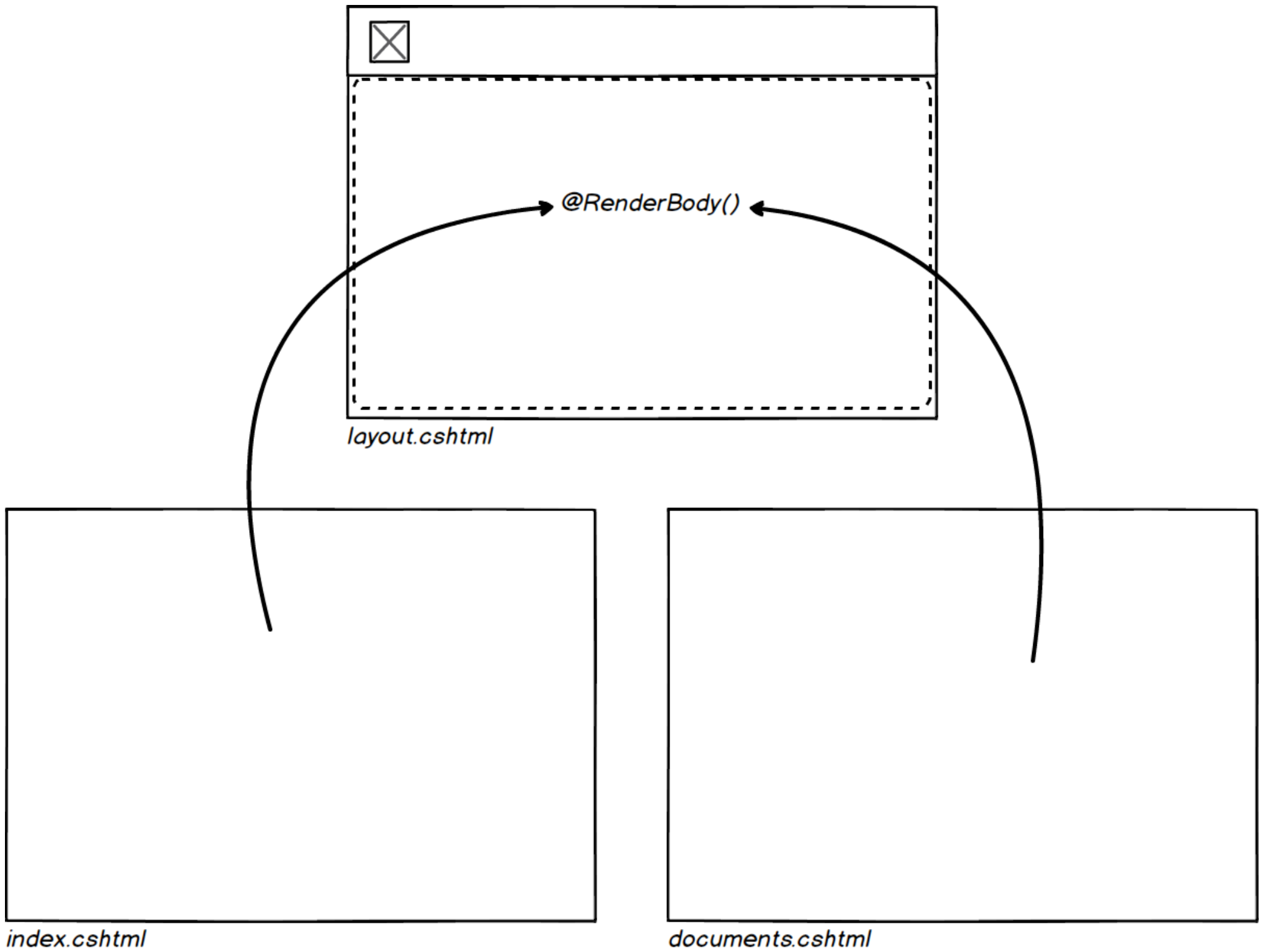


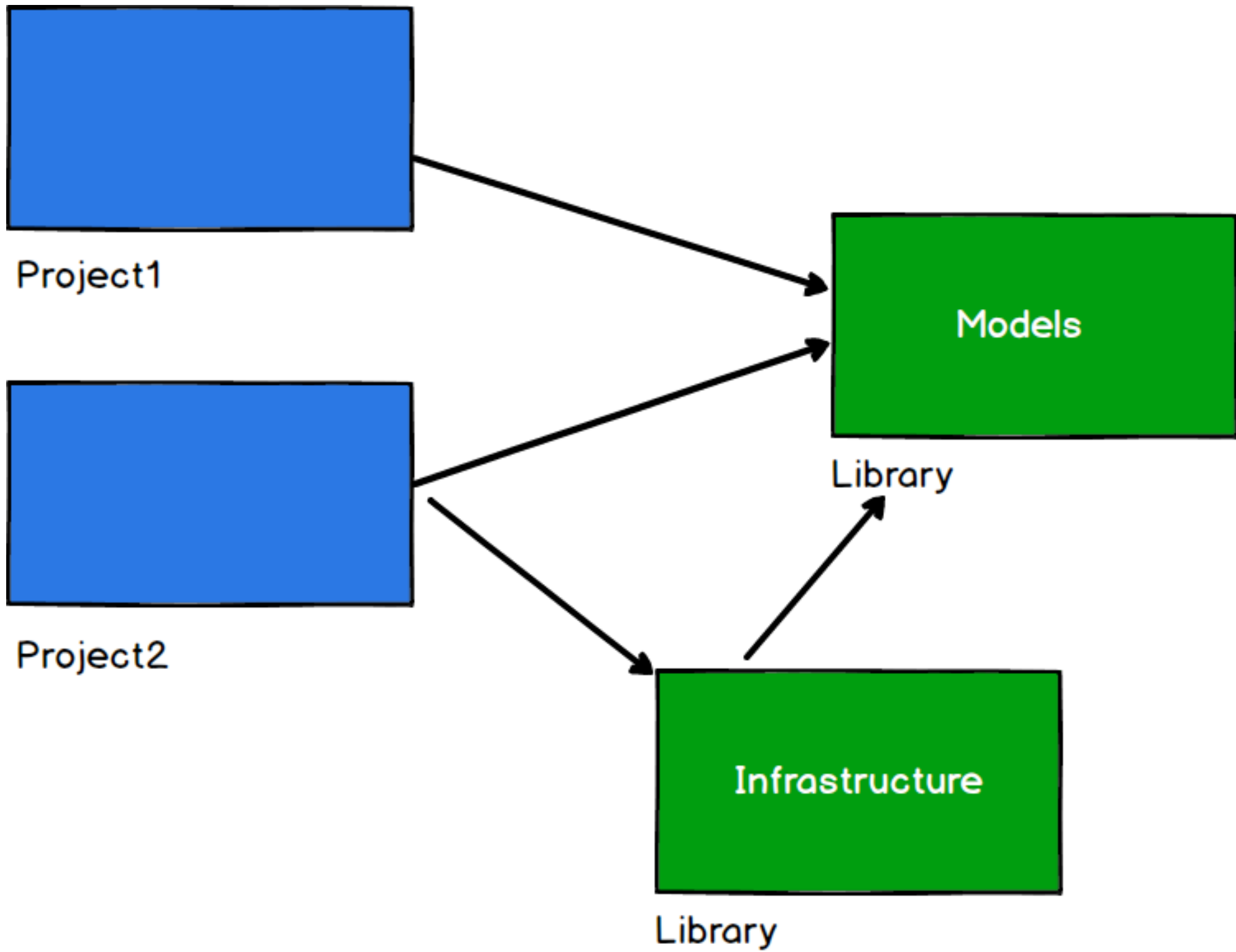
ASP.NET Core MVC / Razor Pages

@Razor Syntax

Client Side









```
int x = 0;
```

```
x++;
```

Uwierzytelnianie



kim jesteś?

Autoryzacja



do czego masz dostęp?

