




Window Name

File Edit View Help




Home

Counter

Customers


Products

Settings




WPF

46,99



Wzorce Projektowe w C#

146,59



Testy jednostkowe w C#

299,40

About

Product Name

WPF Book

Color

Blue

UnitPrice

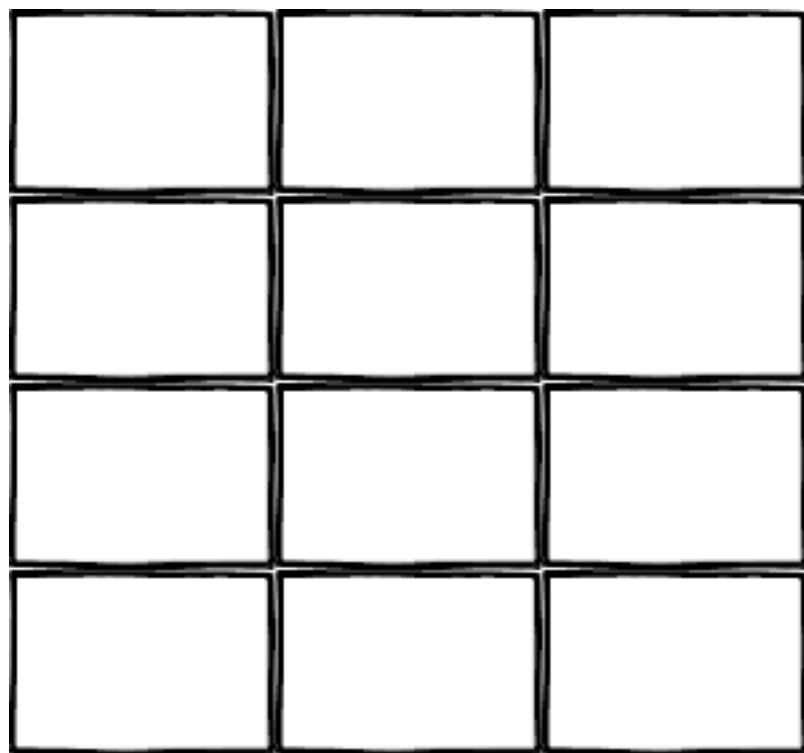
56,99

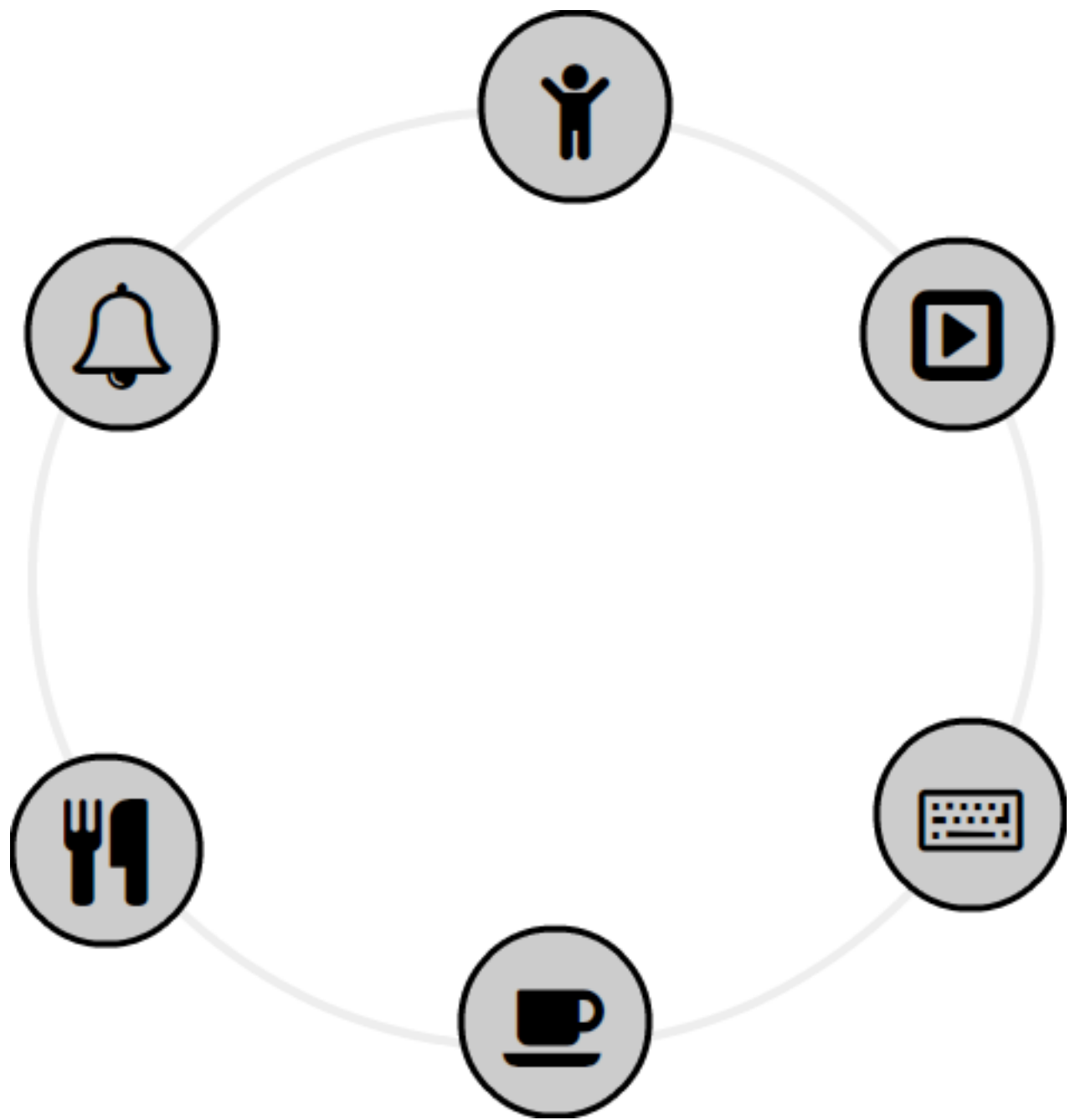
☒ Discount

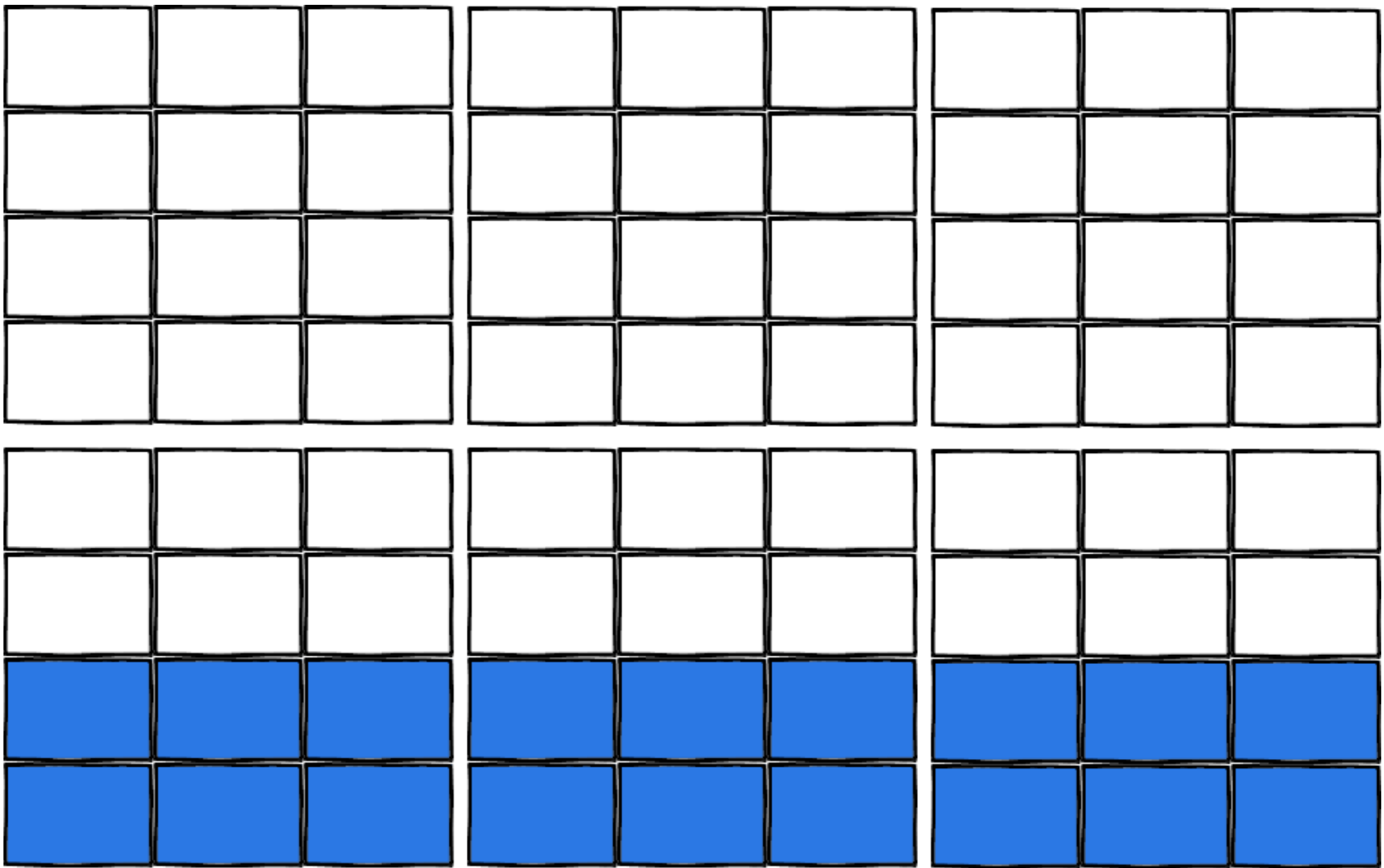
10

$$\text{XAML} = \underbrace{\text{XML}}_{\text{Markup}} + \underbrace{\{ \}}_{\text{Markup Extension}}$$



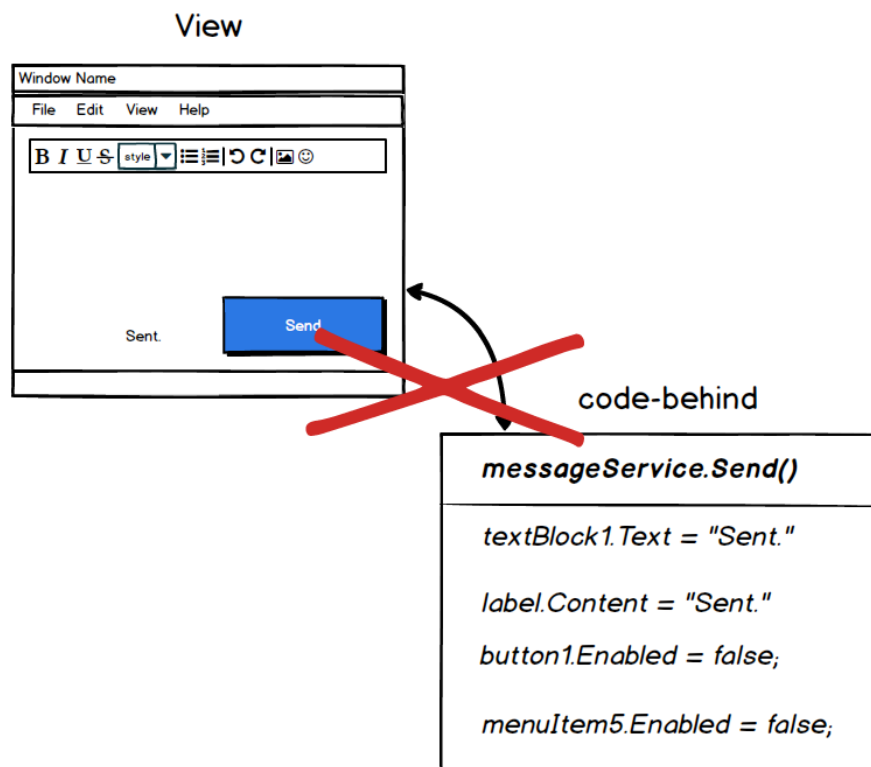
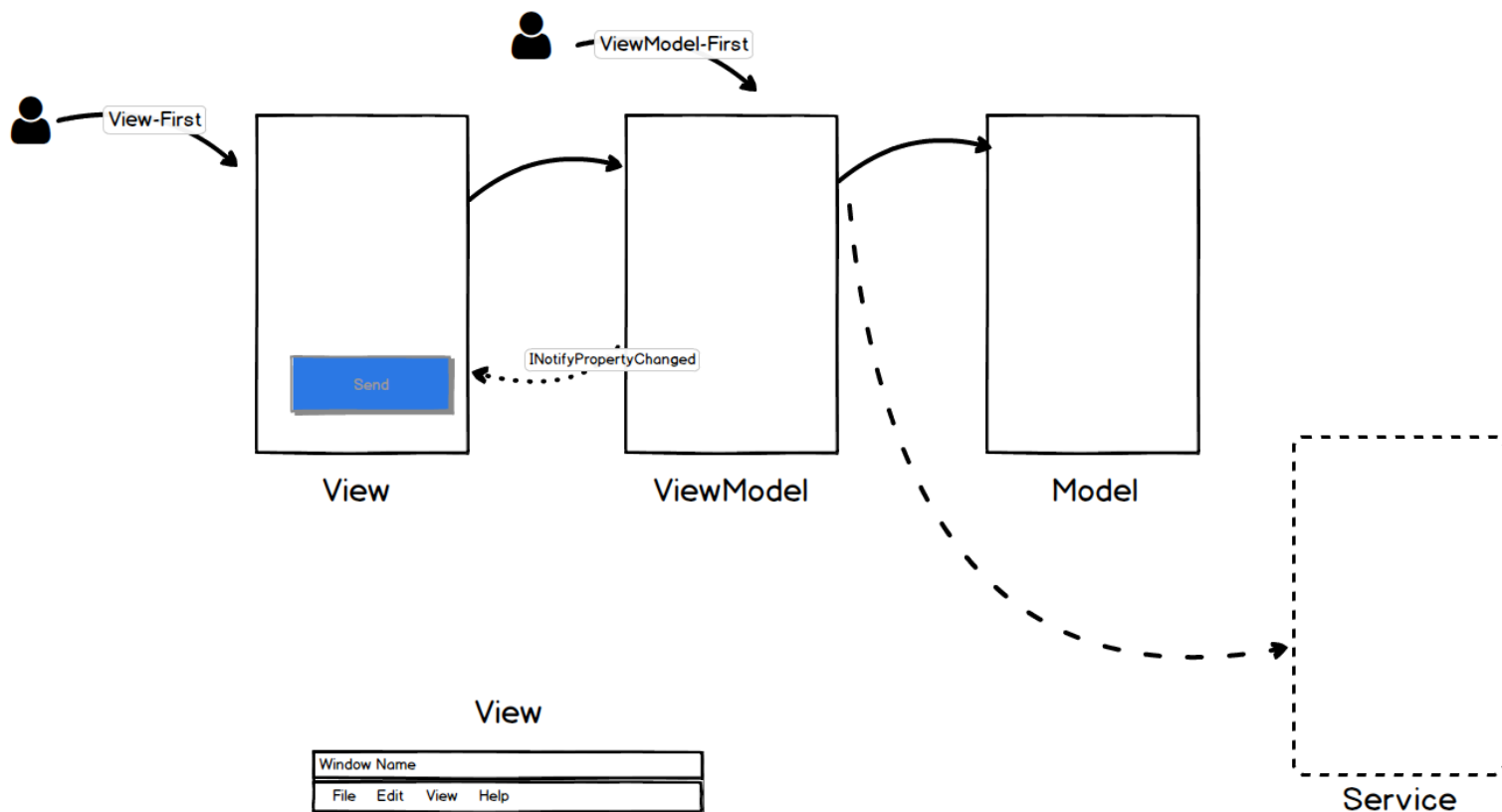


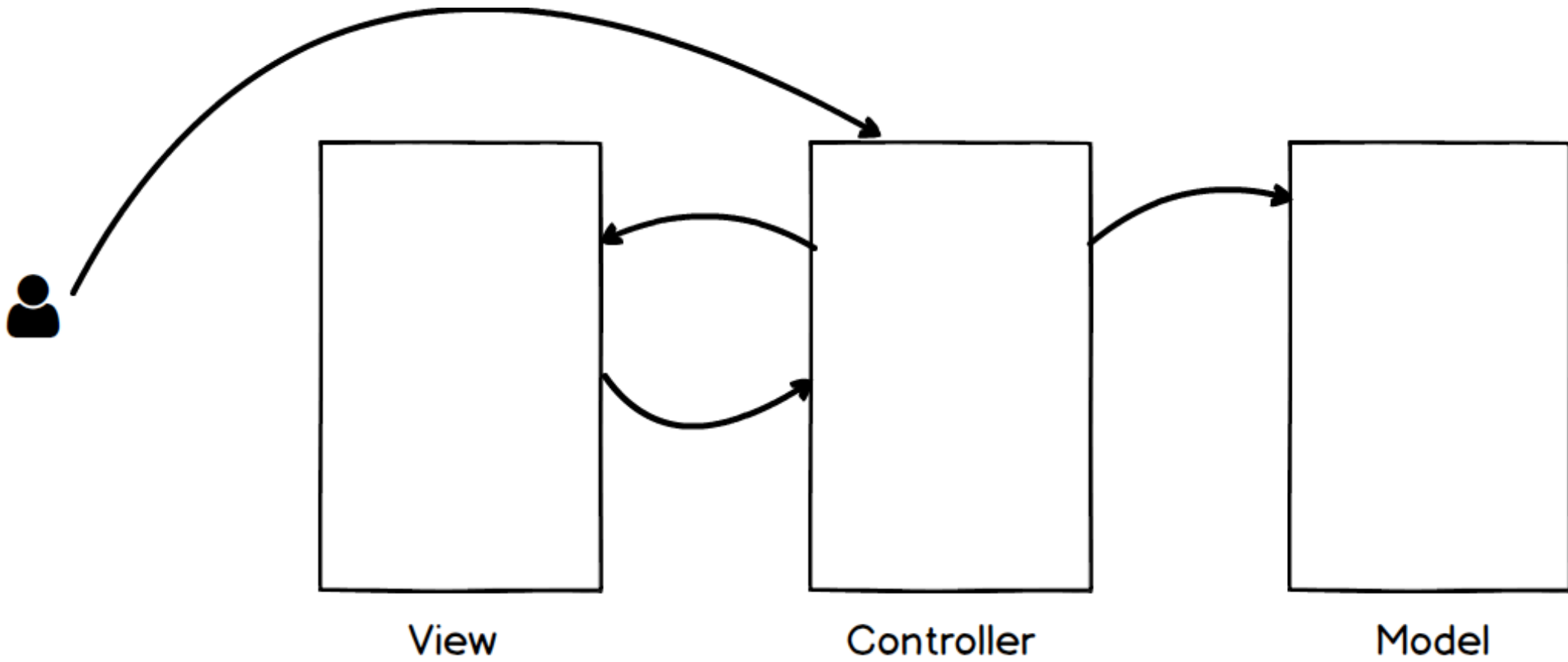




Double

MVVM (Model-ViewModel-View)





```
public CustomersViewModel CustomersViewModel => new CustomersViewModel(new FakeCustomerService(new CustomerFaker()));
```

```
class Factory  
    T Create(Type type);
```

Container

Key	Value	cykl życia
CustomersViewModel	CustomersViewModel	Instance
ICustomerService	FakeCustomerService	Instance
ICustomerService	DbCustomerService	Instance
Faker<Customer>	CustomerFaker	Singleton

```
T Resolve<T>
```

```
IEnumerable<T> ResolveAll<T>
```

Order

Number

Print() { ... }

bool CanPrint() { }

Send() { }

bool CanSend() { }

interface ICommand

void Execute() { ... }

bool CanExecute() { ... }

class PrintCommand : ICommand

Execute() { ... }

class SendCommand : ICommand

Execute() { ... }

ICollection<ICommand> commands;

ICollection<ICommand> commands;

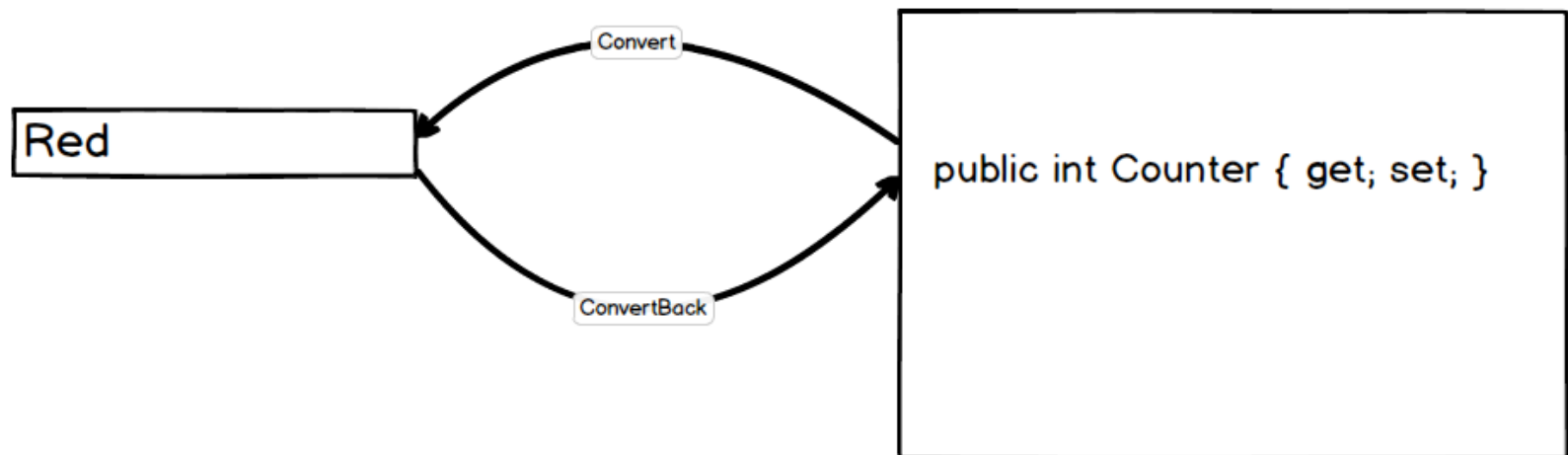
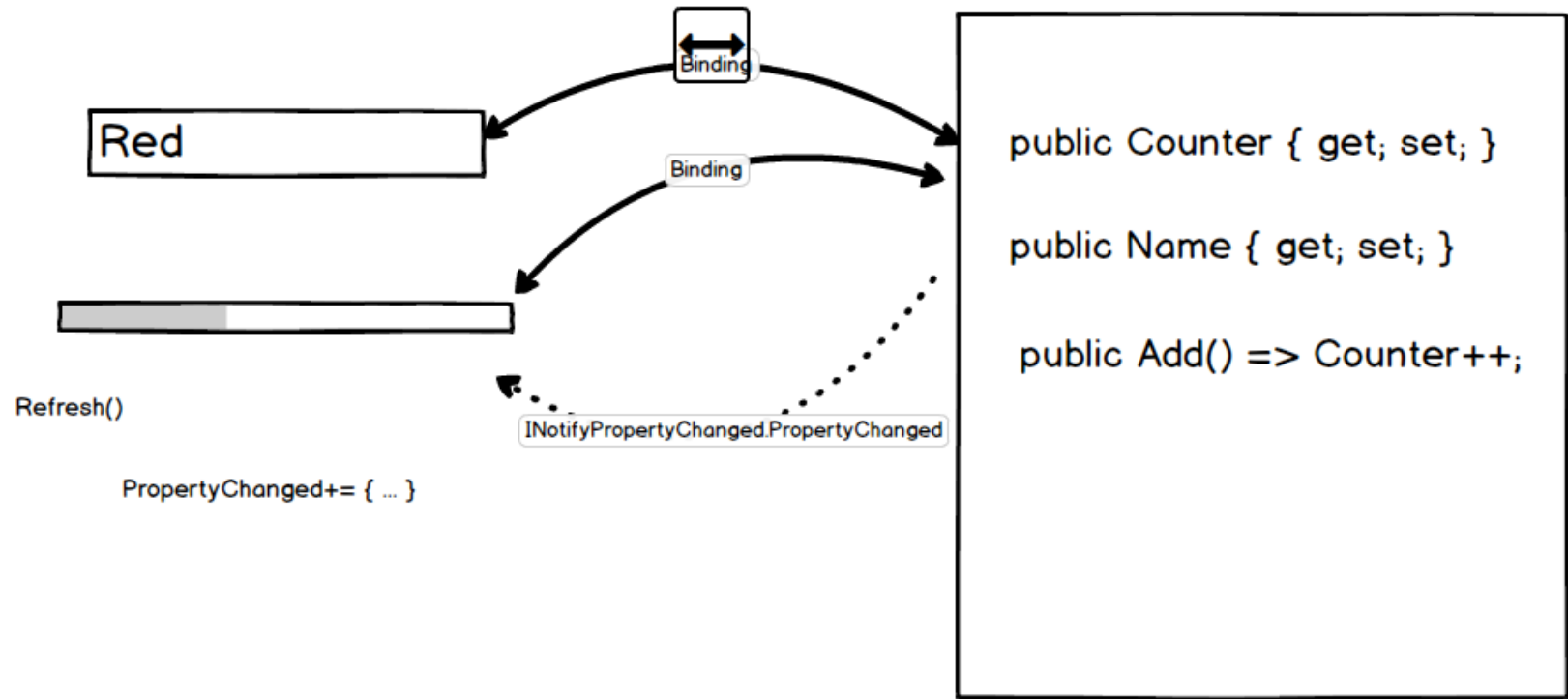
commands.Add(new PrintCommand(5));

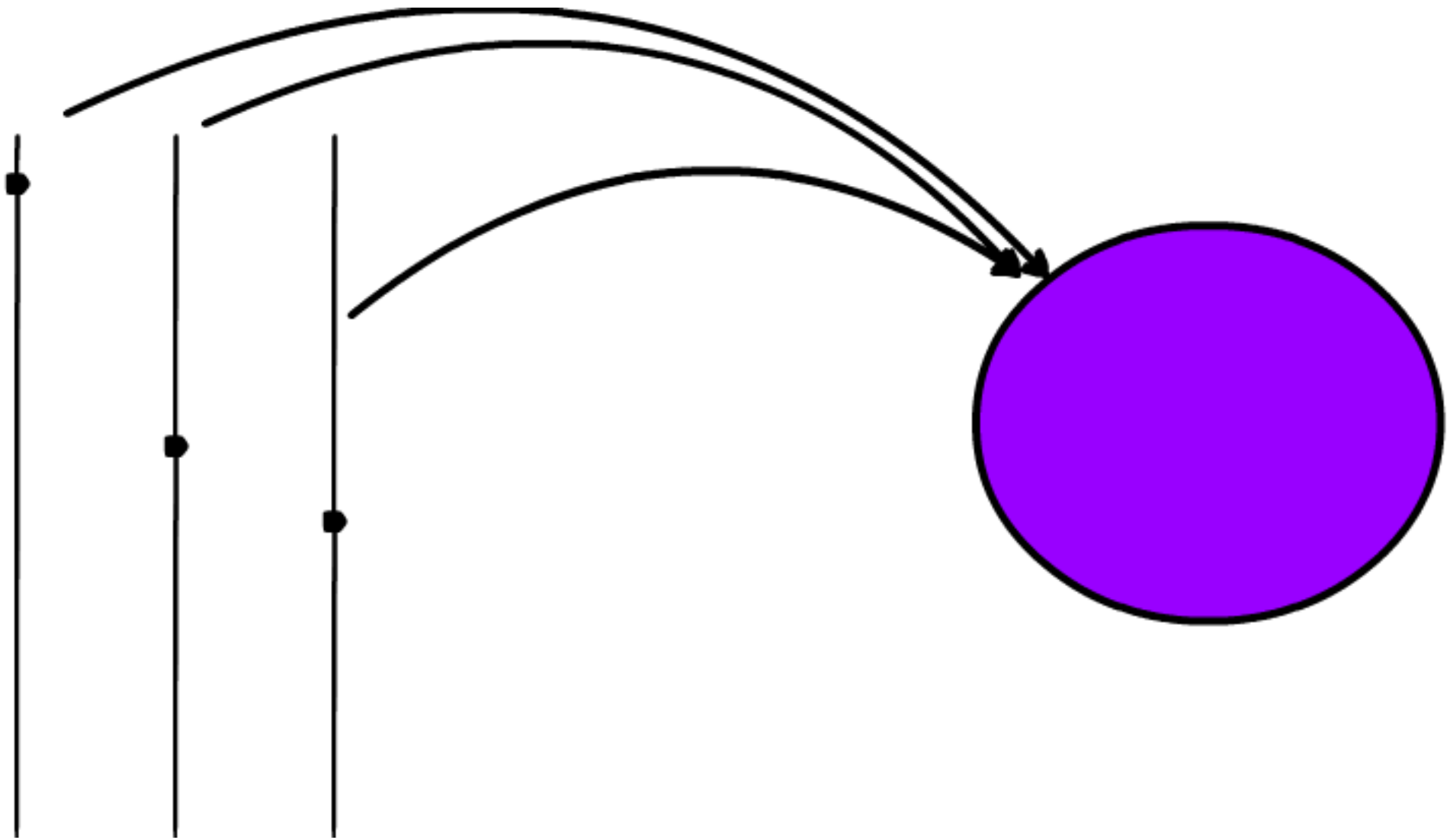
commands.Add(new SendCommand("marcin.sulecki@sulmar.pl"));

foreach(ICommand command in commands)

command.Execute();

CounterViewModel







Control

TextBlock

Hello world!



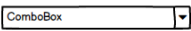
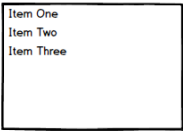
ContentControl

Label

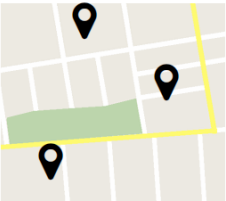
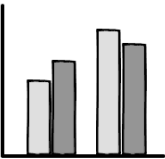
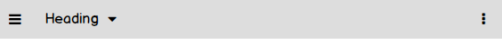
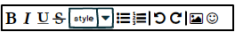
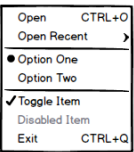
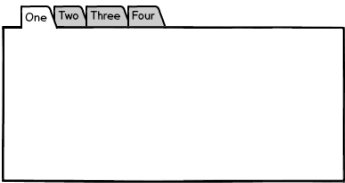


☐ Checkbox

ItemsControl

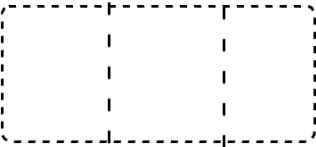


Name (job title)	Age	Nick	Employee
Giacomo	40	Peldi	<input type="radio"/>
Founder & CEO			
Marco Bot	38		<input checked="" type="checkbox"/>
Tuttofare			
Marion Ma	41	Pato	<input type="checkbox"/>
Better Ha			
Valerie Lit		Val	<input checked="" type="checkbox"/>
Head Che			

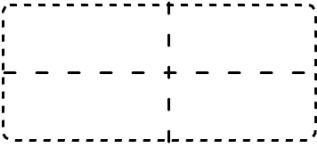


Panel (LayoutControl)

Grid



StackPanel



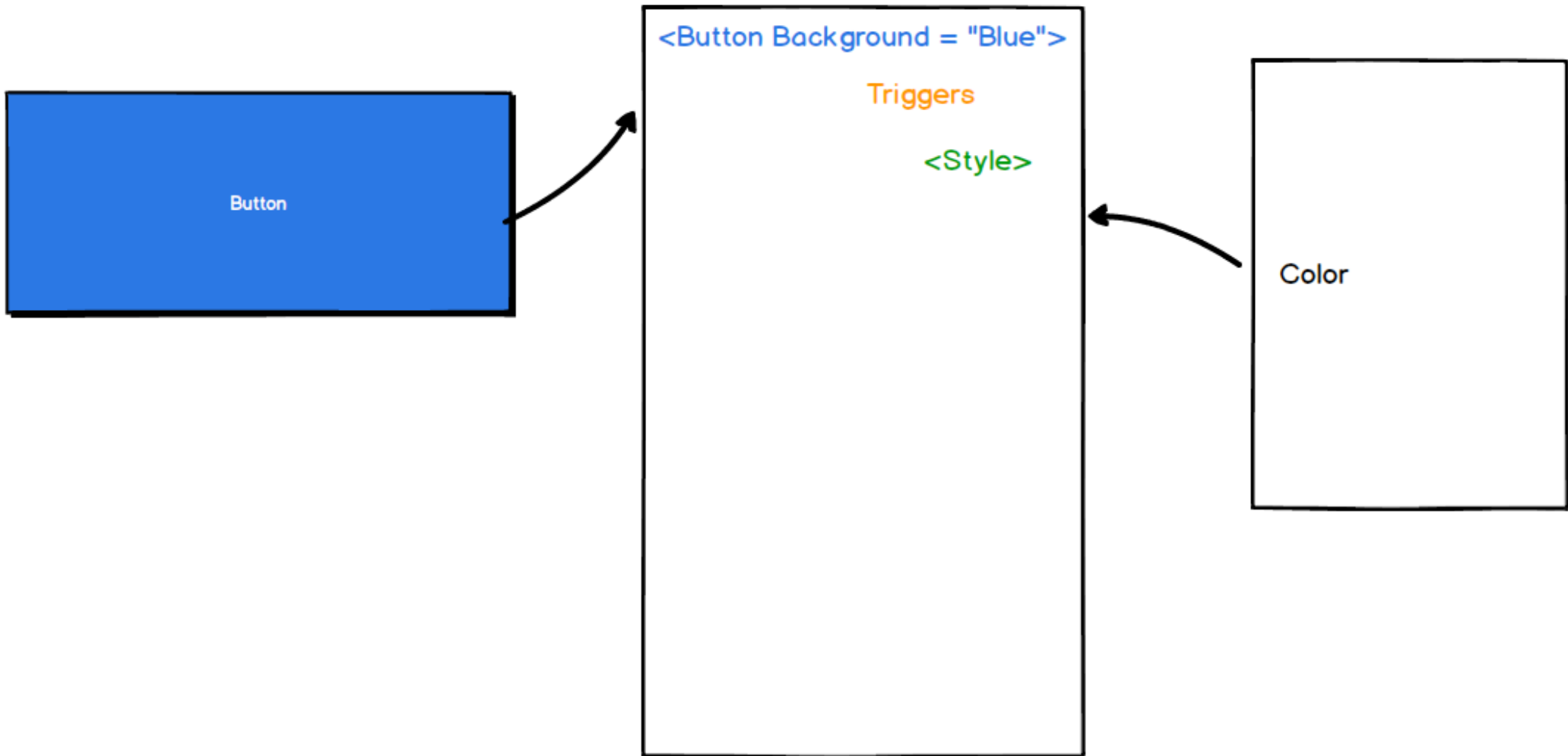
Canvas



Key

Value

Button1.Background



Window Name

File Edit View Help

About

Home

Counter

Customers

Products

Settings

First name

John

Last name

Smith

Customer Type

Happy

Country

Poland

Pesel

645654645

Region

645654645

VisualStateGroup

Window Name

File Edit View Help

About

Home

Counter

Customers

Products

Settings

First name

John

Last name

Smith

Customer Type

Happy

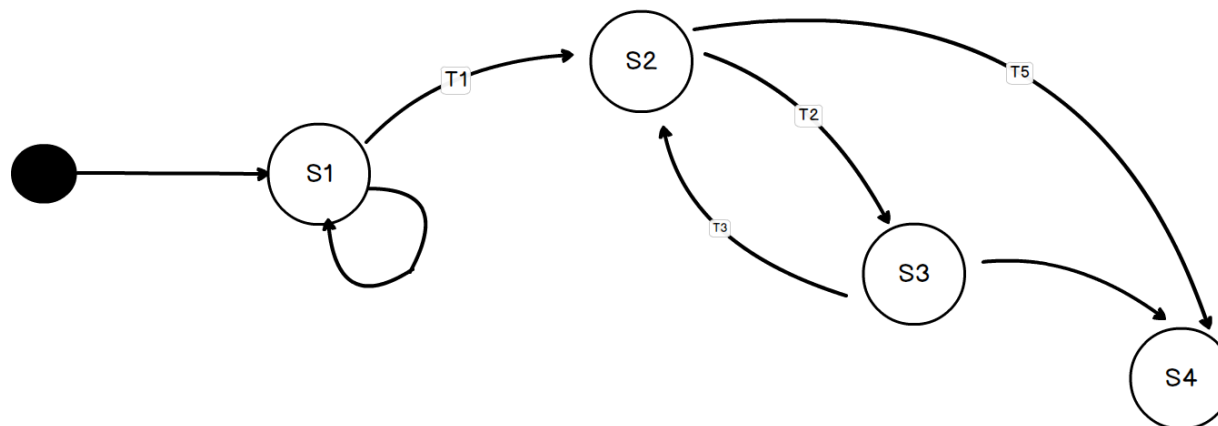
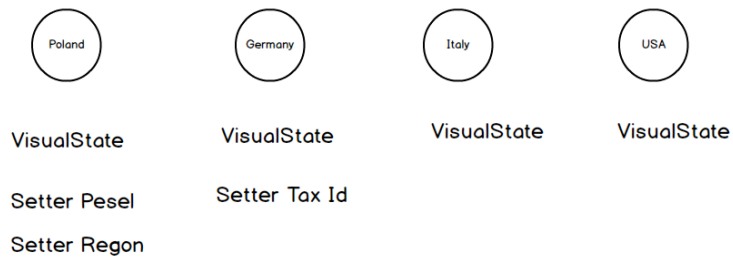
Country

Germany

TaxId

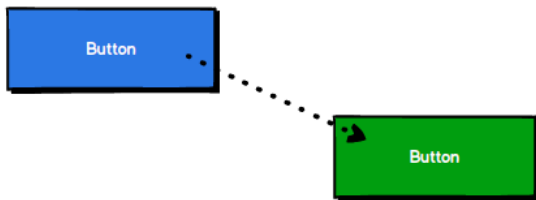
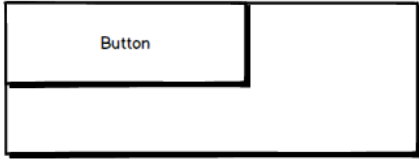
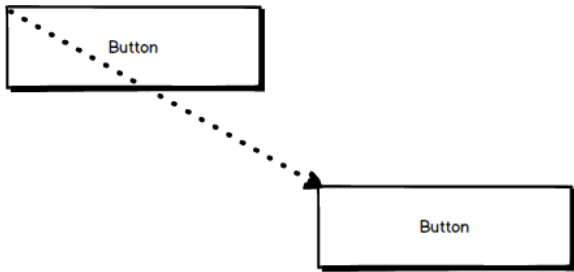
645654645

Visual State Manager

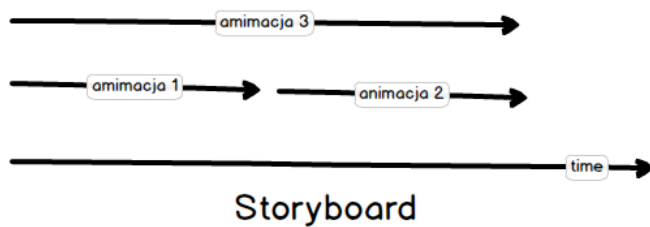
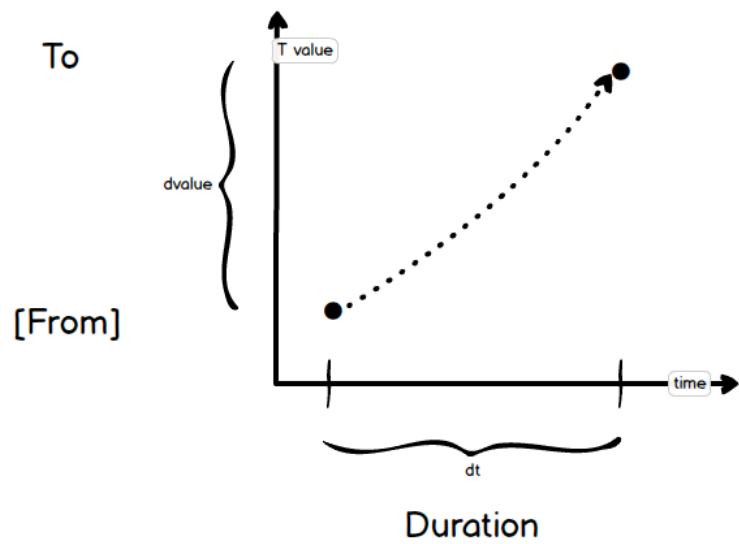


Adorner

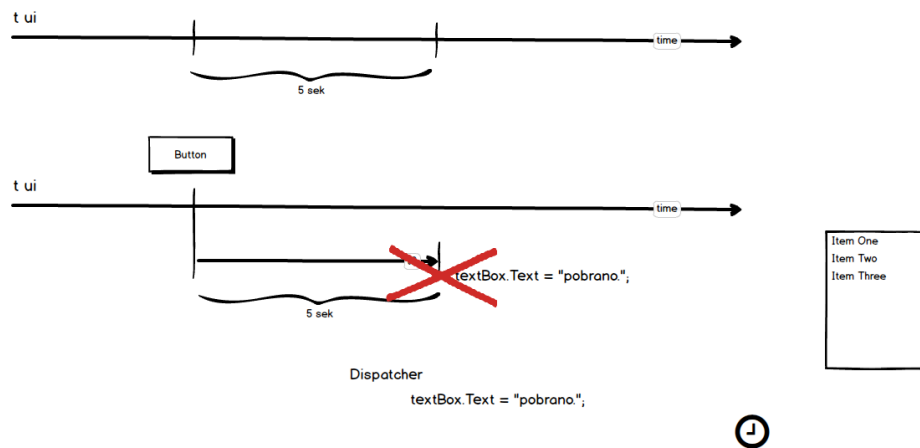




{Type}Animation

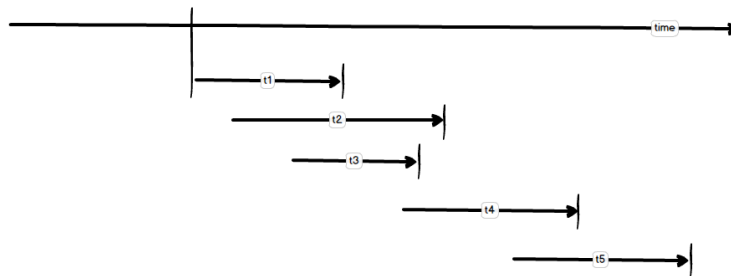


STA (Single Thread Application)

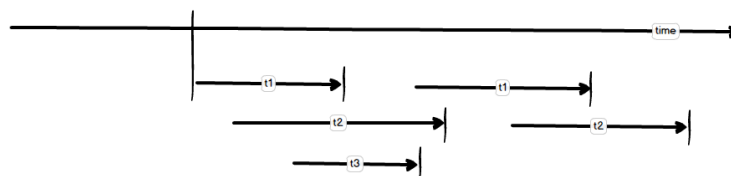


```
Thread t1 = new Thread( ()=>Download("domain.com") );
Thread t2 = new Thread( ()=>Download("domain.com") );
Thread t3 = new Thread( ()=>Download("domain.com") );
Thread t4 = new Thread( ()=>Download("domain.com") );
Thread t5 = new Thread( ()=>Download("domain.com") );

t1.Start();
t2.Start();
t3.Start();
t4.Start();
t5.Start();
```



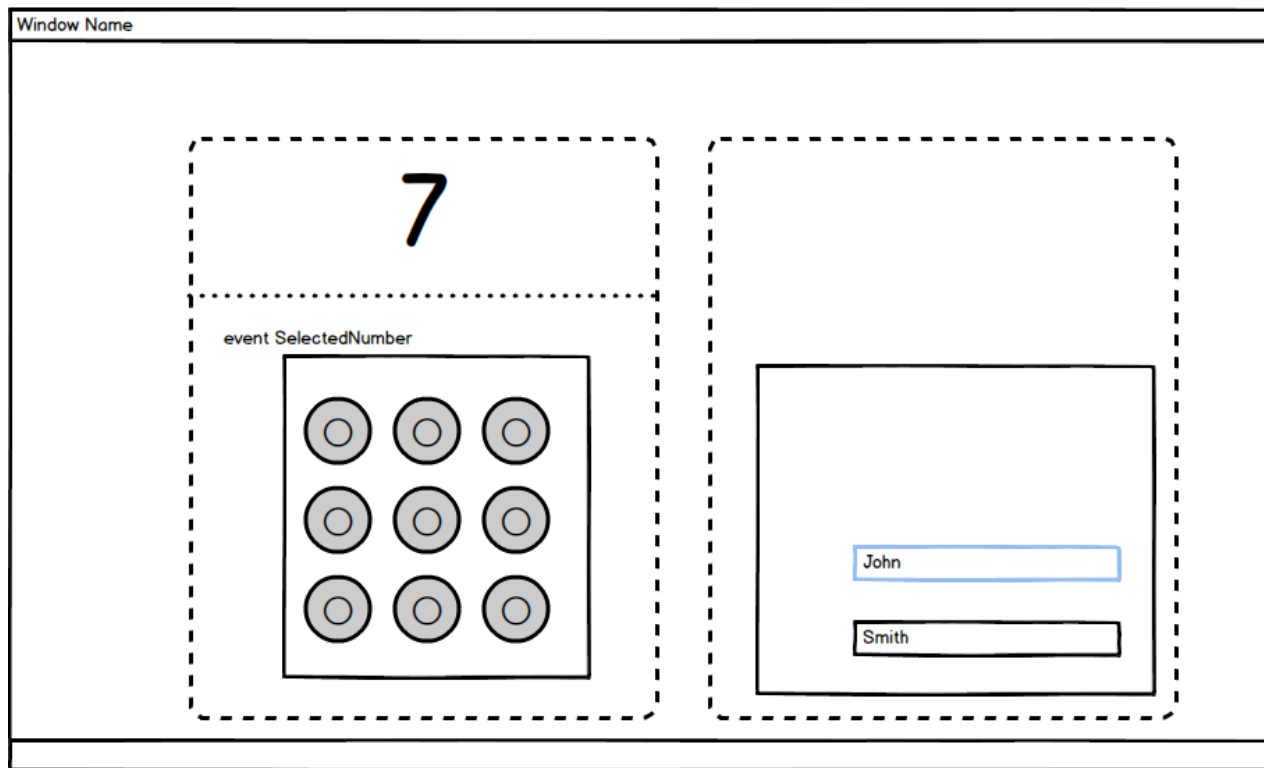
ThreadPool



```
Task task1 = new Task ( ()=>Download("domain.com") );
Task<string> task2 = new Task<string> ( ()=>Download("domain.com") );
task1.Start();
```

```
Task task3 = Task.Run( ()=>Download("") );
```

```
Task<string> task4 = Task.Run( ()=>Download("") );
```



Bubbling

Tunneling Preview{....}

Direct



Window
Grid
StackPanel
Label
UserControl
~~UniformGrid~~
Button
Image
Button
Image
Button
Image

e.Cancel = true

Routed Events