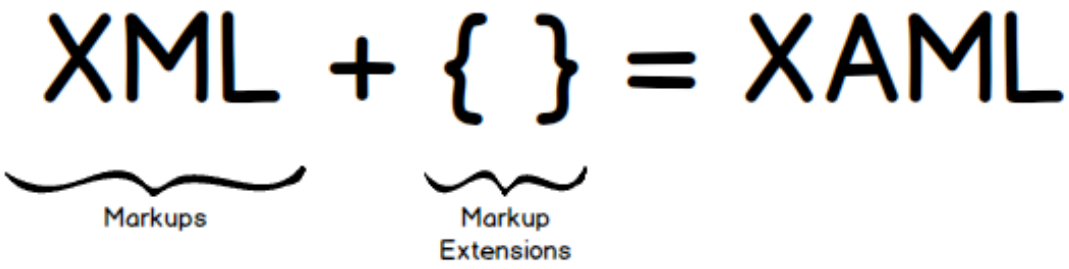
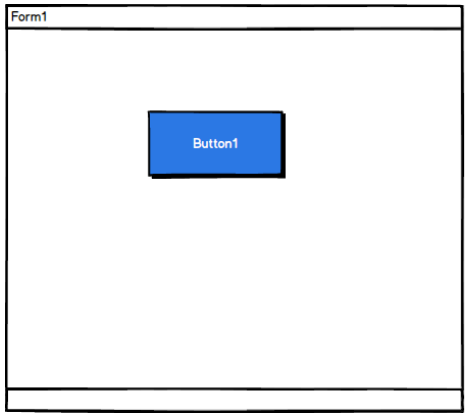
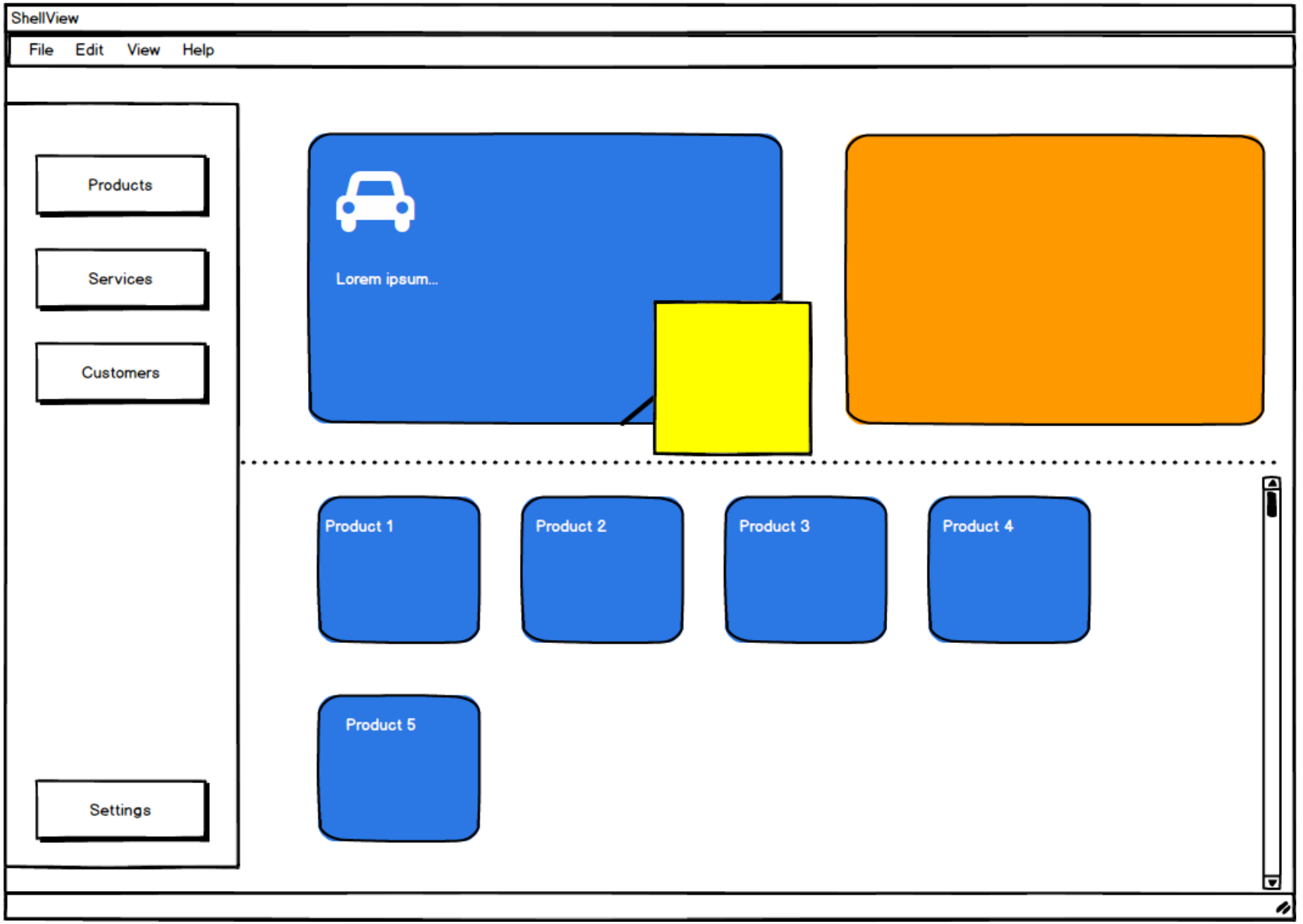
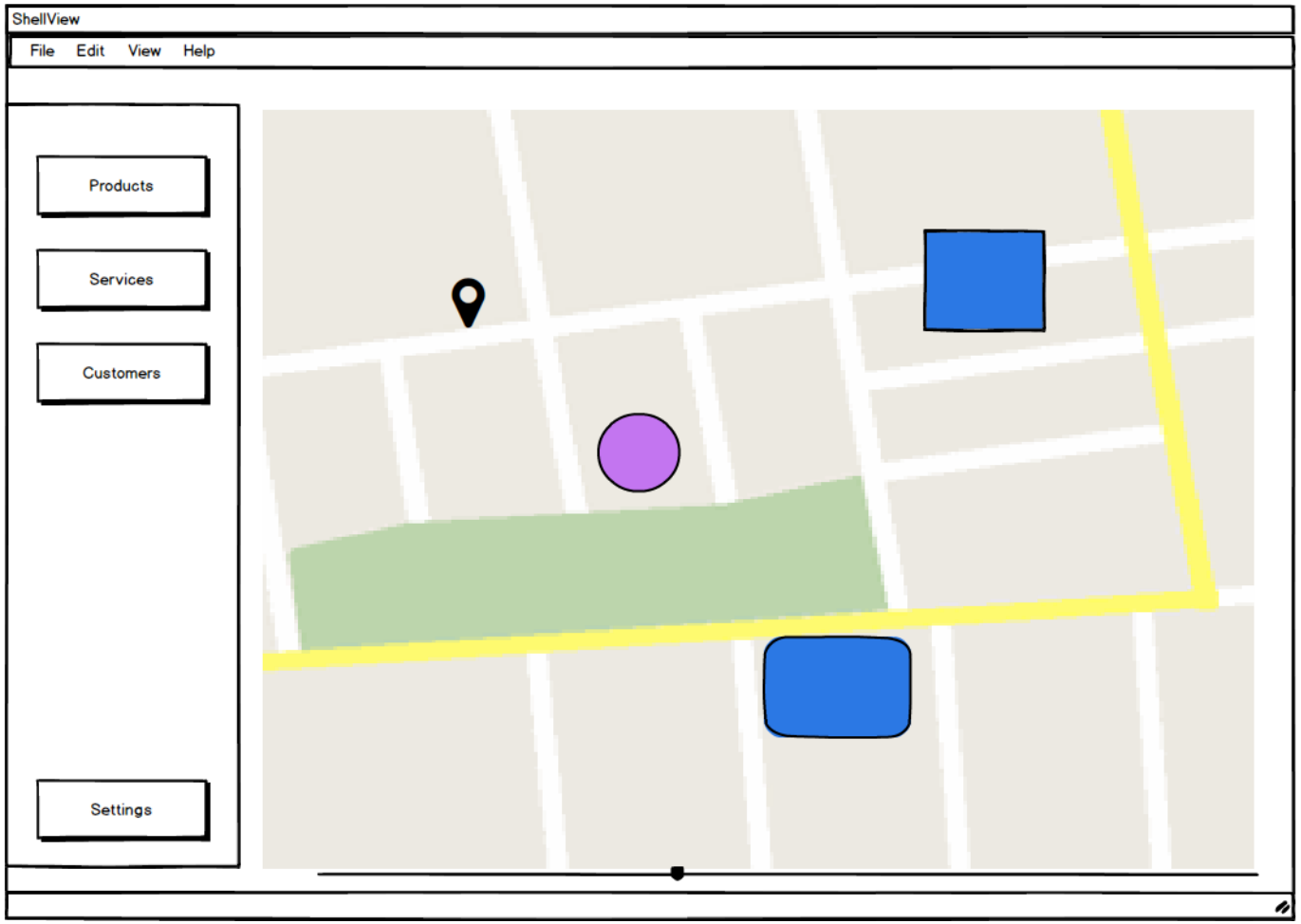

XML + { } = XAML
Markups
Markup
Extensions

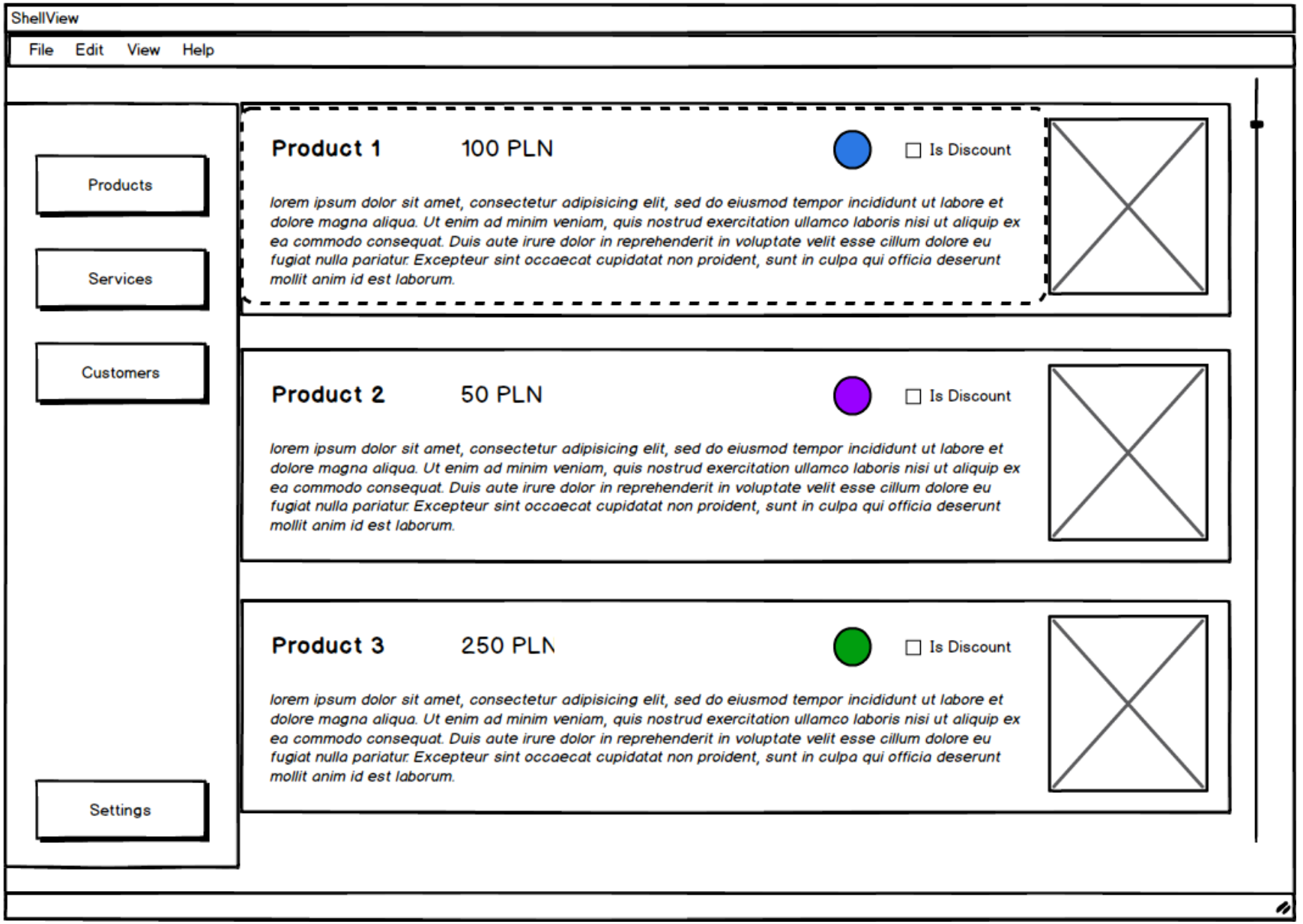


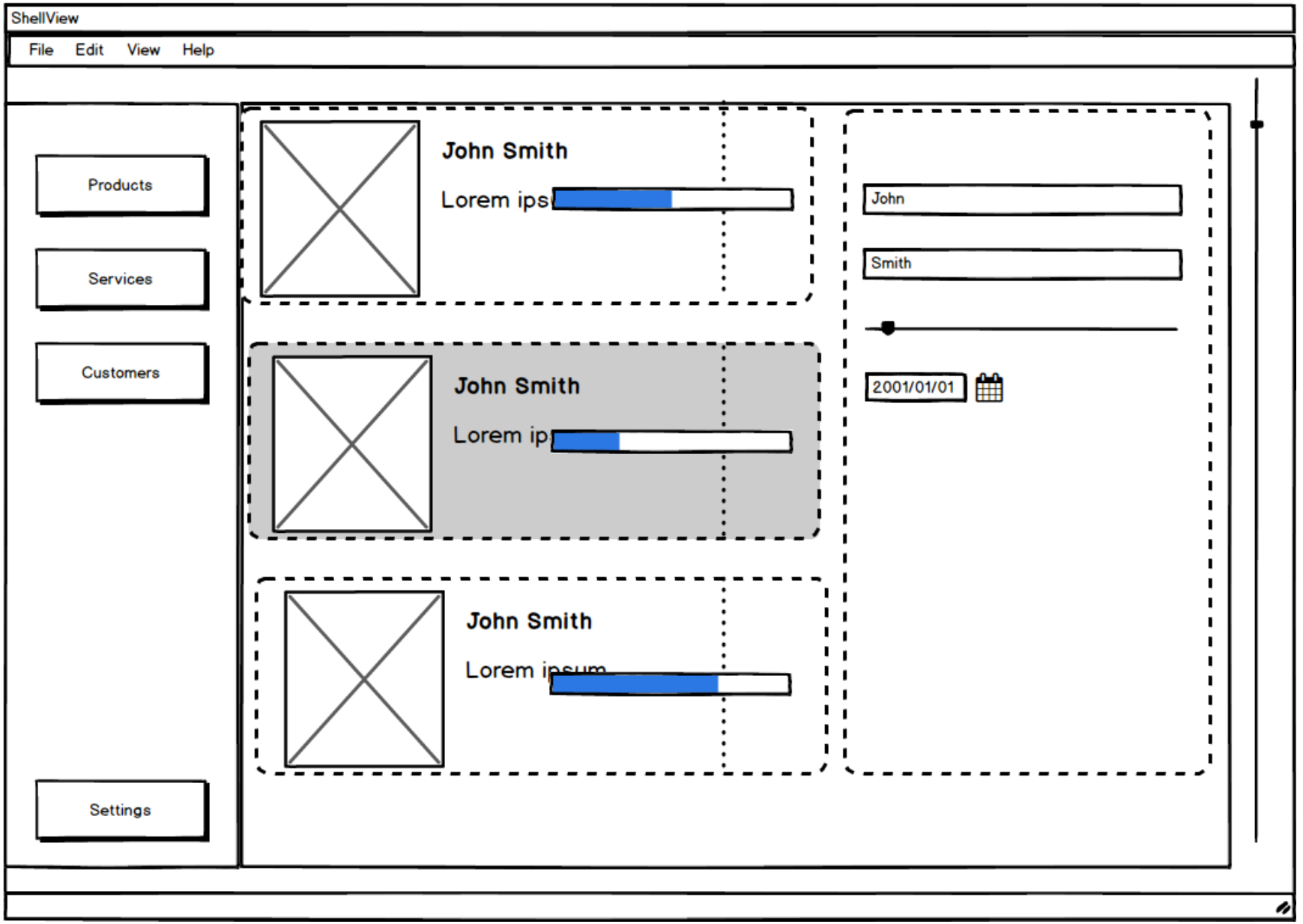

```
form1.Children.Add(button1);
Form form1 = new Form();
Button button1 = new Button();
button1.Context = "Print";
button1.Background = Color.Blue;
```

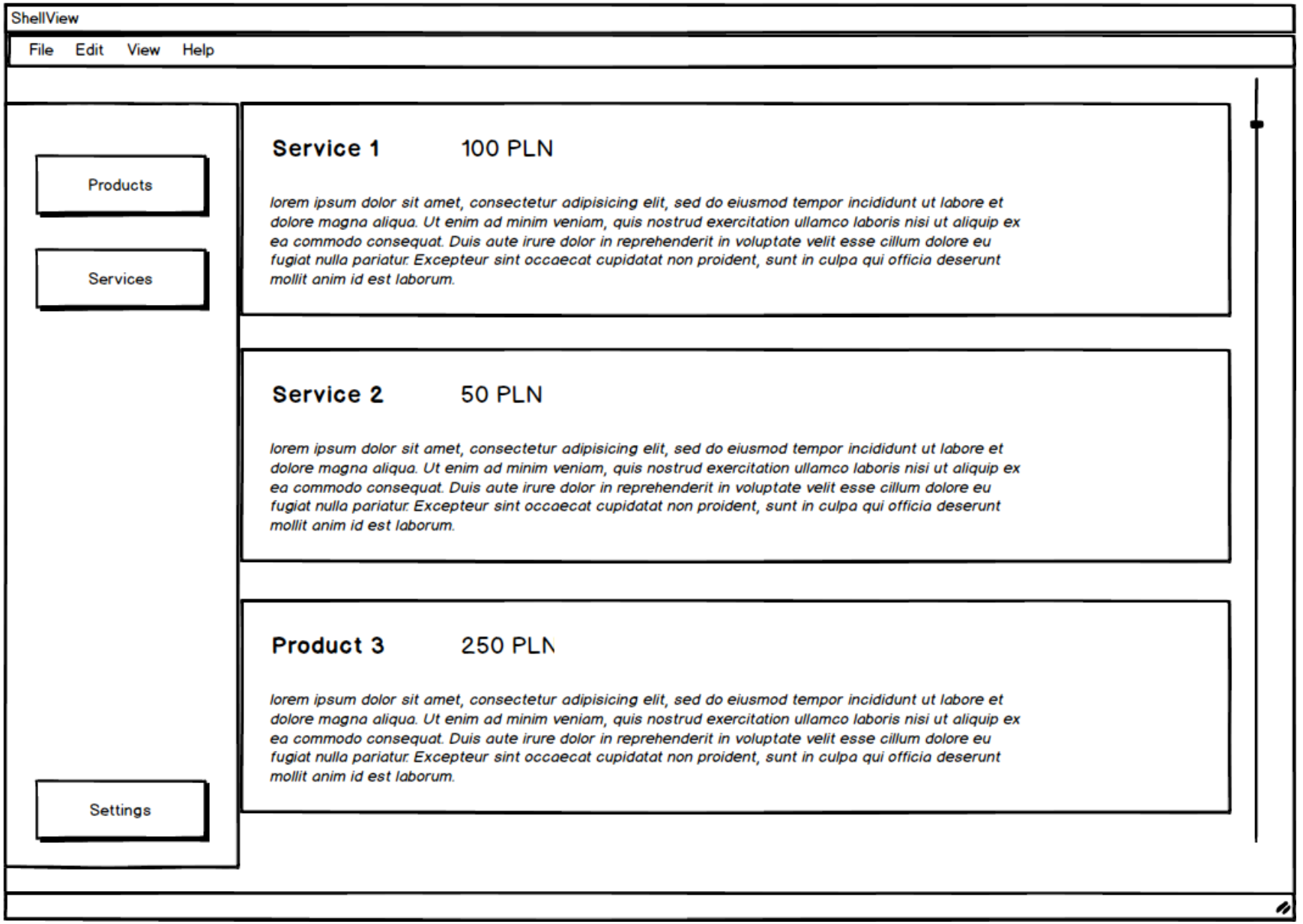
```
<Form>
  <Button Background="{StaticResource MyColor}">Print</
Button>

</Form>
```

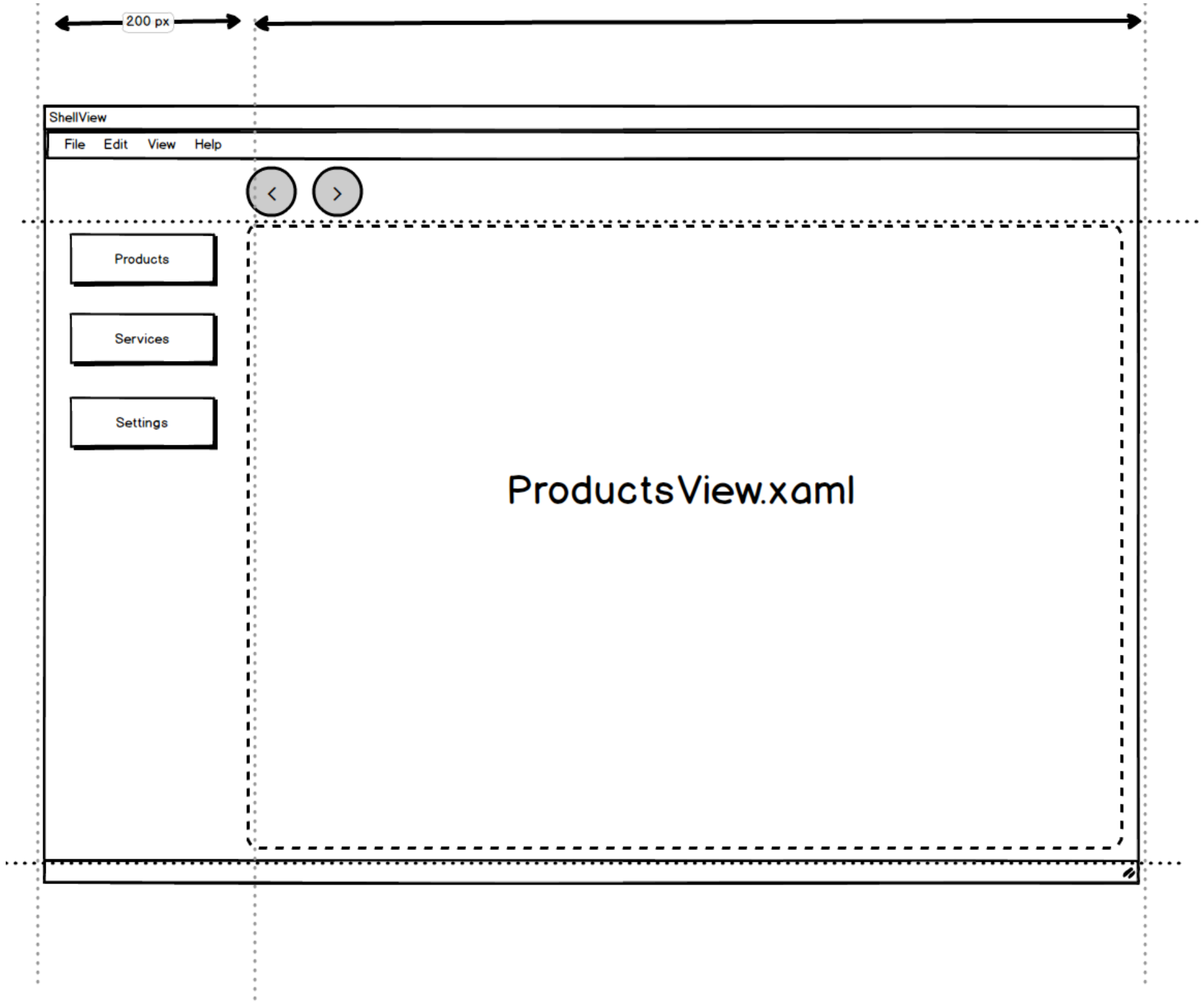

ShellView
File
Edit
View
Help
Products
Services
Customers
Settings
Lorem ipsum...
Product 1
Product 2
Product 3
Product 4
Product 5

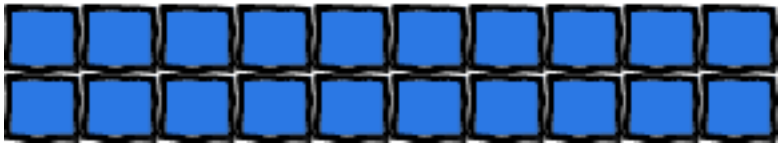

ShellView
File
Edit
View
Help
Products
Services
Customers
Settings


ShellView
File
Edit
View
Help
Products
Services
Customers
Settings
Product 1
100 PLN
Is Discount
lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
Product 2
50 PLN
Is Discount
lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
Product 3
250 PLN
Is Discount
lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.

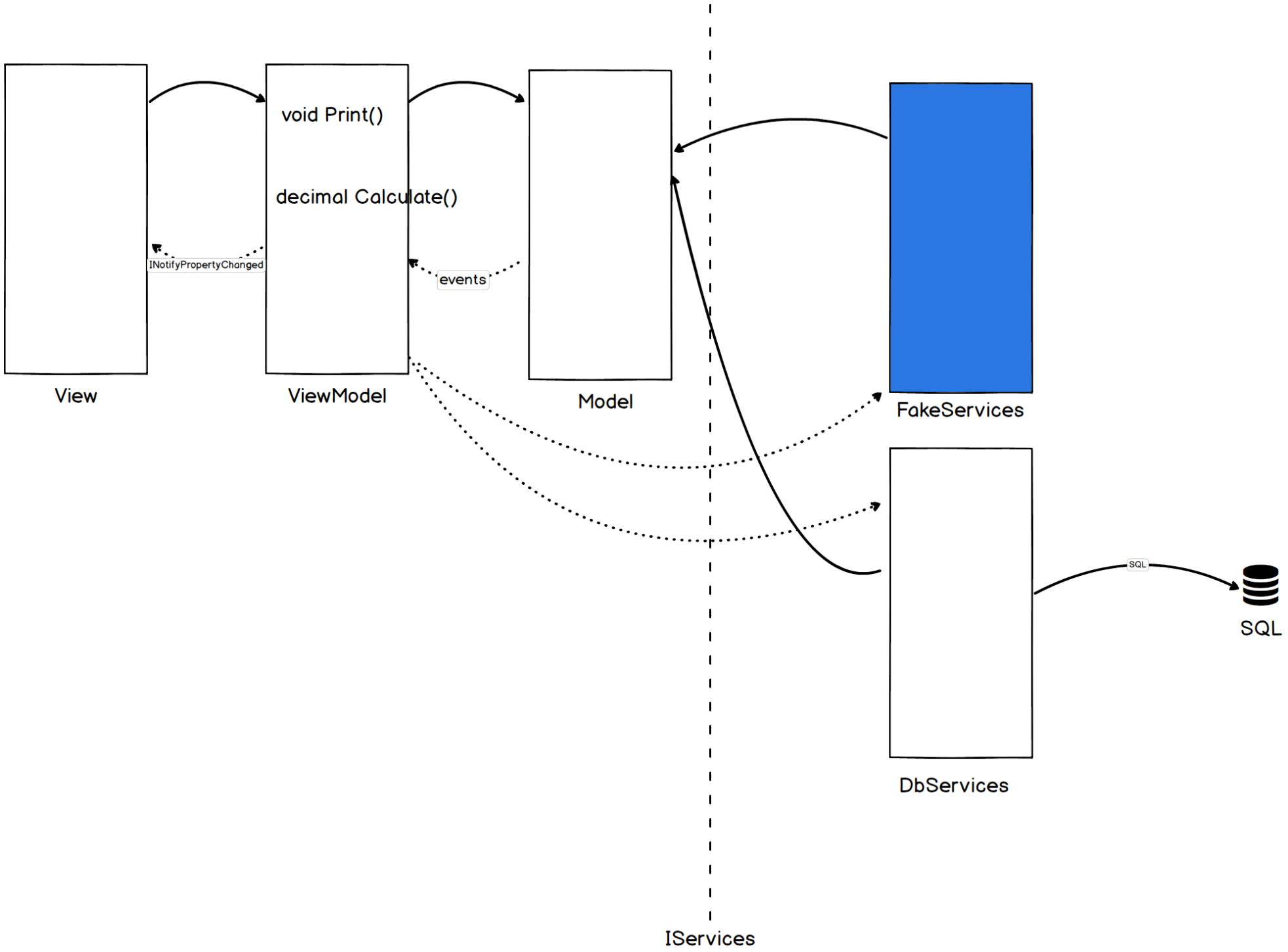

ShellView
File
Edit
View
Help
Products
Services
Customers
Settings
John Smith
Lorem ips
John Smith
Lorem ip
John Smith
Lorem ipsum
John
Smith
2001/01/01

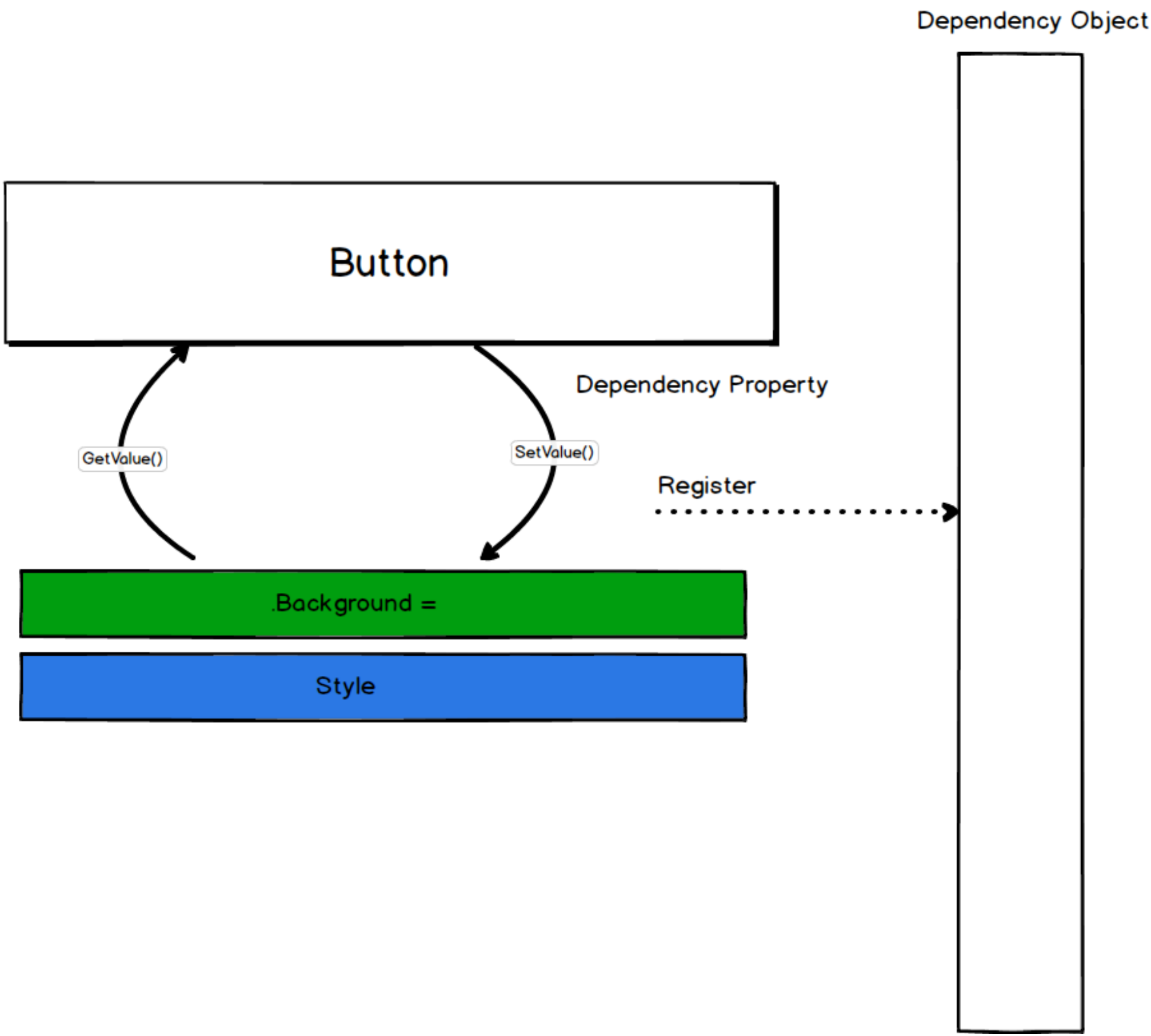

ShellView
File
Edit
View
Help
Products
Services
Settings
Service 1
100 PLN
lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
Service 2
50 PLN
lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.
Product 3
250 PLN
lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.


200 px
ShellView
File
Edit
View
Help
Products
Services
Settings
ProductsView.xaml

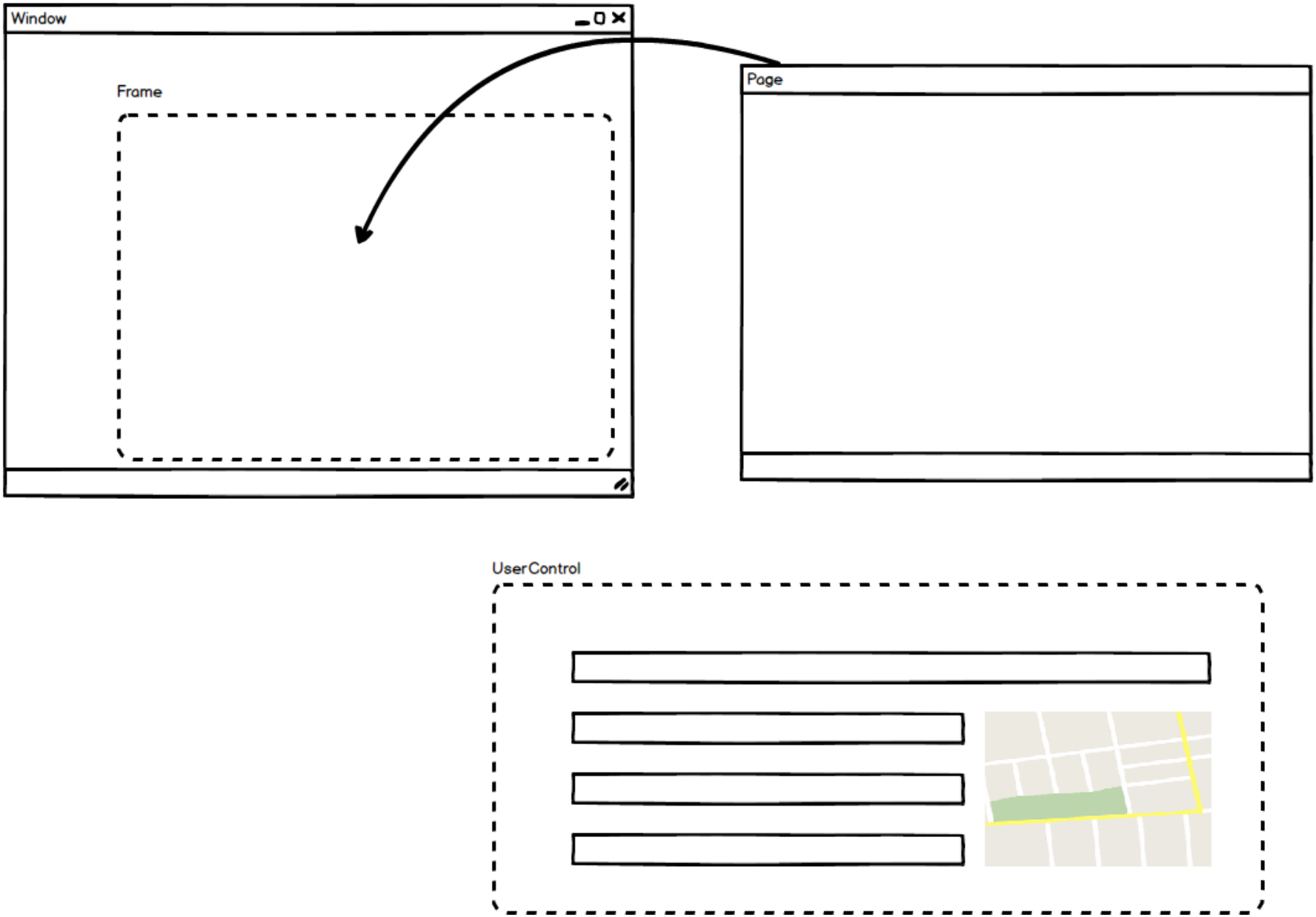


MVVM

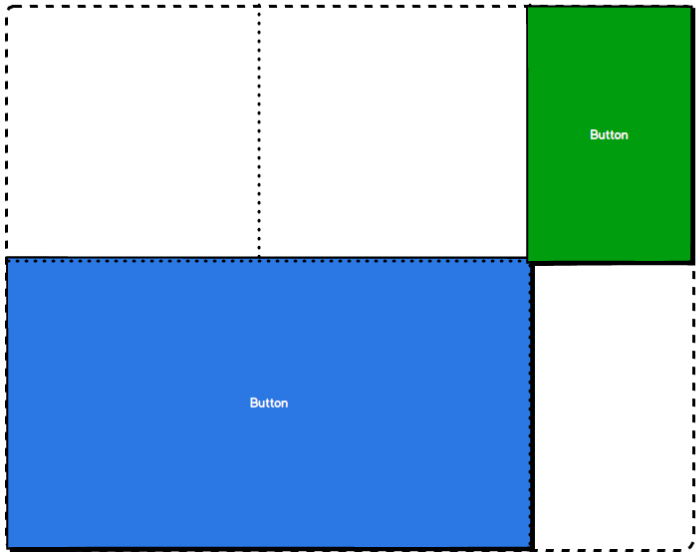

void Print()
decimal Calculate()
INotifyPropertyChanged
events
View
ViewModel
Model
FakeServices
DbServices
SQL
SQL
IServices


Dependency Object
Button
Dependency Property
GetValue()
SetValue()
Register
.Background =
Style

Key	Value
ProductsViewModel	ProductsViewModel
IProductService	FakeProductService
Faker<Product>	ProductFaker
ProductViewModel	ProductViewModel

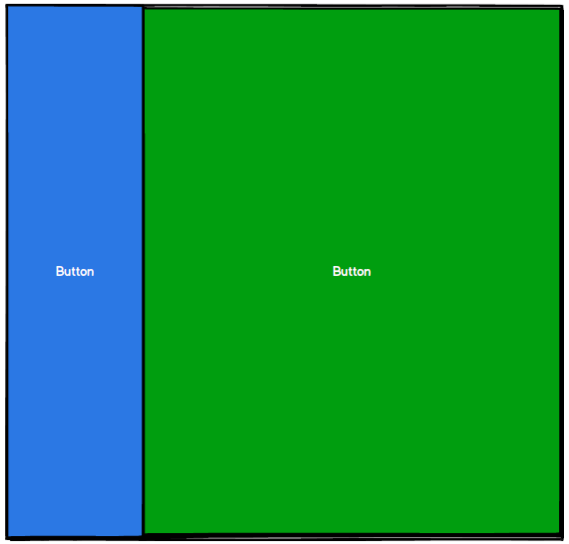

Window
Frame
Page
UserControl

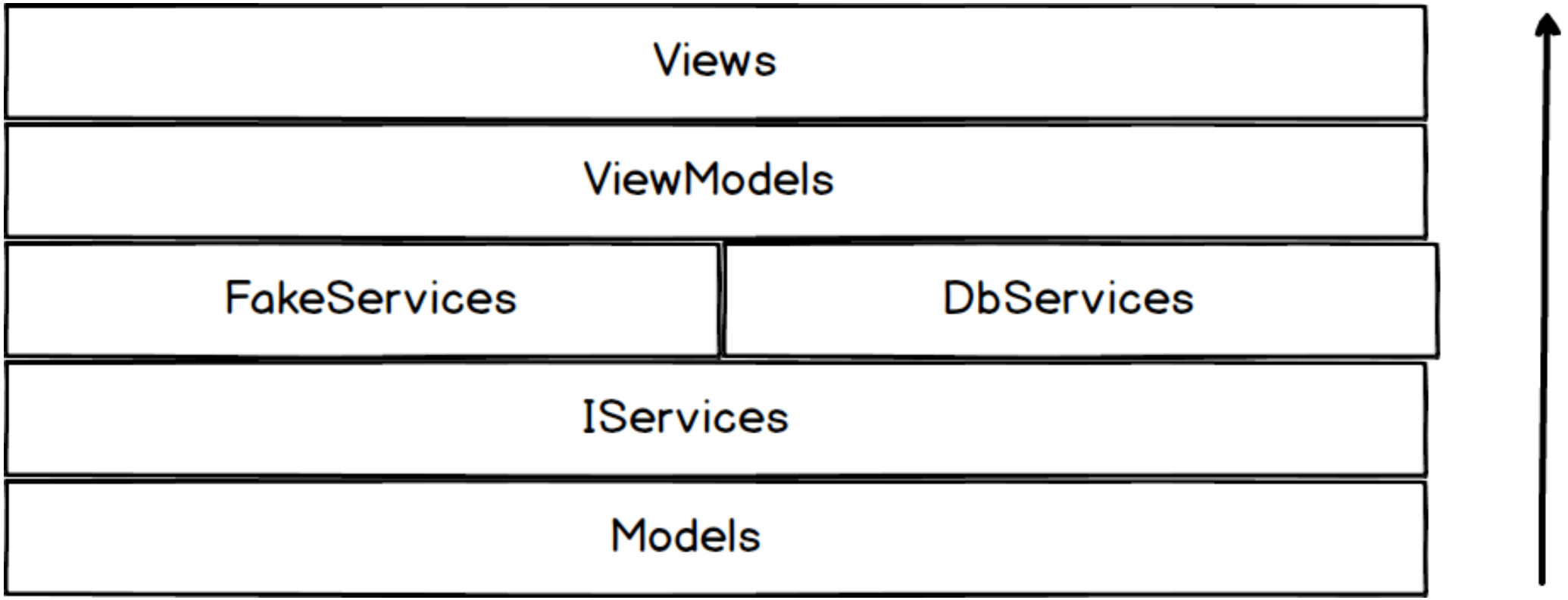
Grid



StackPanel .Orientation

DockPanel .Dock




Views
ViewModels
FakeServices
DbServices
IServices
Models

Product

Name

UnitPrice

BarCode

decimal Calculate() { ... }

bool CanCalculate() { ... }

void Print() { ... }

void CanPrint() { ... }

void Send() { ... }

class PrintCommand

byte numberOfCopies;

PrintCommand(Print product, byte numberOfCopies)

void Execute() { ... }

bool CanExecute() { ... }

class SendCommand

string recipient;

string sender;

SendCommand(string recipient, string sender)

void Execute() { ... }

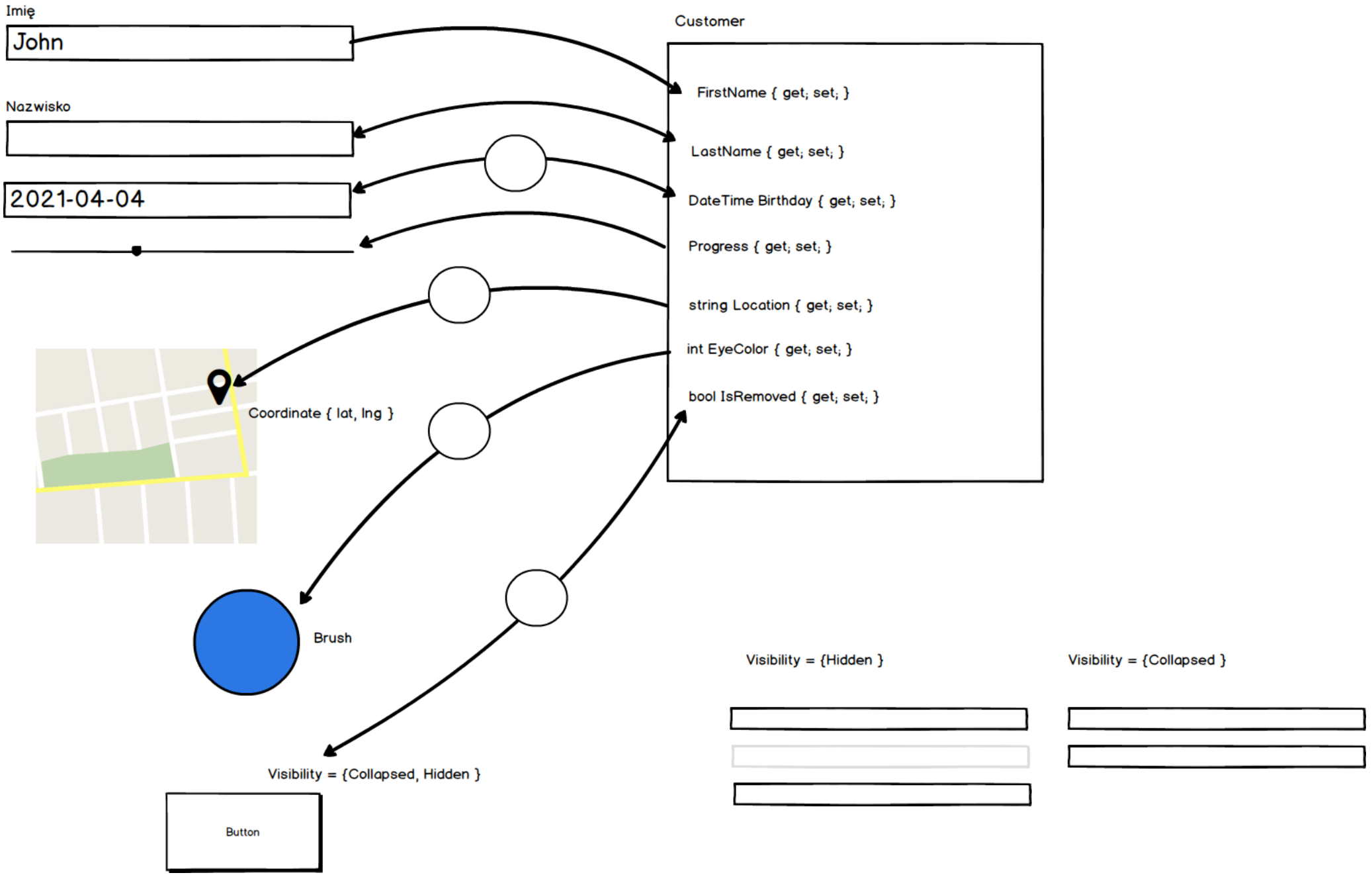
bool CanExecute() { ... }

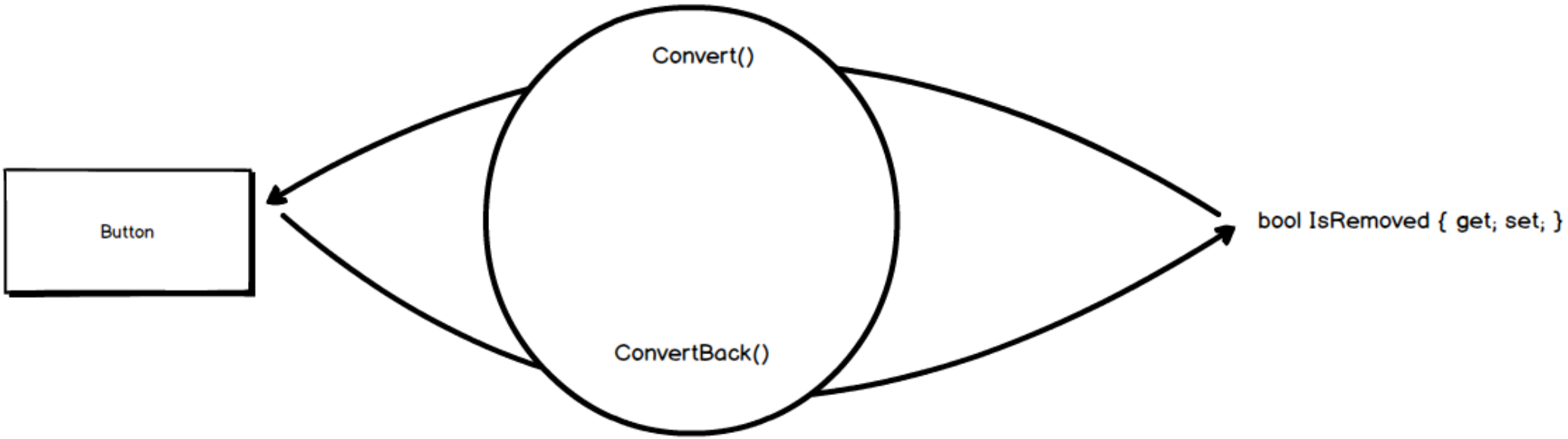
interface ICommand

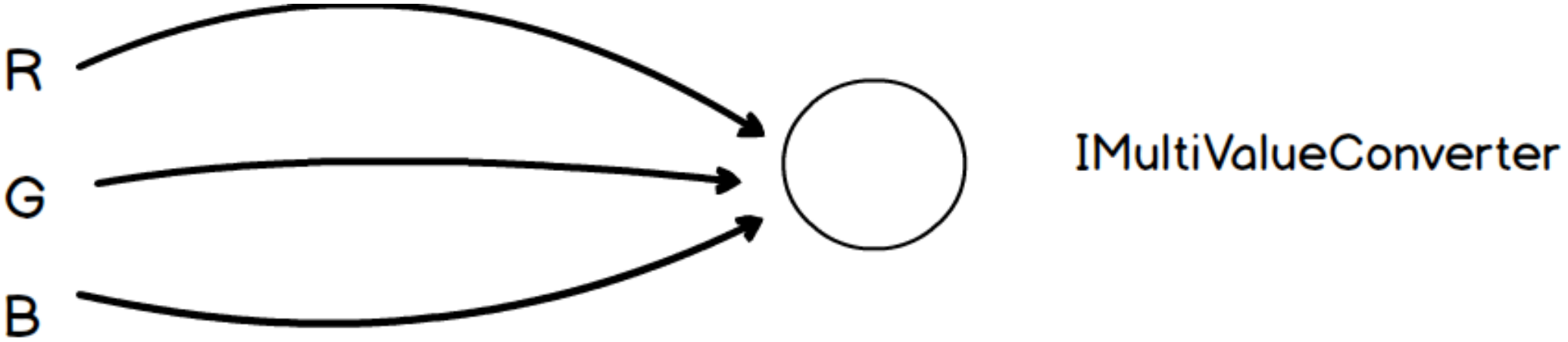
void Execute();

bool CanExecute() { ... }

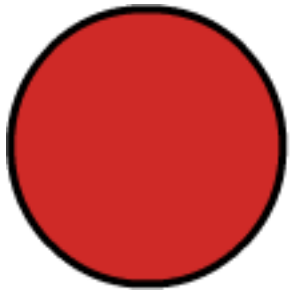
```
List<ICommand> commands = new List<ICommand>();

commands.Add(new PrintCommand());
commands.Add(new PrintCommand());
commands.Add(new PrintCommand());
commands.Add(new SendCommand());


foreach(ICommand command in commands)
{
  if (command.CanExecute())
        command.Execute();
}
```


Imię
John
Nazwisko
2021-04-04
Customer
FirstName { get; set; }
LastName { get; set; }
DateTime Birthday { get; set; }
Progress { get; set; }
string Location { get; set; }
int EyeColor { get; set; }
bool IsRemoved { get; set; }
Coordinate { lat, lng }
Brush
Visibility = {Collapsed, Hidden }
Button
Visibility = {Hidden }
Visibility = {Collapsed }


Convert()
Button
bool IsRemoved { get; set; }
ConvertBack()


R
G
B
IMultiValueConverter

	01	02	03	04
Wirnik	01 01	01 01		
Łożyska	01 01	01 01		
Stojan				
Prądnica				



141 km/h

ContentControl

.Content

Button

Label

Control

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad

/ /

ItemsControl

.ItemsSource .ItemTemplate

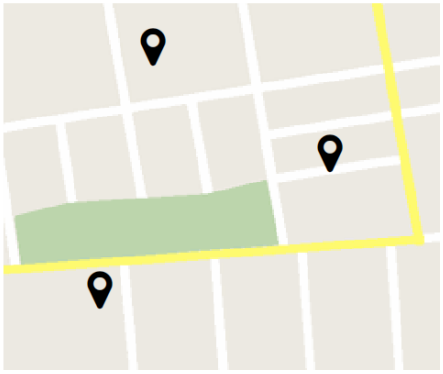
Item One
Item Two
Item Three

ComboBox

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			☐

One Two Three Four

Open CTRL+O
Open Recent ›
● Option One
Option Two
✓ Toggle Item
Disabled Item
Exit CTRL+Q



Panel (LayoutControl)

Grid

StackPanel

HeaderContentControl

Group Name

Window Name

Shape

.Geometry → *Geometry*

Rectangle

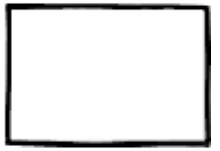
Elipse

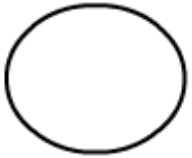
Path

Polygon

Line

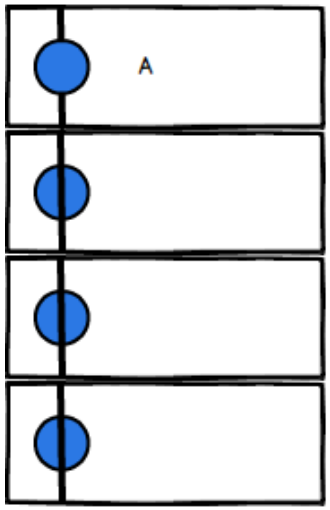
PolyLine

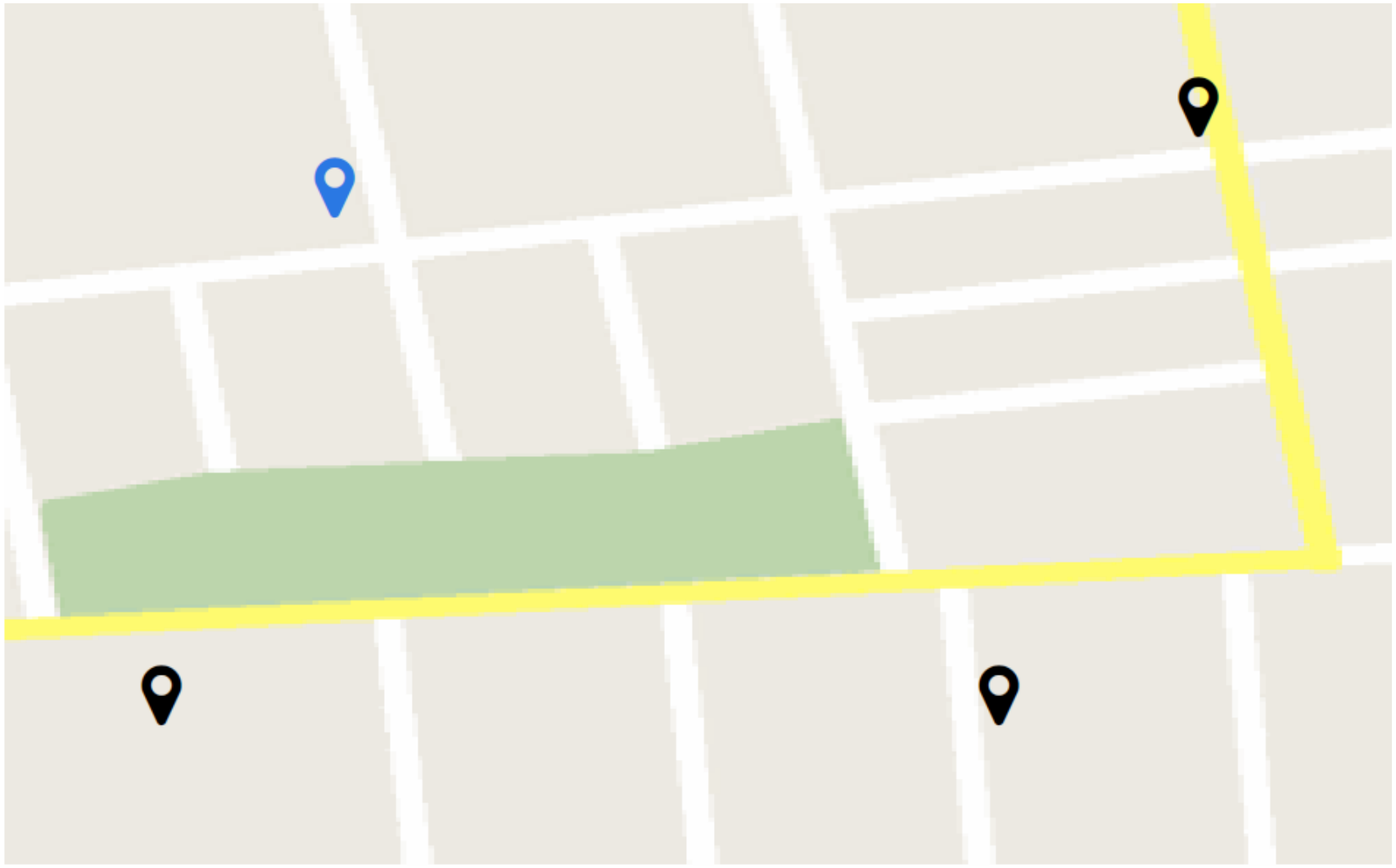
RectangleGeometry 

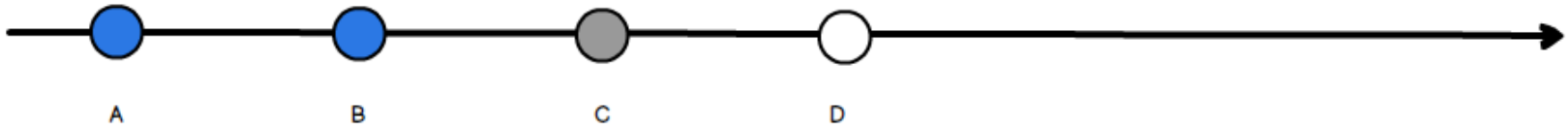
ElipseGeometry 

PathGeometry

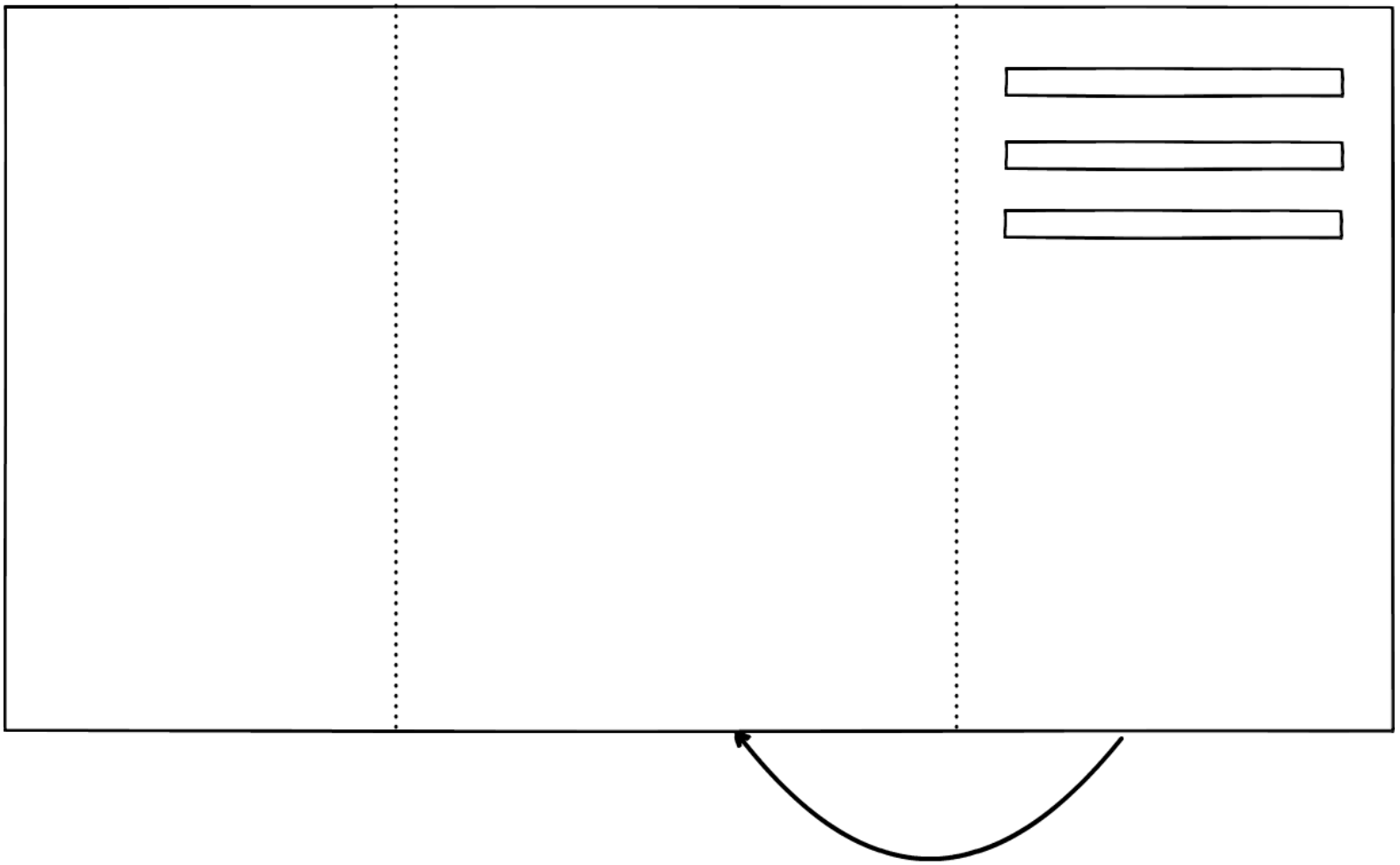
PolygonGeometry

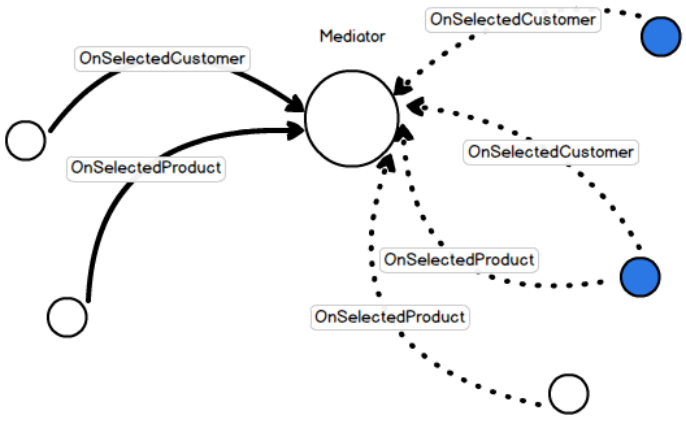

A

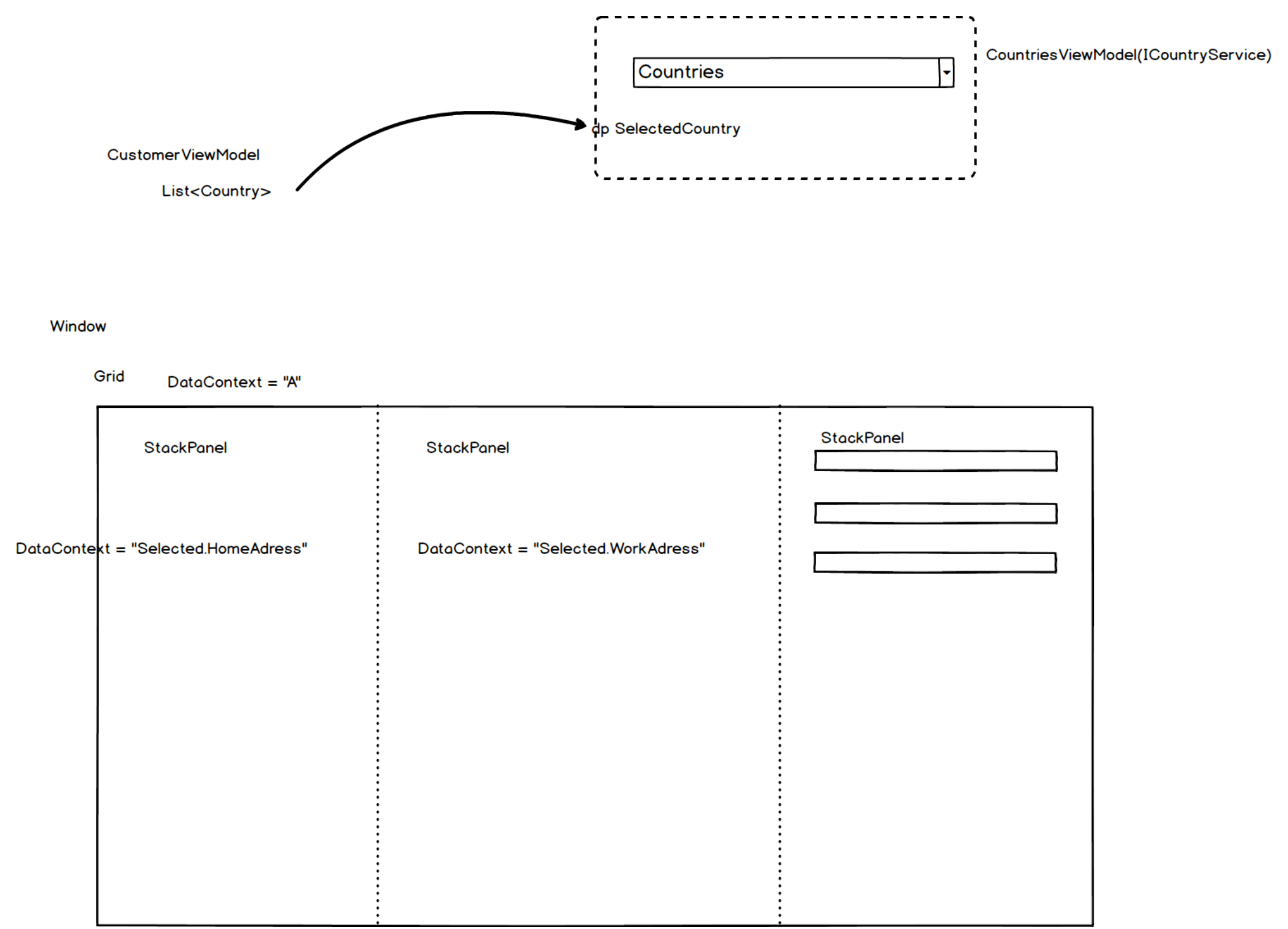



A
B
C
D

EventAggregator



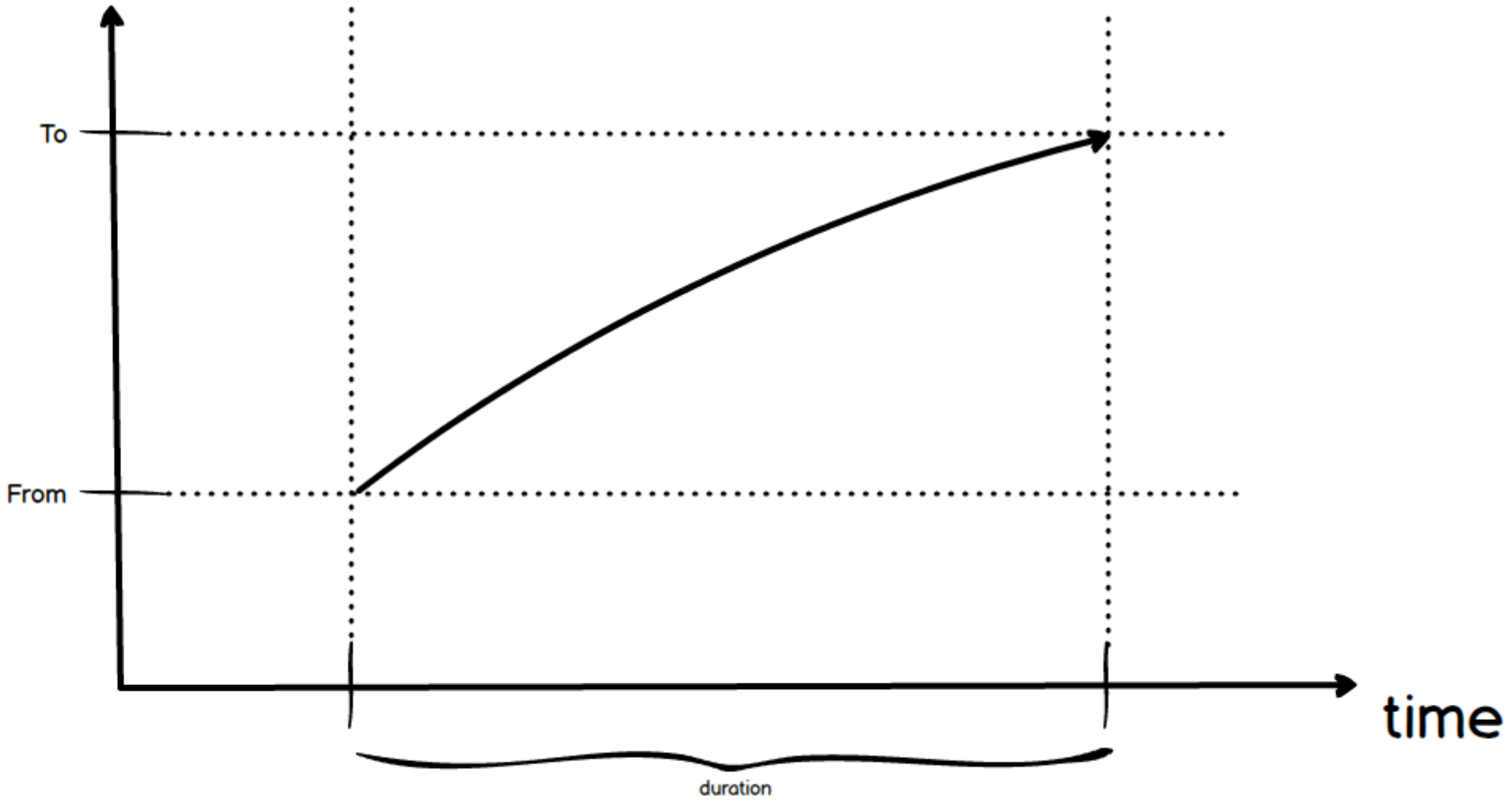


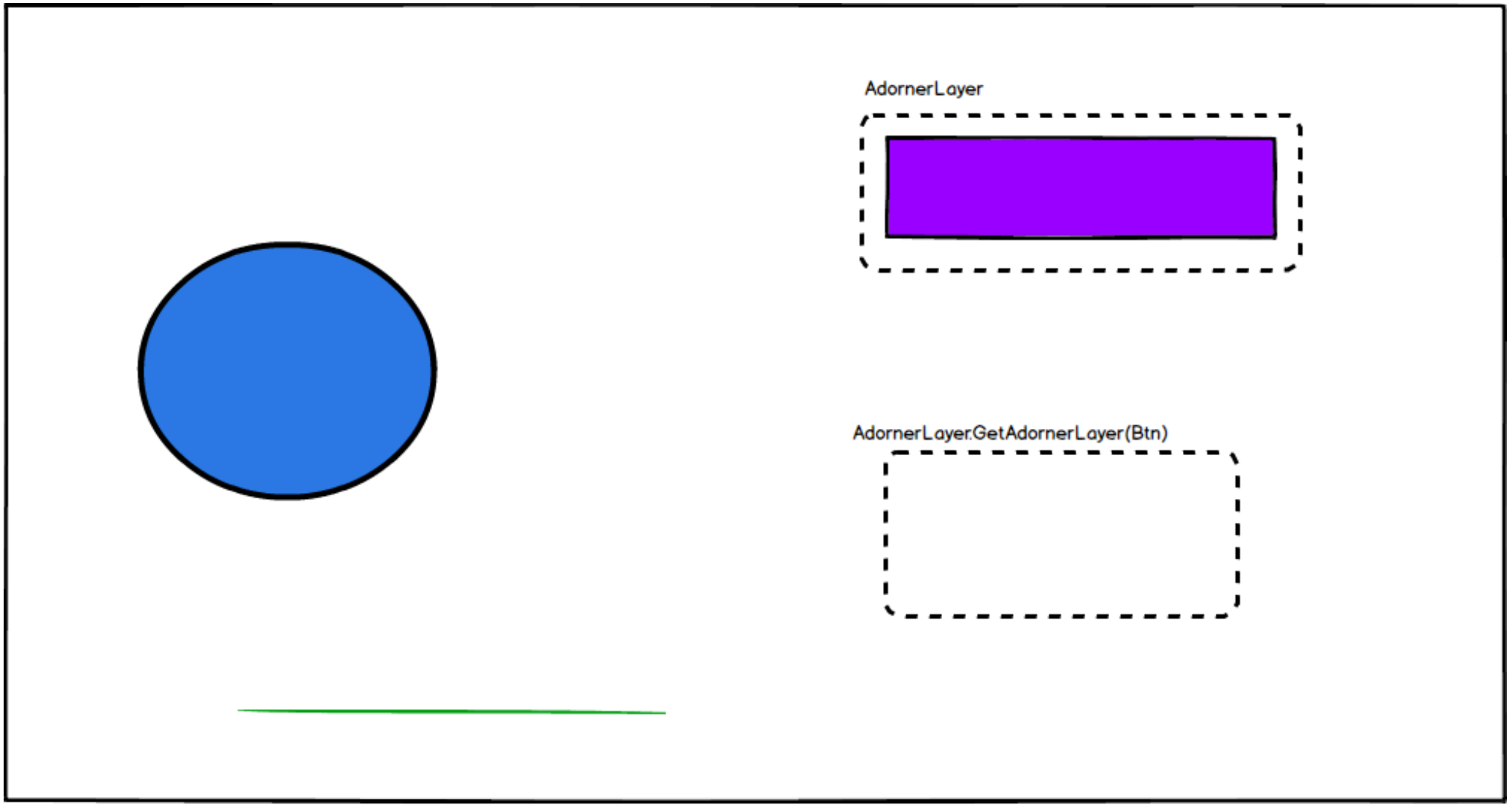

Countries
CountriesViewModel(ICountryService)
dp SelectedCountry
CustomerViewModel
List<Country>
Window
Grid
DataContext = "A"
StackPanel
StackPanel
StackPanel
DataContext = "Selected.HomeAdress"
DataContext = "Selected.WorkAdress"

double, Color, int16

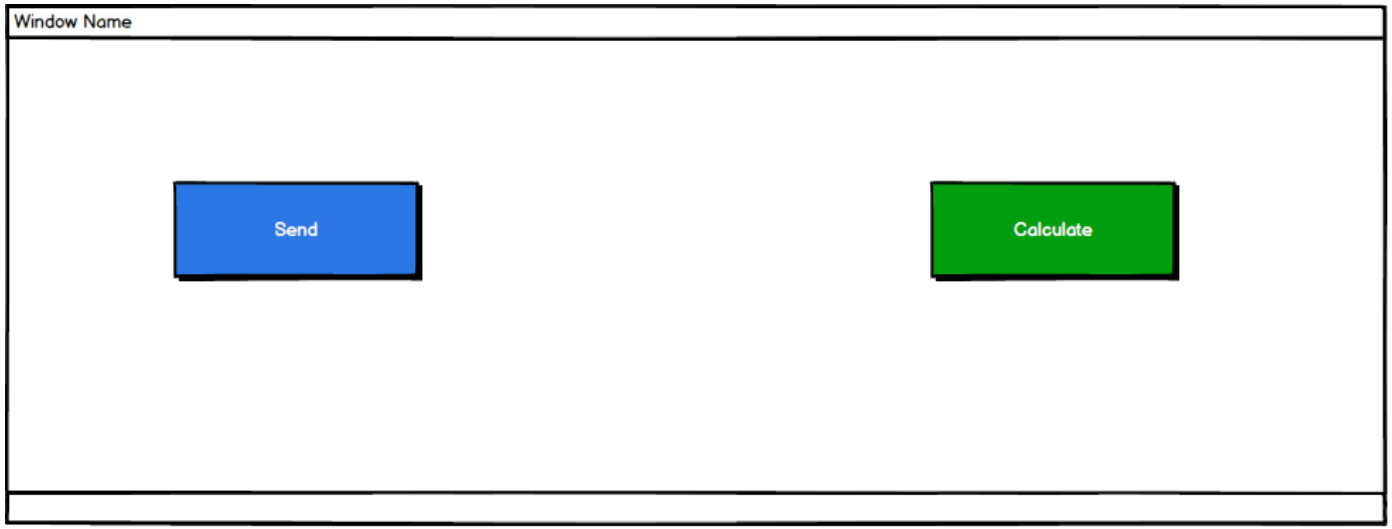
{typ}Animation

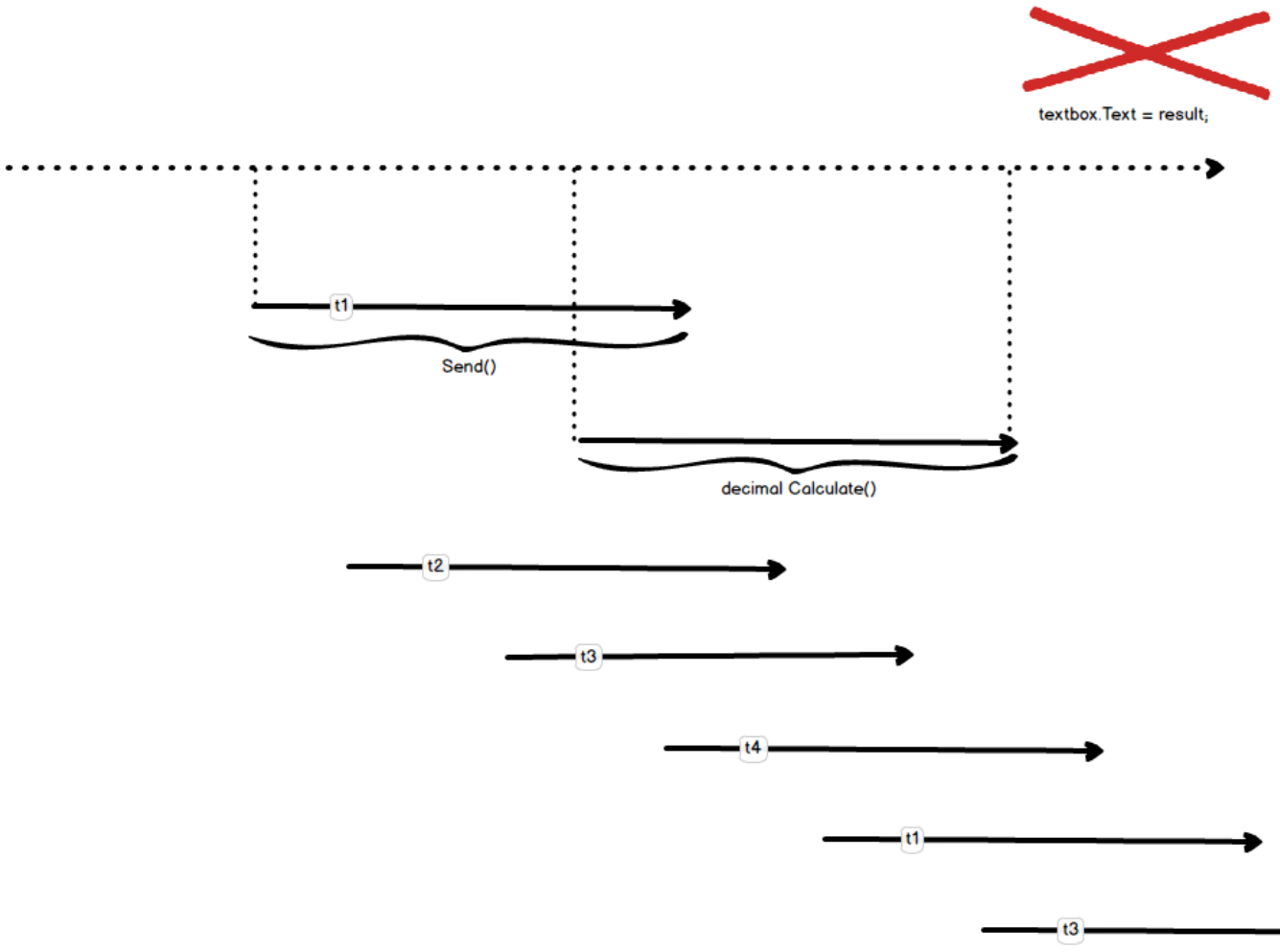
value





http://www.pzielinski.com/?p=1208



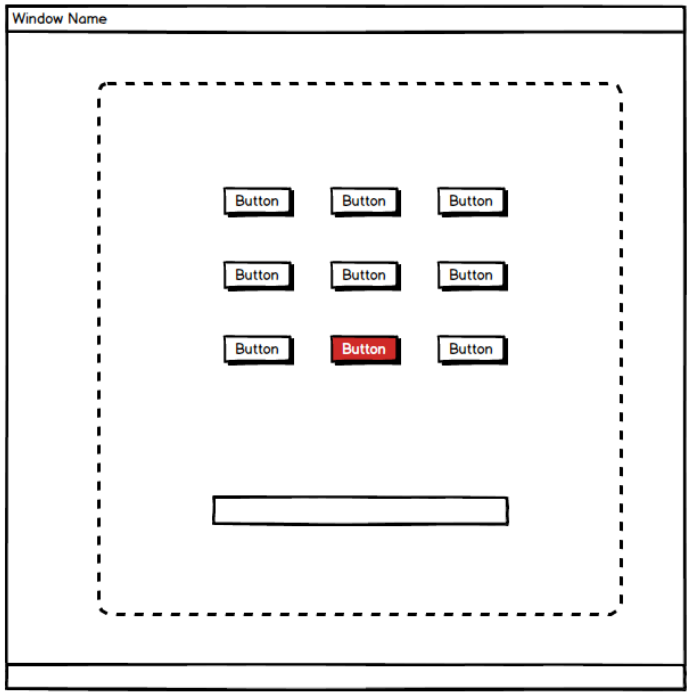
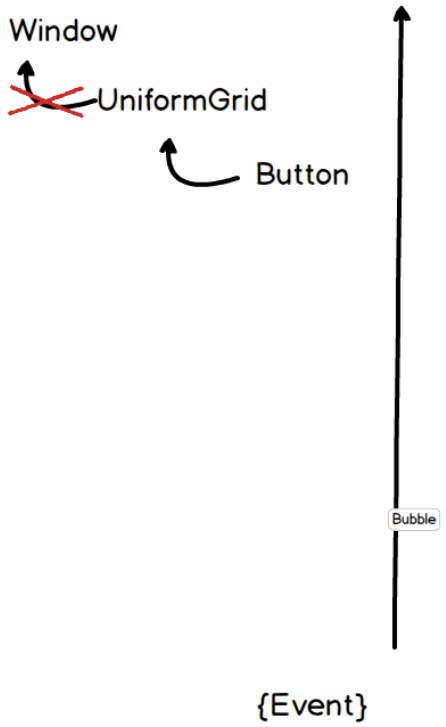
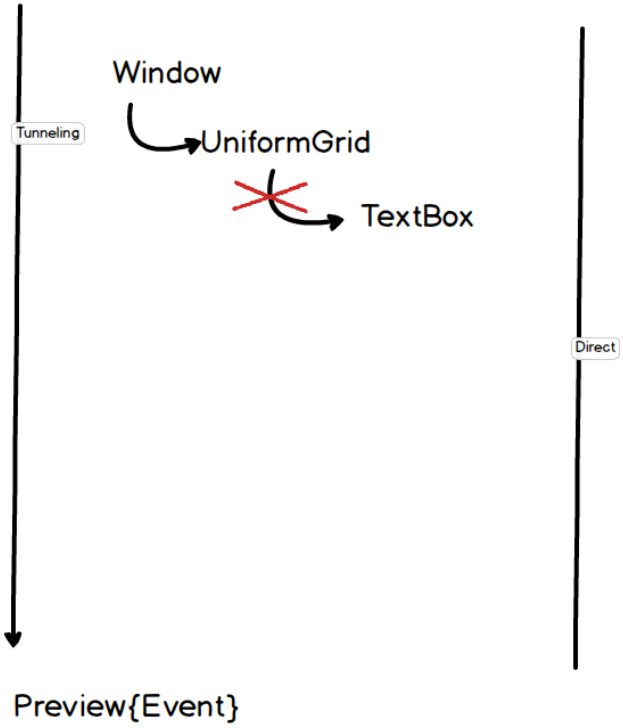


Thread / ThreadPool

Task

Task<TResult>

.ContinueWith()

async - await

Routed Events