



Update Conference
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How to write cloud-native .NET applications using Microsoft Orleans

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Here's Johnny

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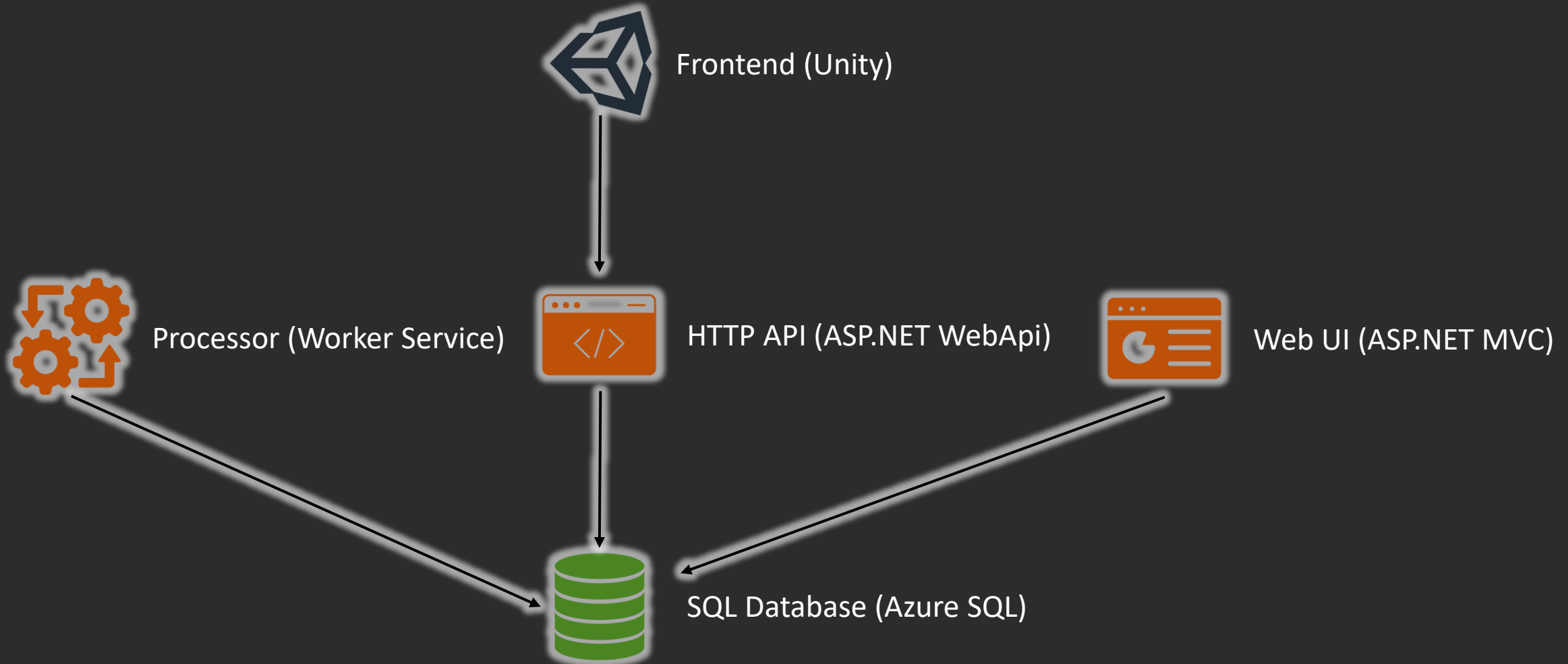
killer (djohnnie)

geert (geert)

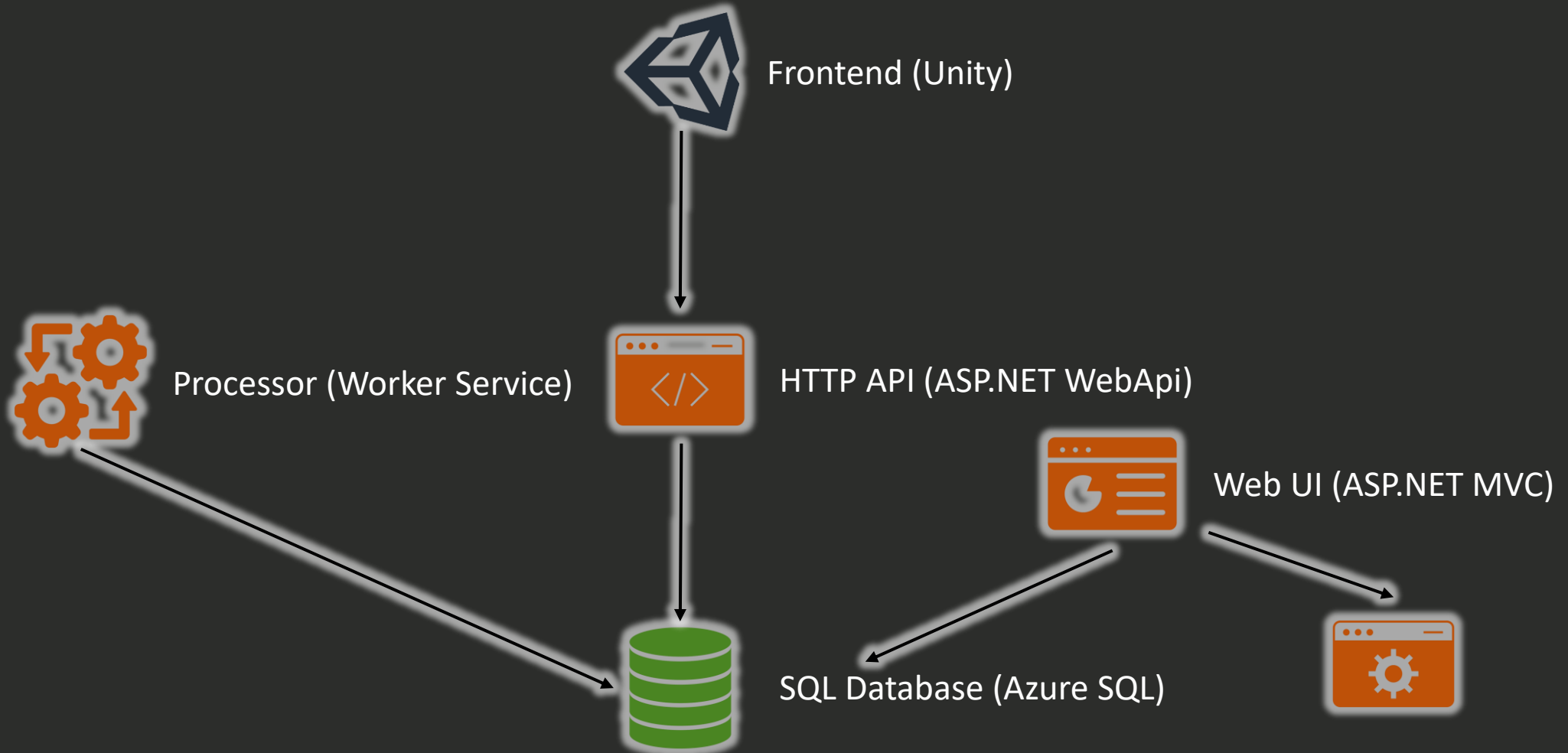
geert (geert)

```
var step = LoadFromMemory<Int32>("STEP");  
if( step % 3 == 0 )  
{  
    TurnLeft();  
}  
else  
{  
    WalkForward();  
}  
step++;  
StoreInMemory<Int32>("STEP", step);
```

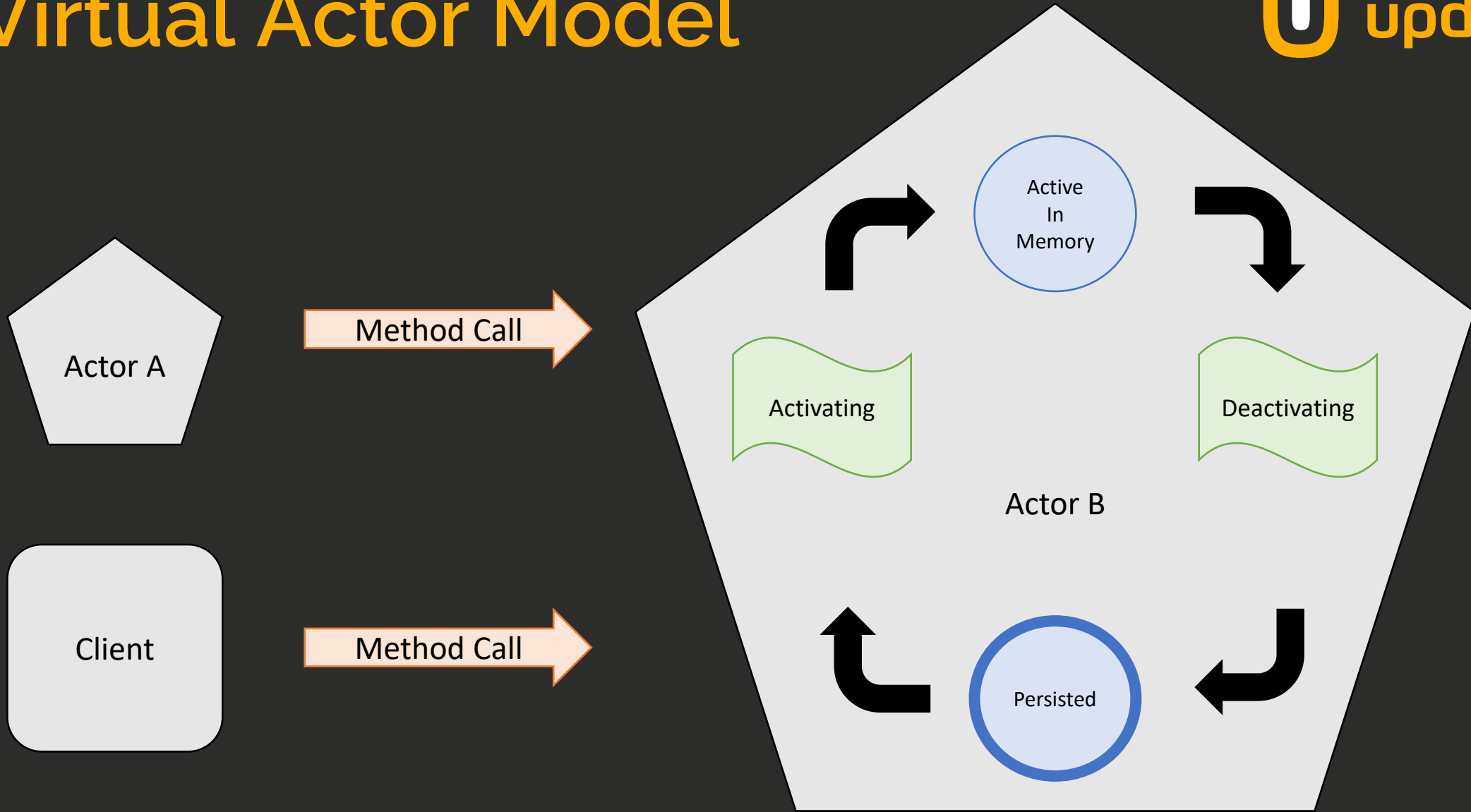
CSharpWars (v1)



CSharpWars (v2)



Virtual Actor Model

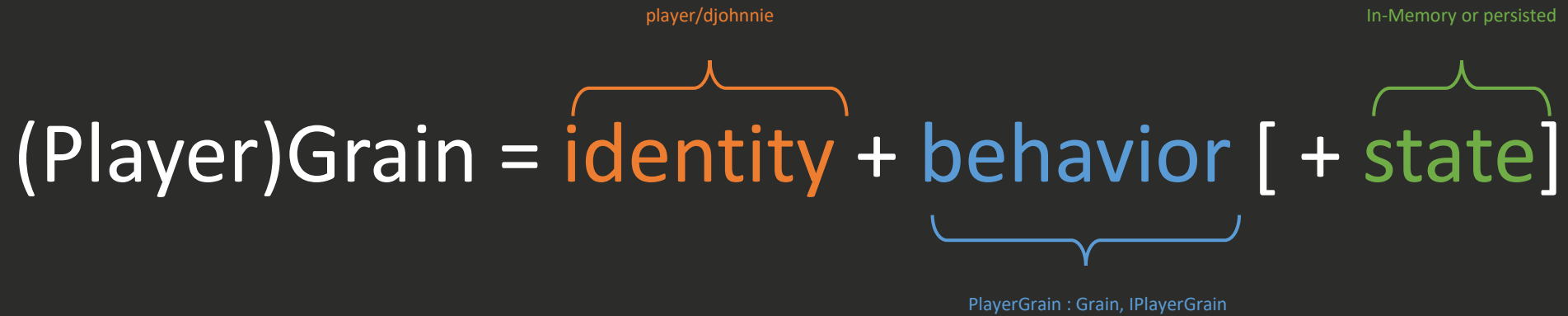


player/djohnnie

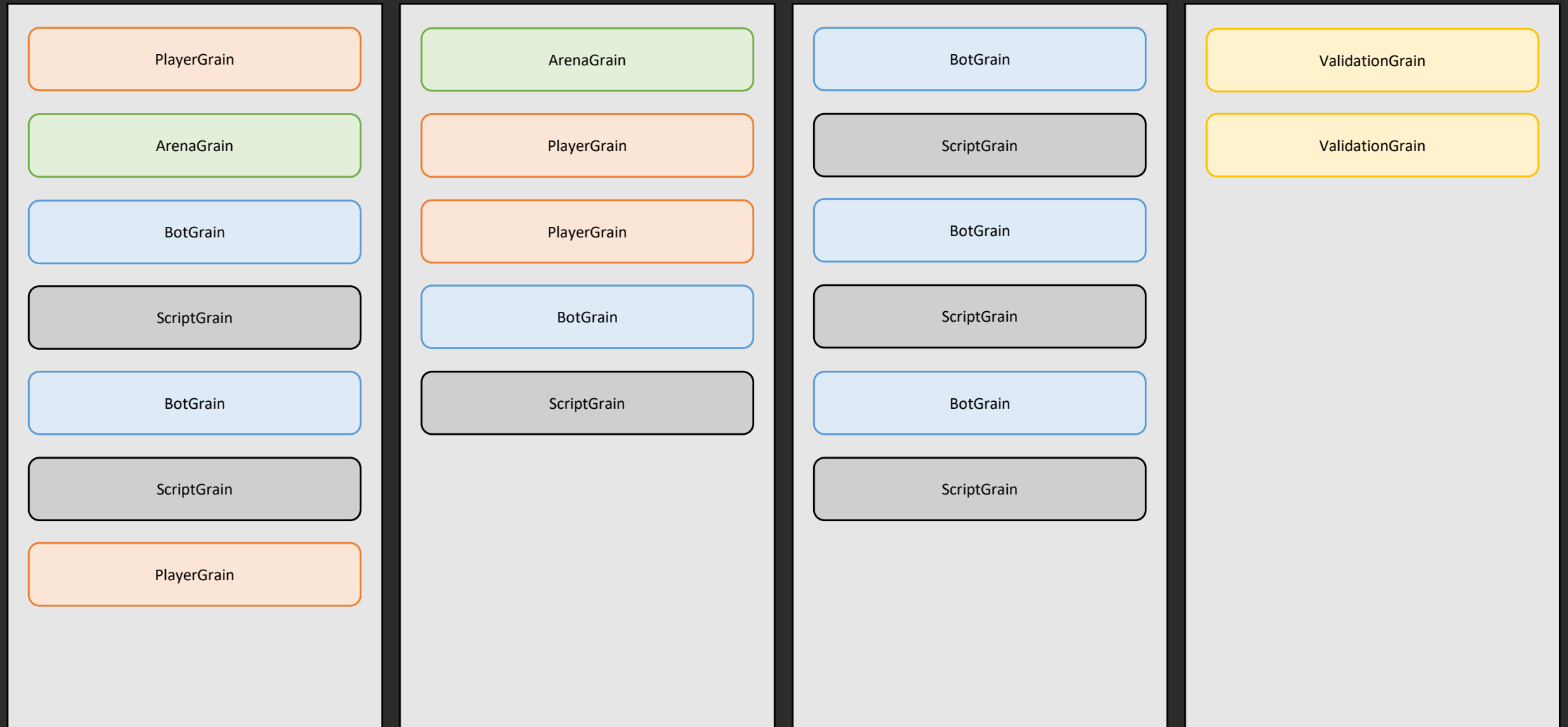
In-Memory or persisted

(Player)Grain = **identity** + **behavior** [+ **state**]

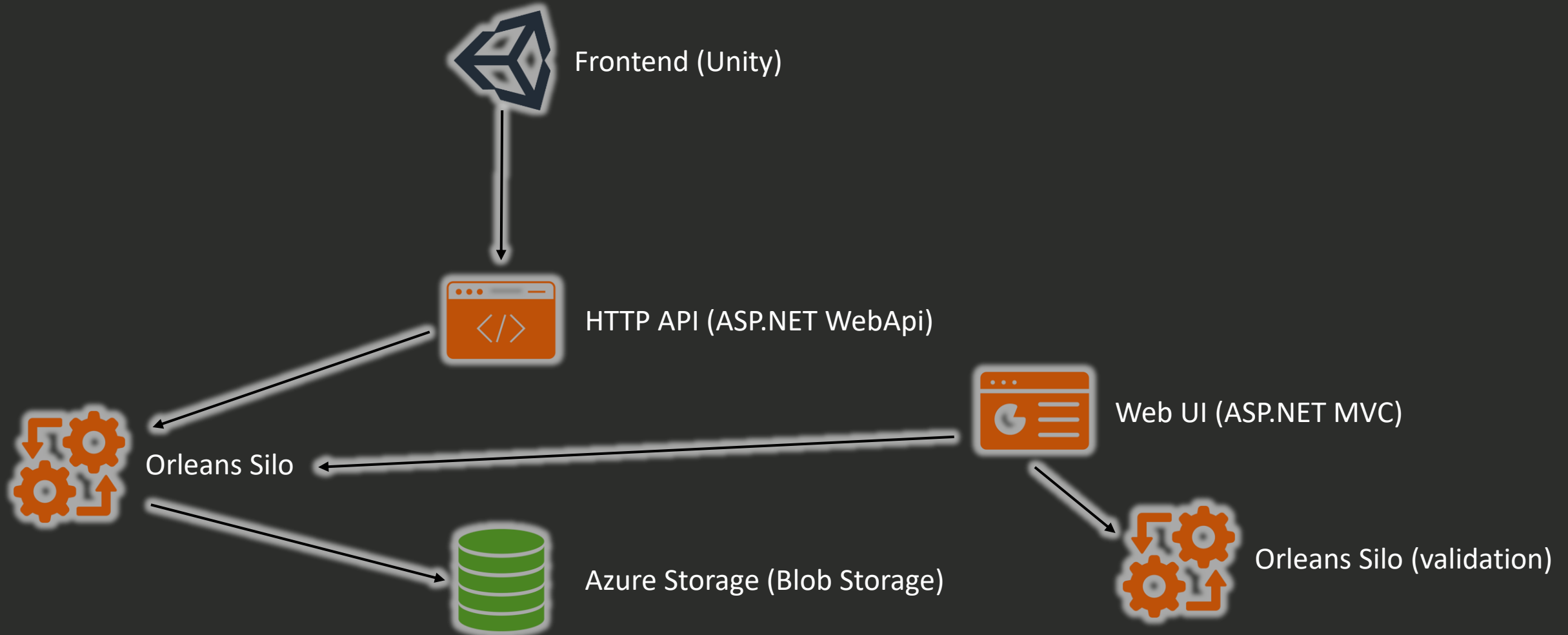
PlayerGrain : Grain, IPlayerGrain

The diagram illustrates the components of a (Player)Grain. The word 'identity' is orange and has an orange bracket above it labeled 'player/djohnnie'. The word 'behavior' is blue and has a blue bracket below it labeled 'PlayerGrain : Grain, IPlayerGrain'. The word 'state' is green and has a green bracket above it labeled 'In-Memory or persisted'. The entire expression is enclosed in brackets with a plus sign before 'state'.

Silos



CSharpWars (v3)



CSharpWars demo





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Thank you!

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