



Introduction to Microsoft Orleans

By Johnny Hooyberghs

Thank you partners!



codit|

involved

Capgemini 

 **Xpirit**

team 4 talent

 **ORDINA**

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Enabling the next generation software developers

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Here's Johnny!



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- Passionate Developer
- Principal Software Consultant/Architect (.NET)
- Microsoft MVP, Developer Technologies
- Operational Manager at Involved



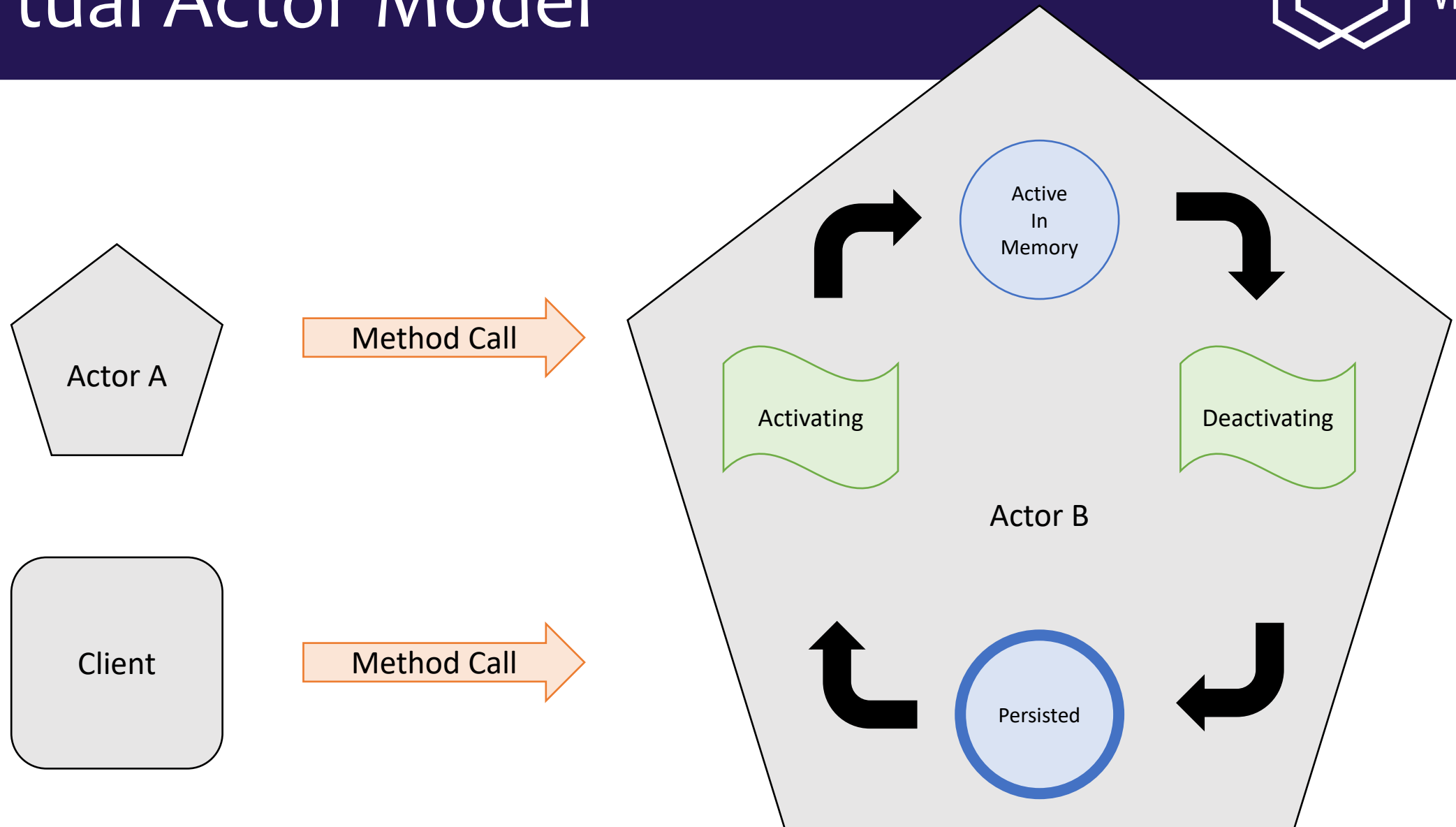
killer (djohnnie)

geert (geert)

geert (geert)

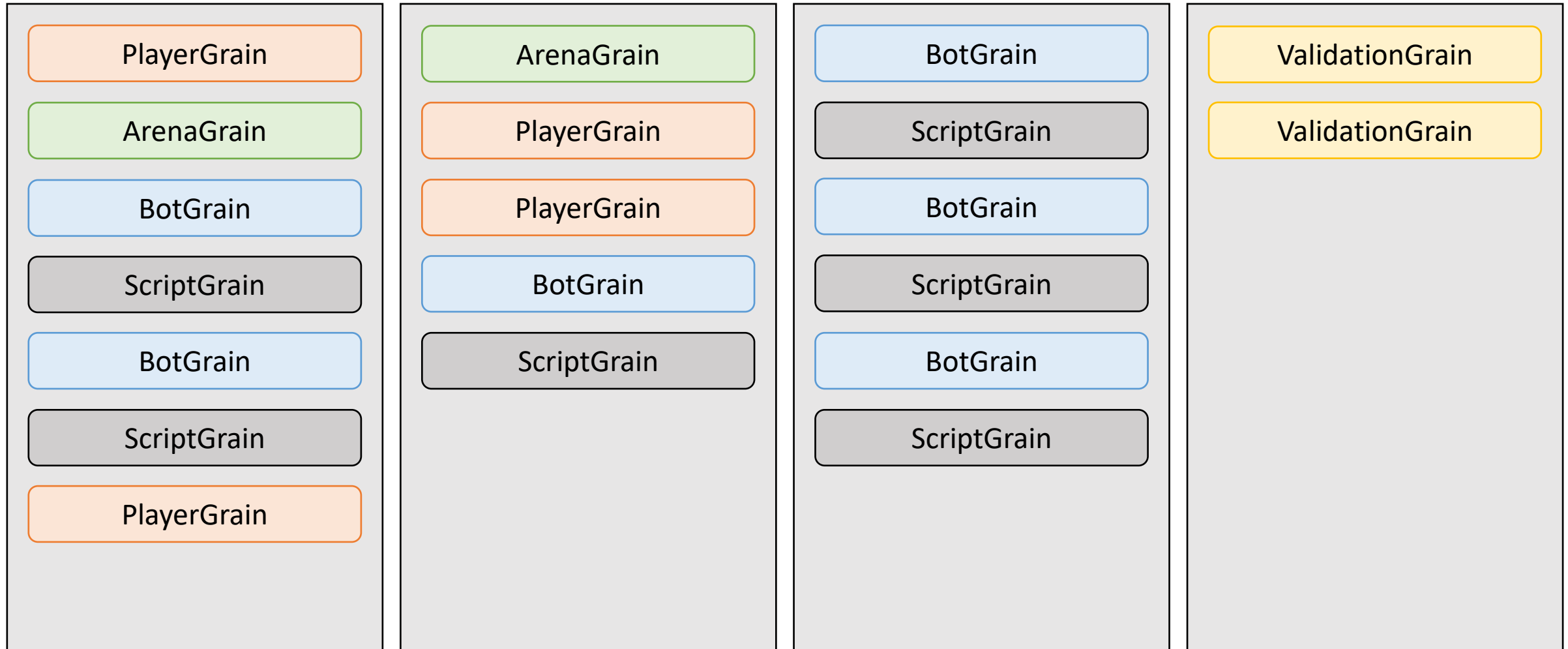
```
var step = LoadFromMemory<Int32>("STEP");  
if( step % 3 == 0 )  
{  
    TurnLeft();  
}  
else  
{  
    WalkForward();  
}  
step++;  
StoreInMemory<Int32>("STEP", step);
```

Virtual Actor Model

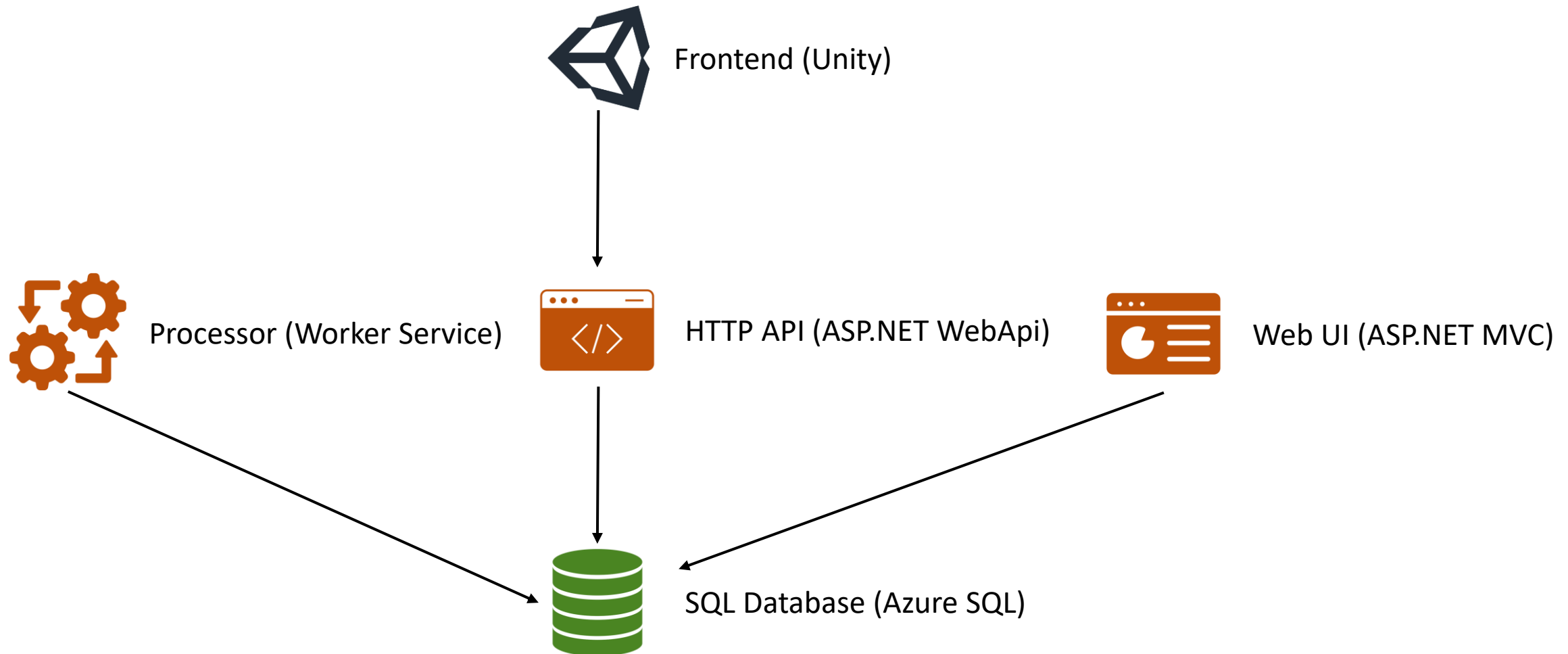


(Player)Grain = ^{player/djohnnie}identity + ^{In-Memory or persisted}behavior [+ state]

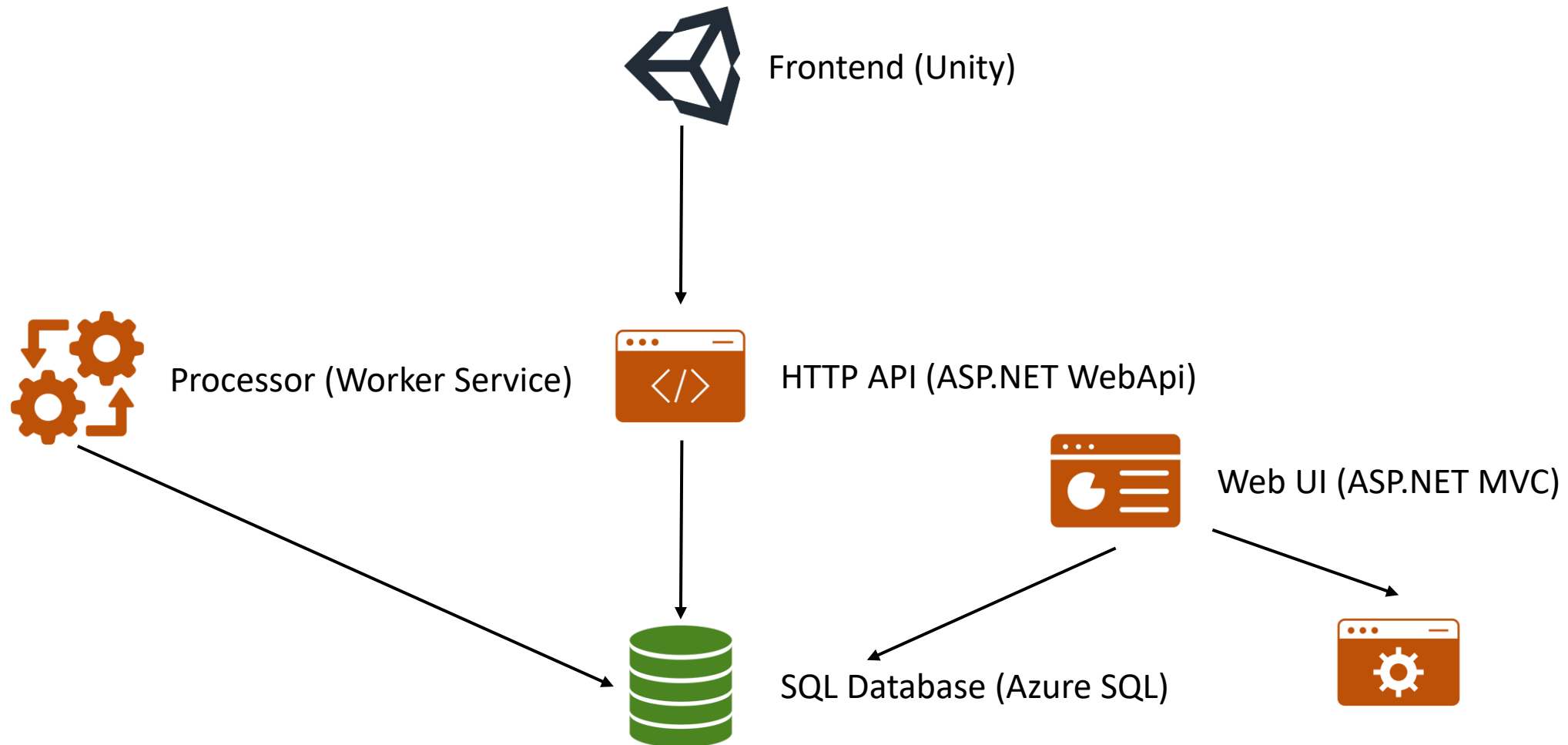
PlayerGrain : Grain, IPlayerGrain



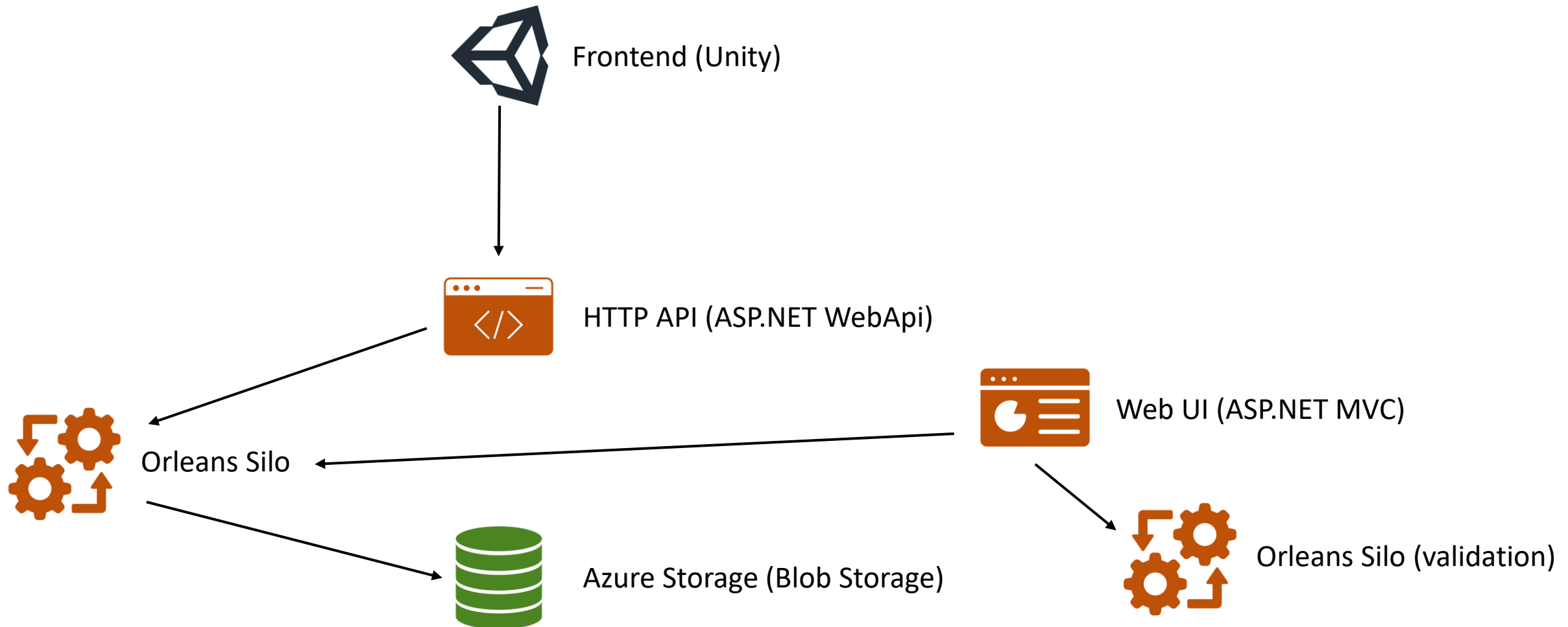
CSharpWars (first version)



CSharpWars (second version)



CSharpWars (Orleans version)



CSharpWars Demo



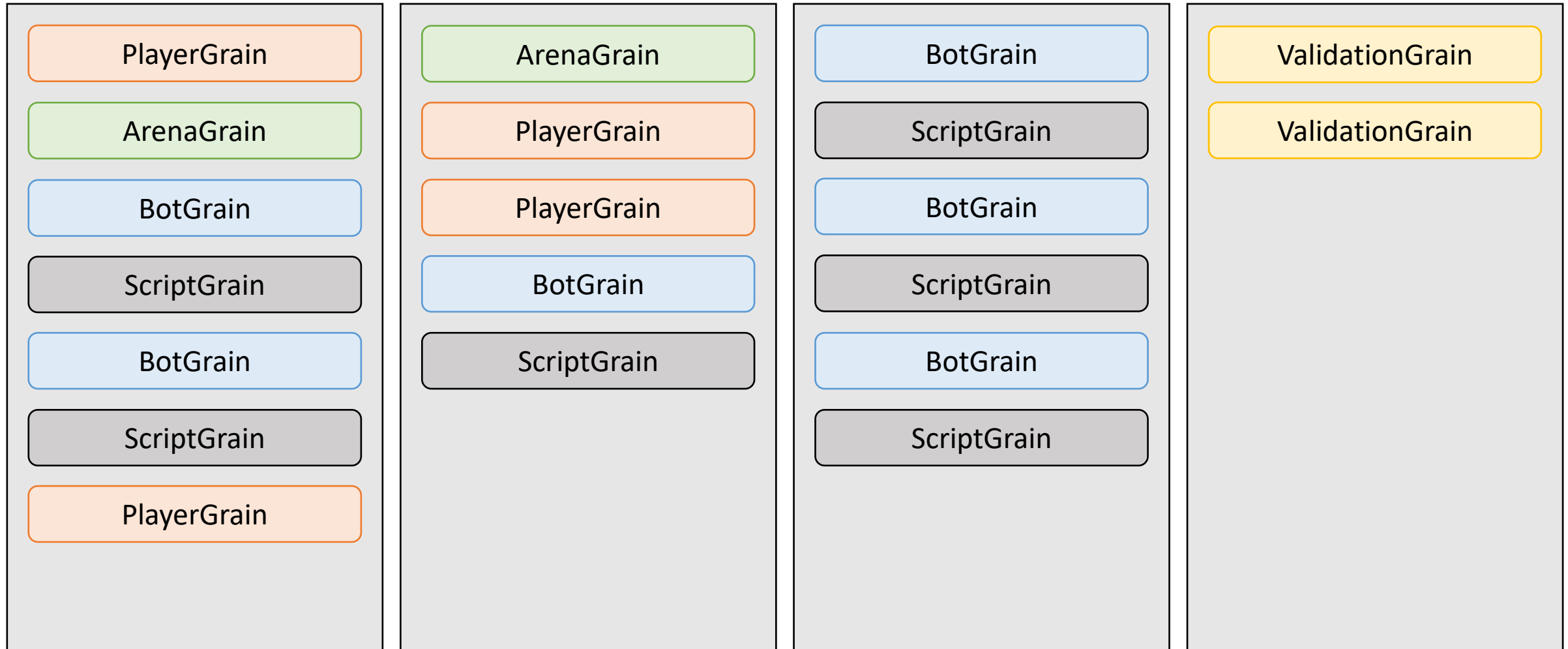
Try it for yourself: <http://web.csharpwars.com>



(Player)Grain = ^{player/djohnnie} **identity** + **behavior** [^{In-Memory or persisted} + **state**]

PlayerGrain : Grain, IPlayerGrain




- Grain Identity
- Persistence & State
- Timers and Reminders
- Placement
- Activation GC



- Hosting
- Clients
- Heterogeneous silos

Thank you!

Questions?

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