



Interfaces in AL

- Tobias Fenster
COSMO CONSULT







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Business-Software for People

INTERFACES IN AI

Tobias Fenster, June 13 2020



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CTO for COSMO CONSULT

**Dual Microsoft MVP for
Business Apps and Azure**

@tobiasfenster



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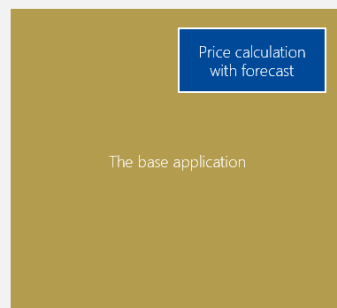
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365
Saturday
Virtual - España

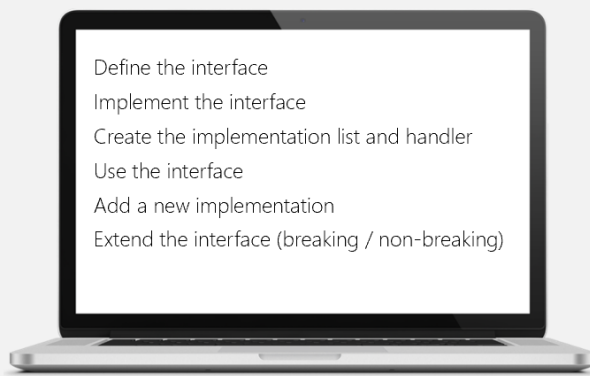
Agenda: Why, how and demo

Why Interfaces? → Componentization!



1. Define a component
 - Describe the purpose (what does it do?), not the implementation (how is it done?)
 - Allow to think more easily and clearly about the architecture of your solution and how different parts (components...) interact
2. Replace a component (runtime / design time)
 - Allow to switch implementation very easily (German tax calculation vs. Danish tax calculation, standard price calculation vs. advanced price calculation)
 - Allow to override standard code by replacing the whole component
3. Extend a component
 - Add functionality

Demo



Define the interface
Implement the interface
Create the implementation list and handler
Use the interface
Add a new implementation
Extend the interface (breaking / non-breaking)

Why Interfaces? → Componentization!



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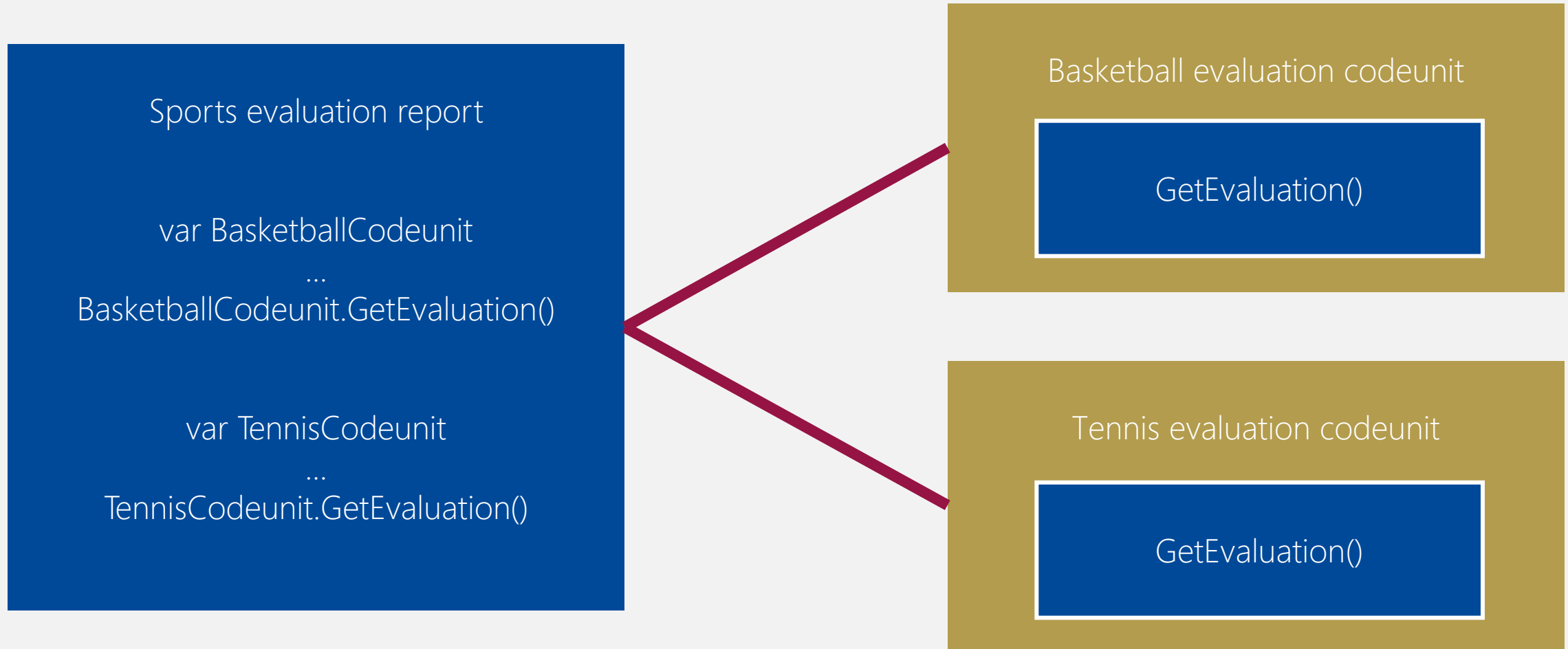
Interfaces - Decoupling



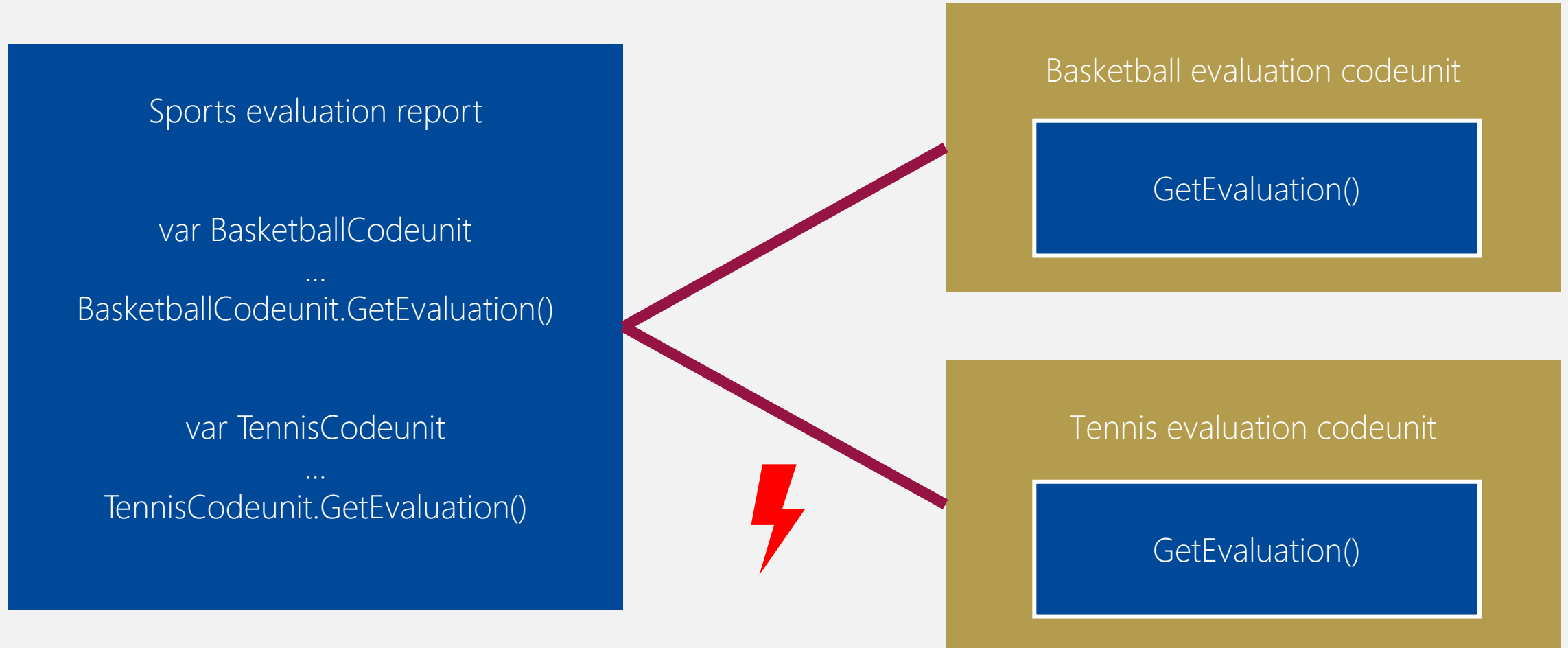
Basketball evaluation codeunit

Tennis evaluation codeunit

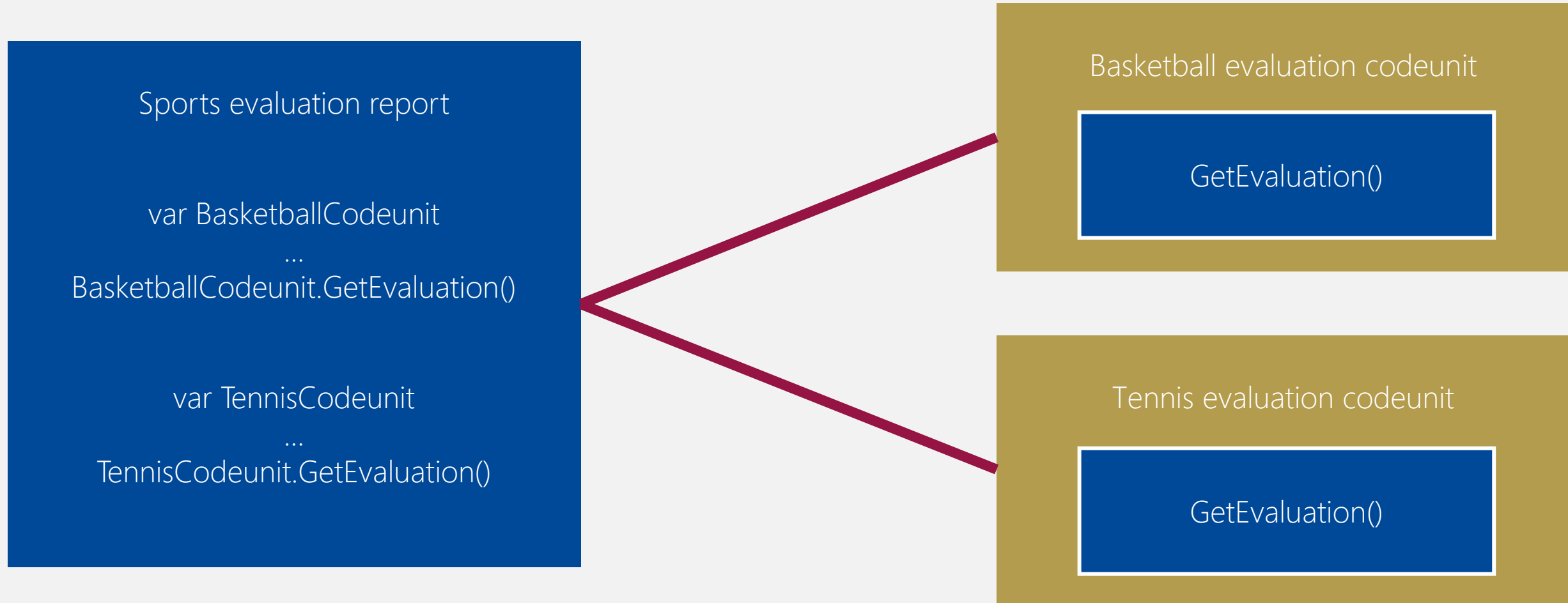
Interfaces - Decoupling



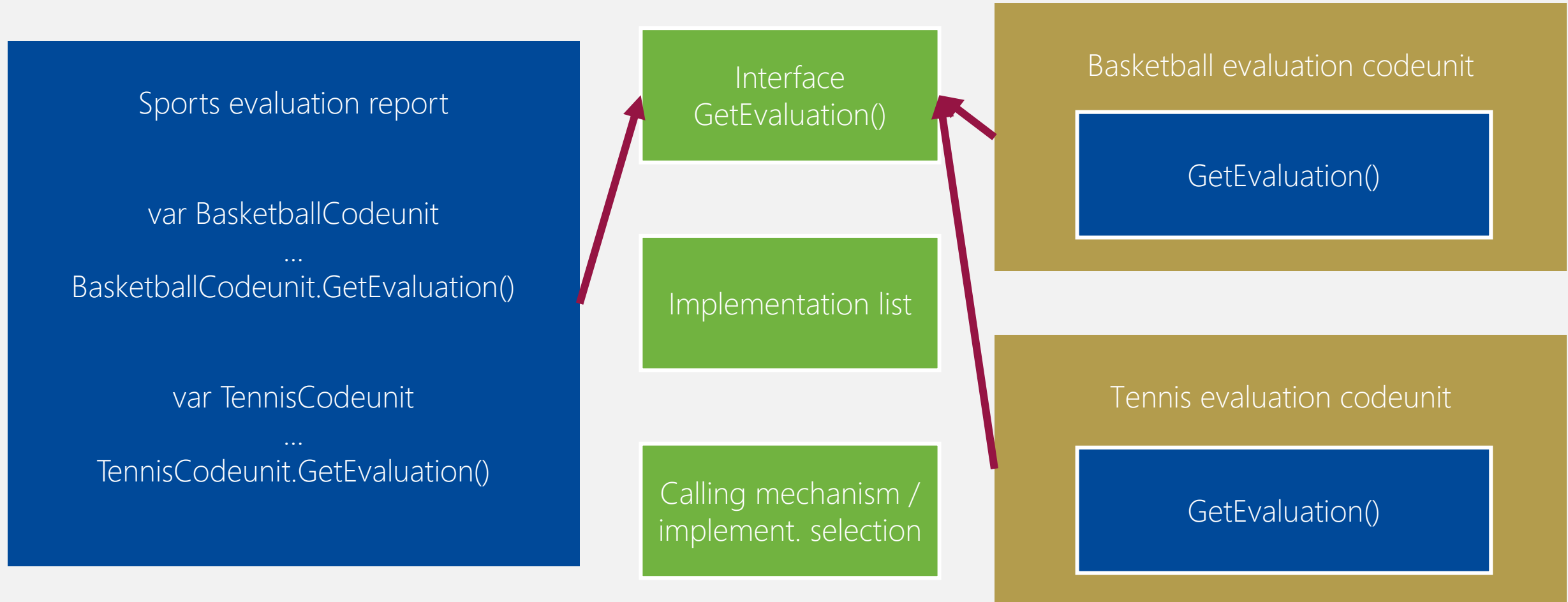
Interfaces - Decoupling



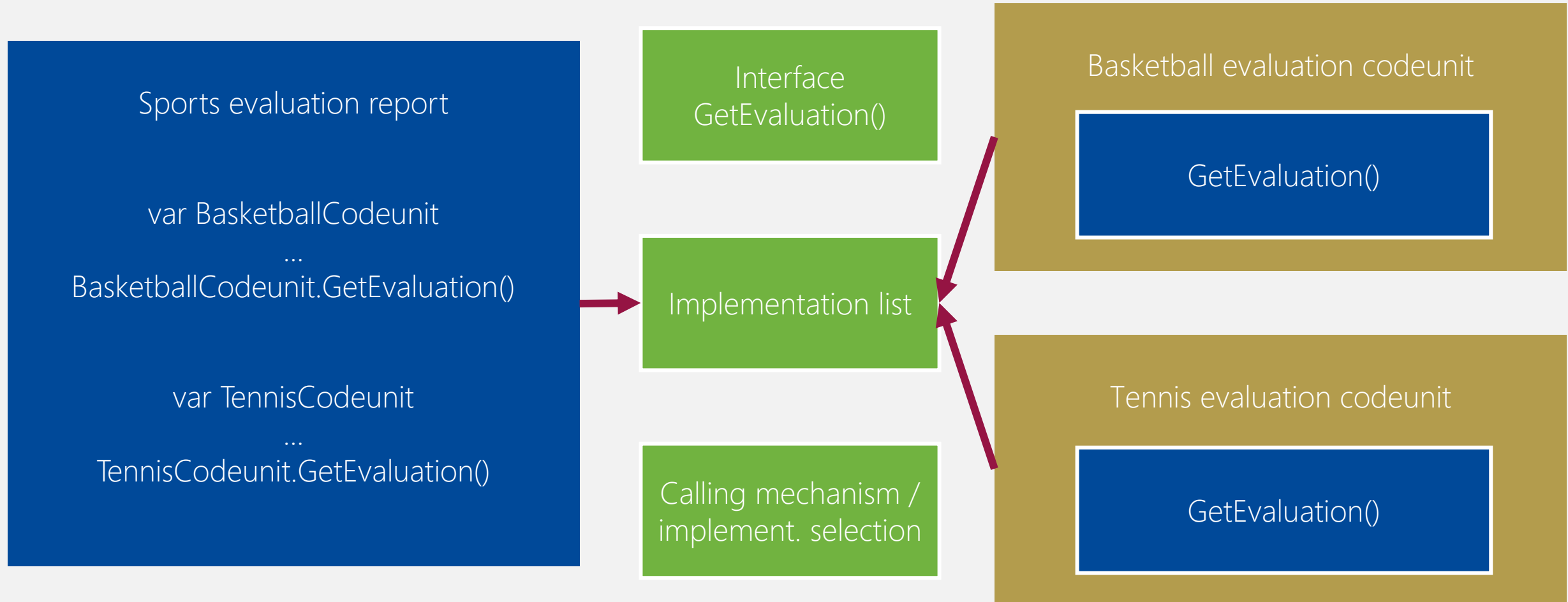
Interfaces - Decoupling



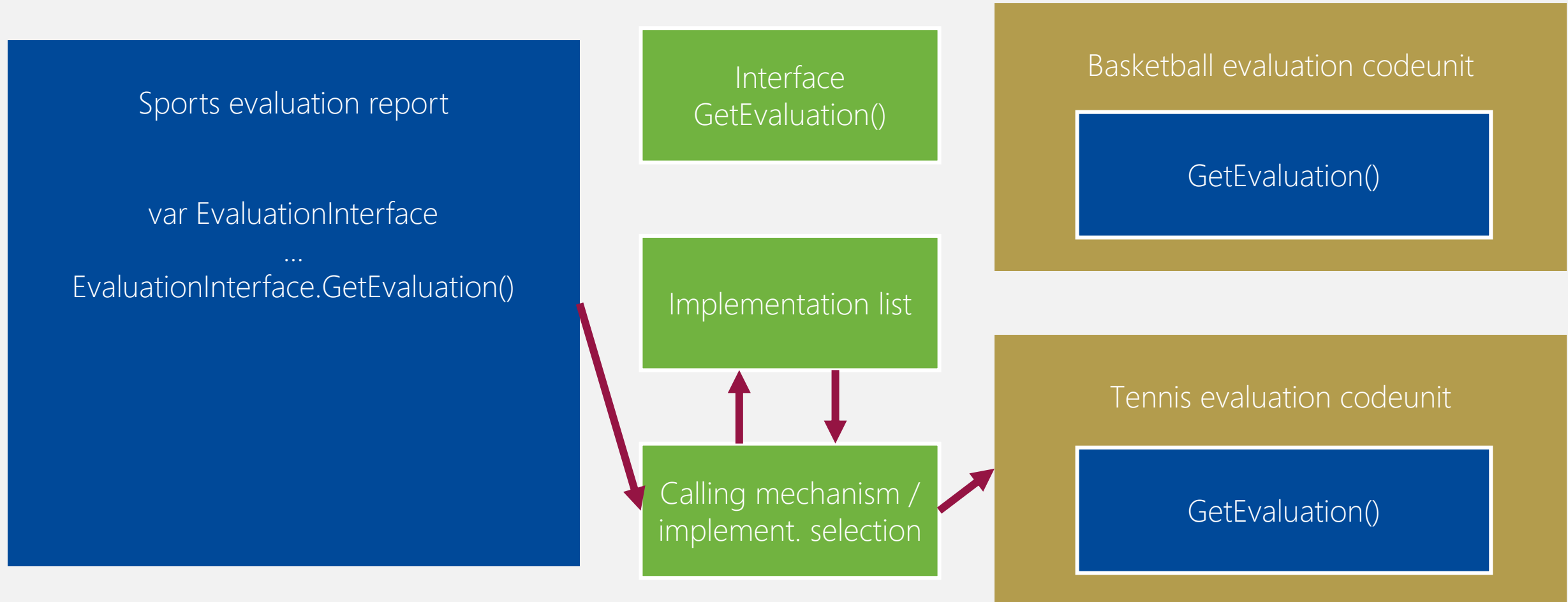
Interfaces - Decoupling



Interfaces - Decoupling



Interfaces - Decoupling



Why decoupling? Removing

Sports evaluation report

```
var EvaluationInterface
```

...

```
EvaluationInterface.GetEvaluation()
```

Interface
GetEvaluation()

Implementation list

Calling mechanism /
implement. selection

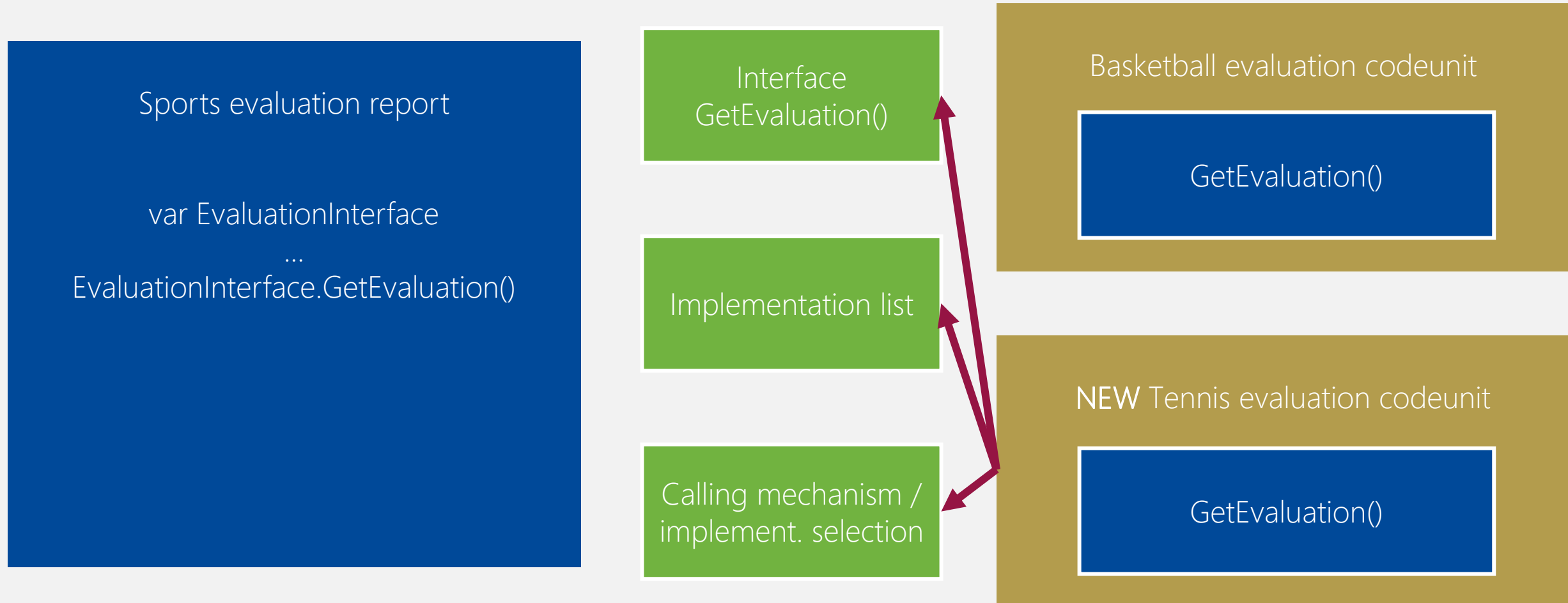
Basketball evaluation codeunit

GetEvaluation()

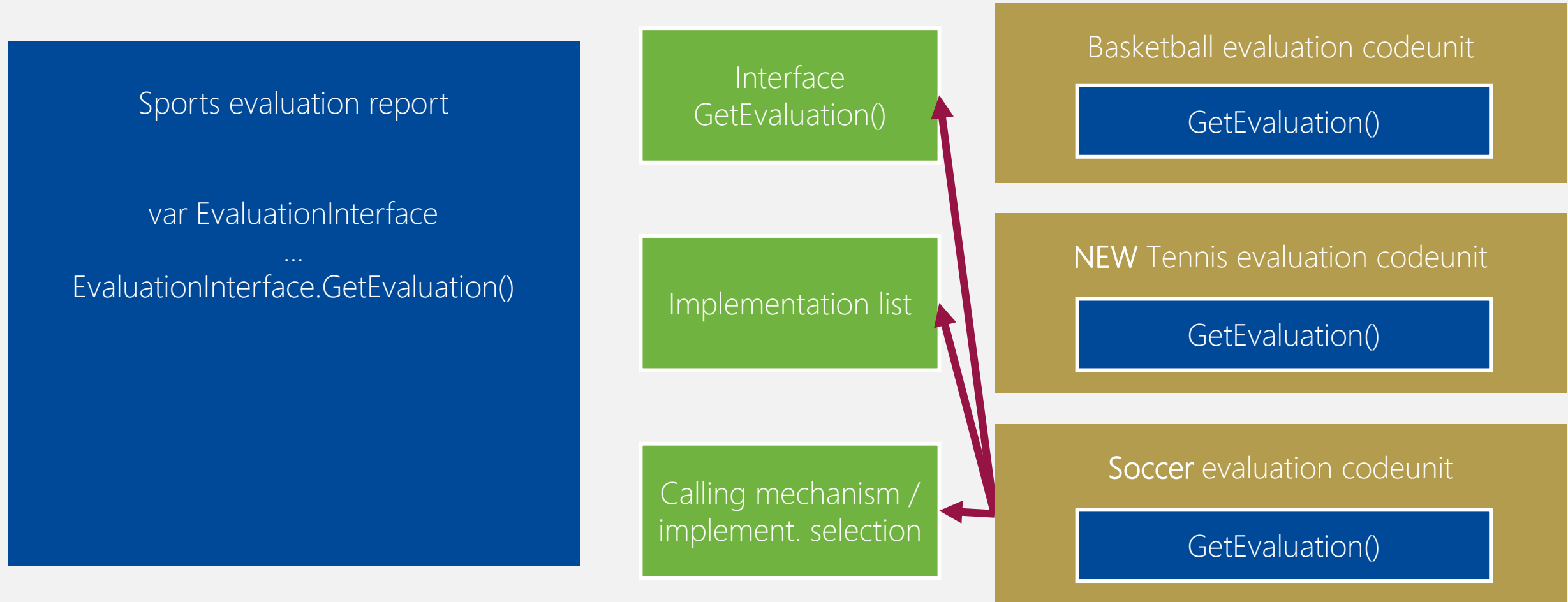
Tennis evaluation codeunit

GetEvaluation()

Why decoupling? Replacing



Why decoupling? Adding



Why decoupling? Extending (breaking)

Sports evaluation report

```
var EvaluationInterface
```

...

```
EvaluationInterface.GetEvaluation()
```

Interface
GetEvaluation()

XY evaluation codeunit

GetEvaluation()

Why decoupling? Extending (breaking)

Sports evaluation report

```
var EvaluationInterface
```

...

```
EvaluationInterface.GetEvaluation()  
EvaluationInterface.GetGraph()
```

Interface
GetEvaluation()
GetGraph()

XY evaluation codeunit

GetEvaluation()

GetGraph()

Why decoupling? Extending (non-breaking)

Sports evaluation report

```
var EvaluationInterface
```

...

```
EvaluationInterface.GetEvaluation()
```

Interface
GetEvaluation()

XY evaluation codeunit

GetEvaluation()

Why decoupling? Extending (non-breaking)

Sports evaluation report

```
var EvaluationInterface
```

...

```
EvaluationInterface.GetEvaluation()
```

```
var GraphInterface
```

...

```
GraphInterface.GetEvaluation()
```

Interface
GetEvaluation()

Interface
GetGraph()

XY evaluation codeunit

GetEvaluation()

GetGraph()

Demo

Define the interface

Implement the interface

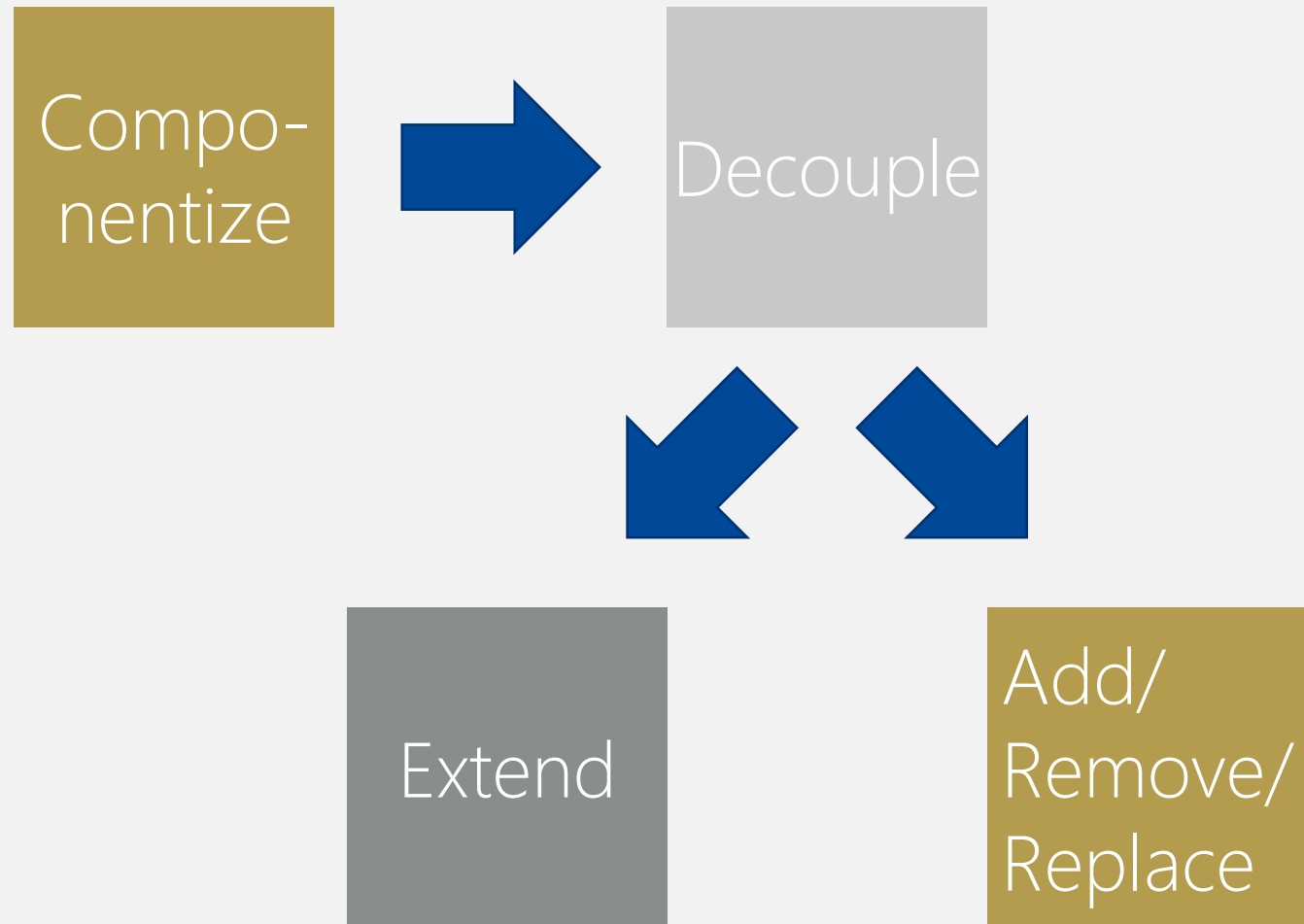
Create the implementation list and handler

Use the interface

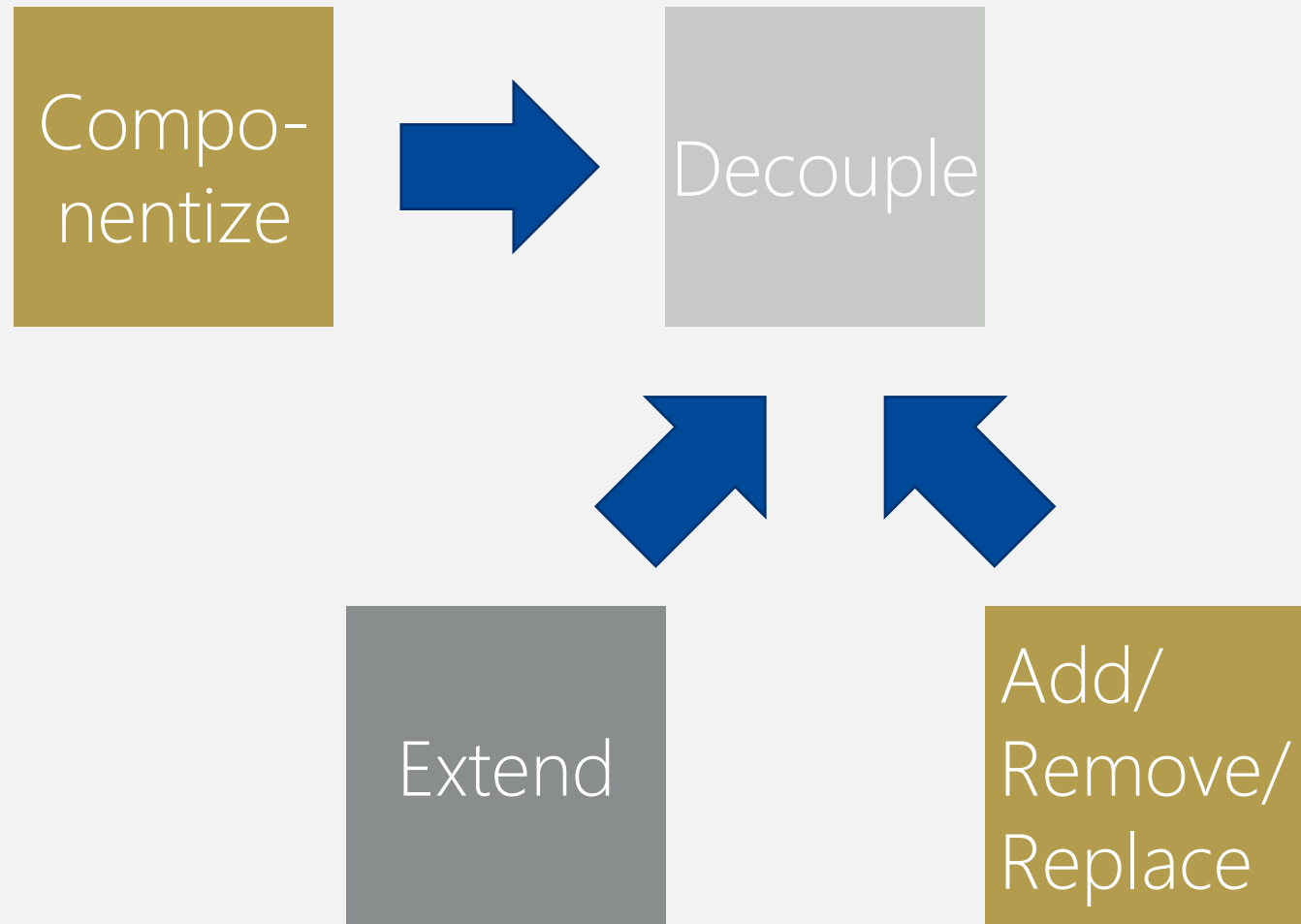
Add a new implementation

Extend the interface (breaking / non-breaking)

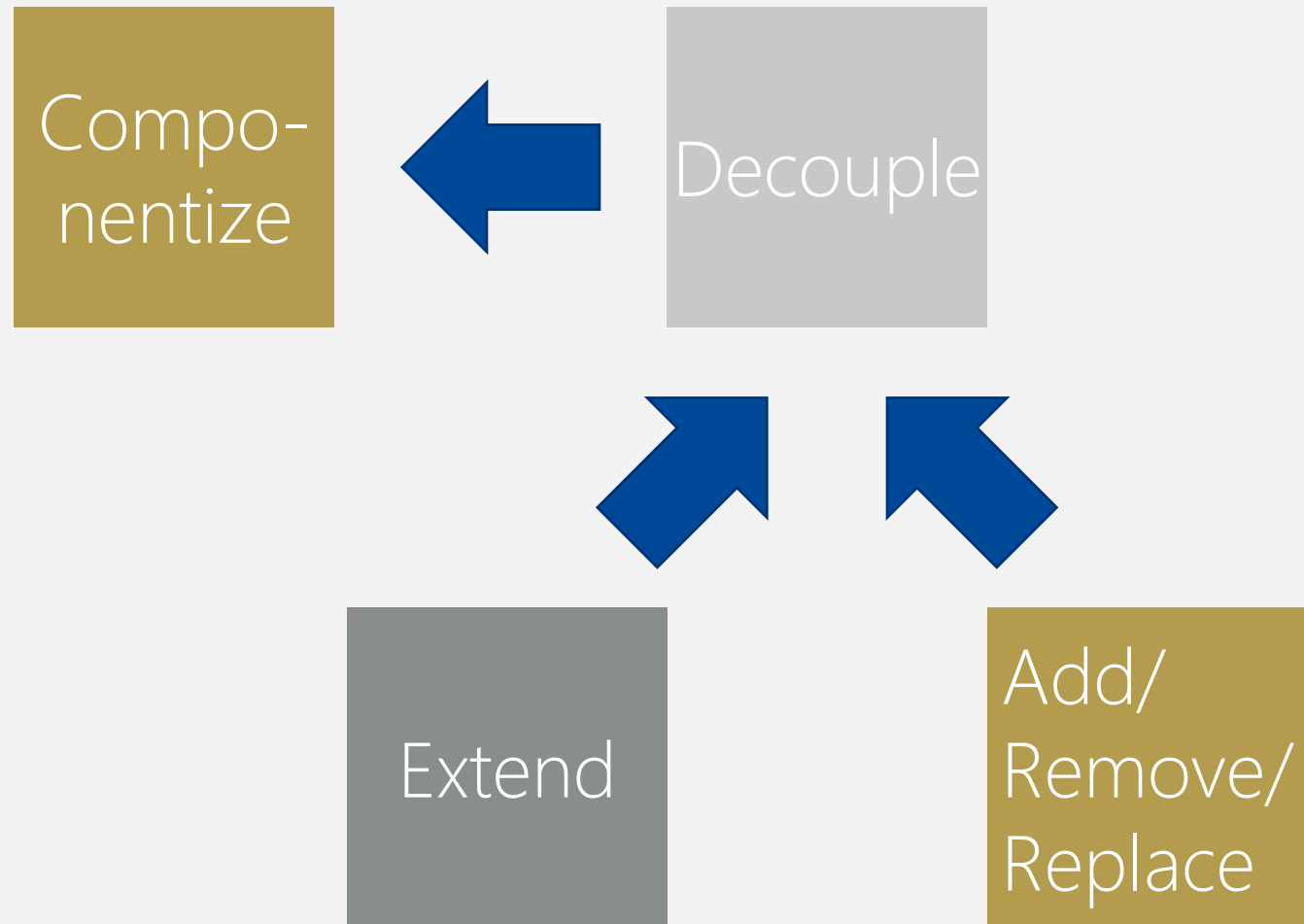
Recap: Why



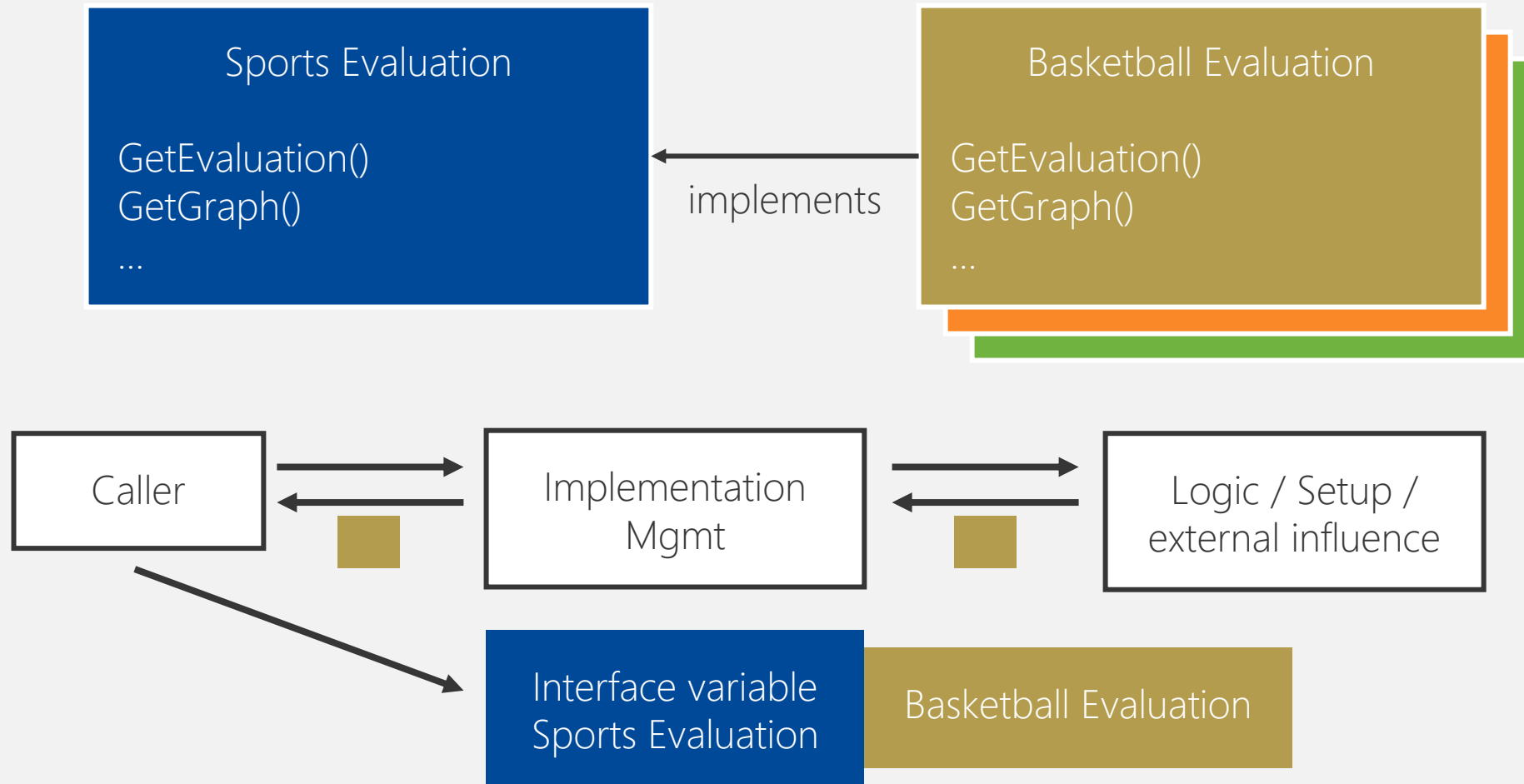
Recap: Why



Recap: Why



Recap: How



More information

Session on interfaces at the 2020 wave 1 virtual event
for BC

aka.ms/virtual/businesscentral/2020rw1



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THANK YOU
FOR YOUR TIME



¡Muchas gracias!

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