Blazor

Blazing Into the Future of Web Development

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https://github.com/rolandguijt

The Workshop

Consists of theory with labs in two parts

Lab files including slides in GitHub repository

Labs use .NET 6

Intermediate level

Breaks

Questions

The Plan

What is Blazor?

The basics of component building

More advanced component capabilities

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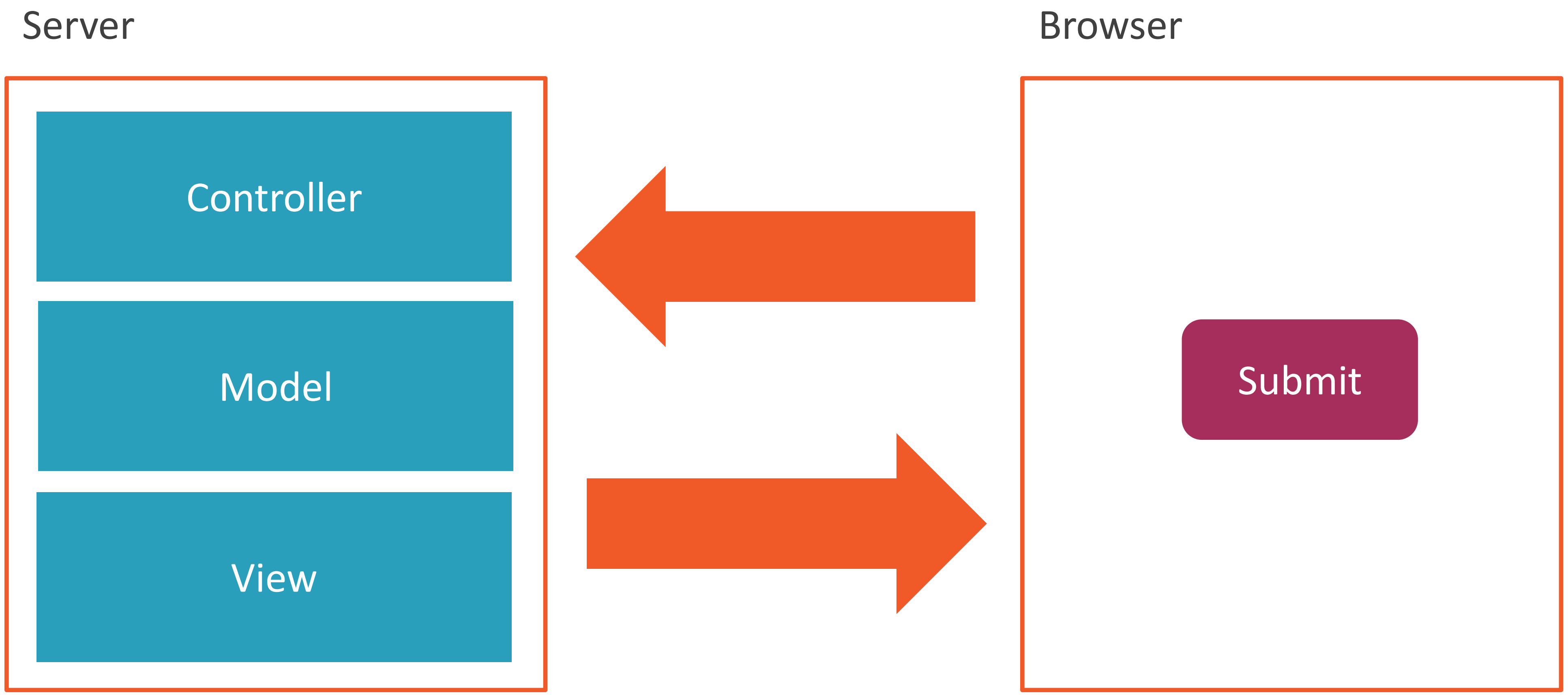
MVC



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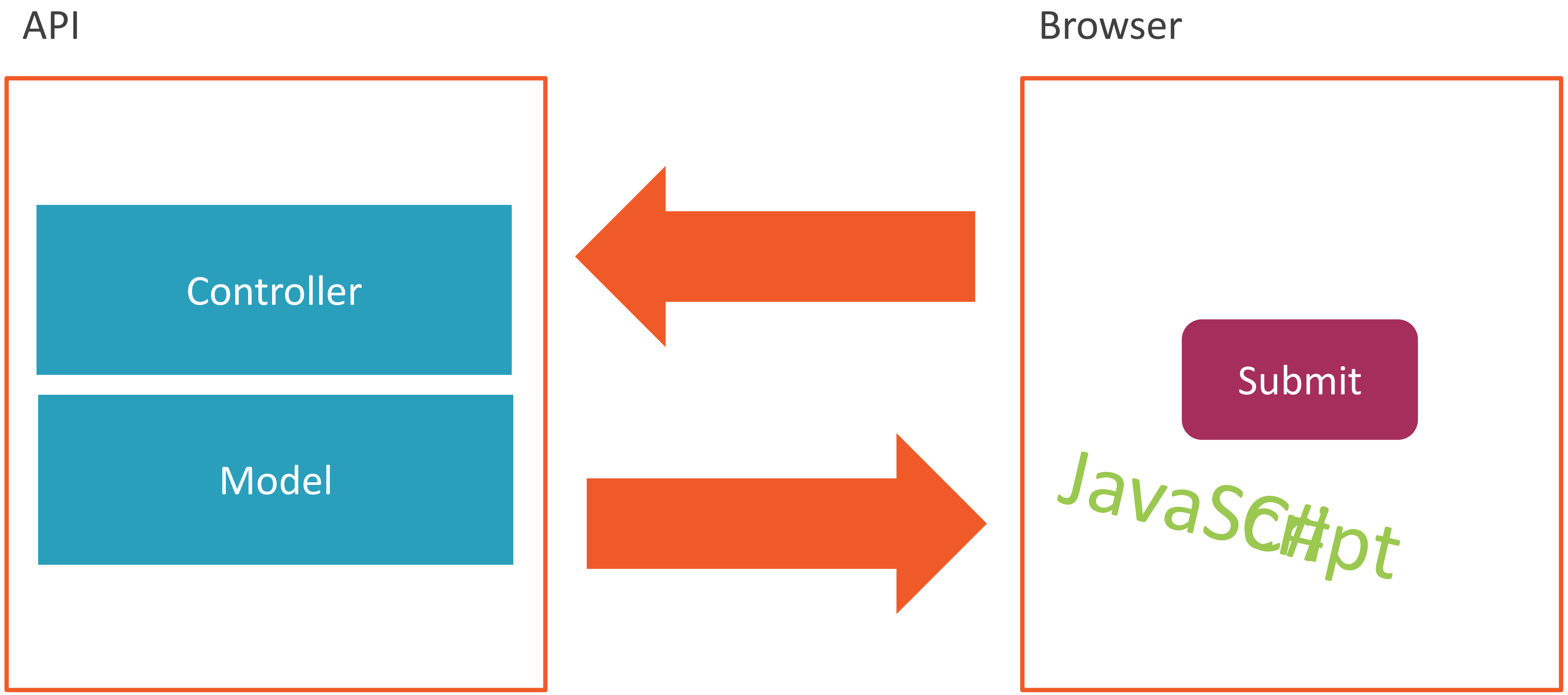
Single Page Application



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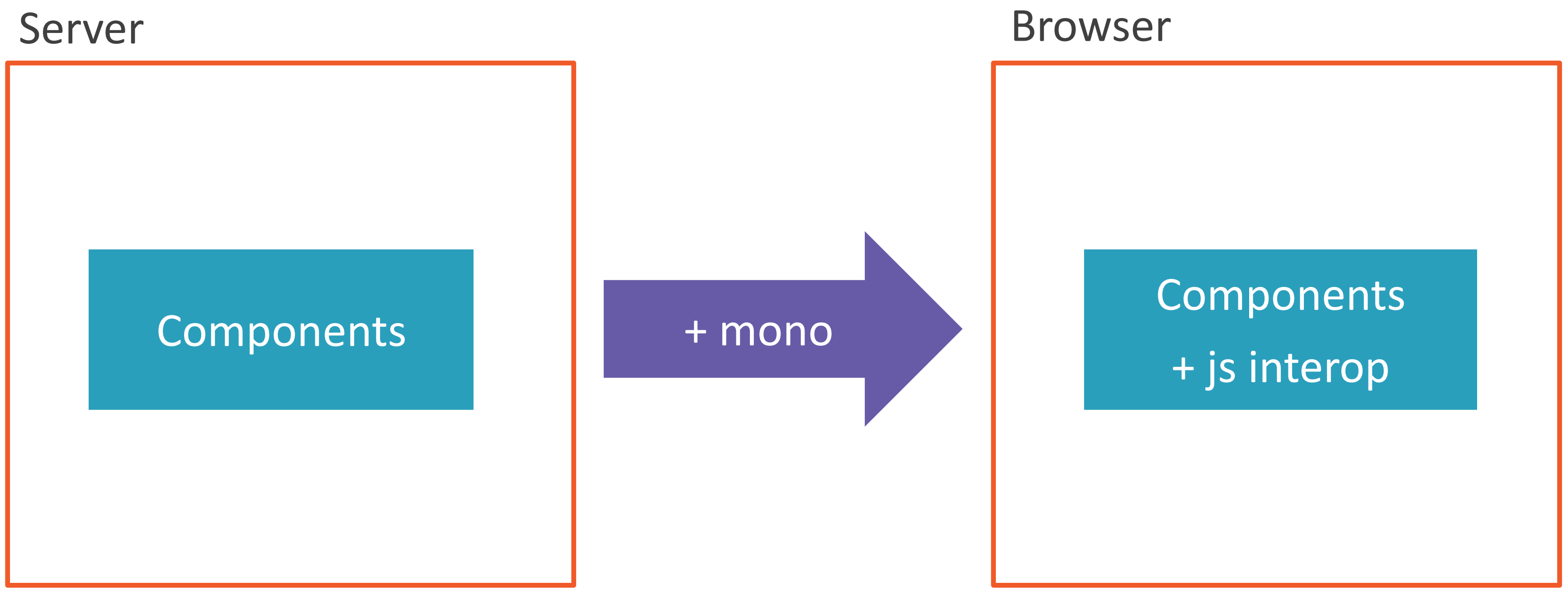
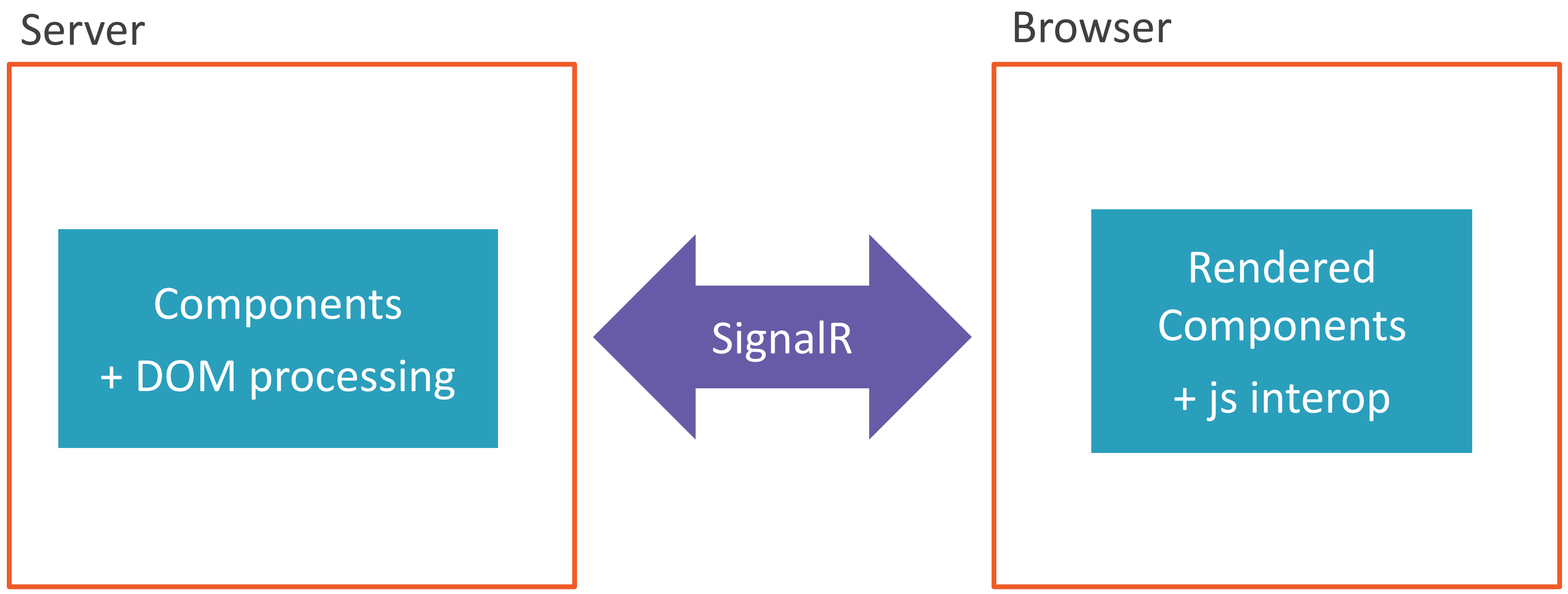
Blazor is a single-page application framework that lets you write C# on the browser side.

Creating Blazor App == Writing components.

Hosting Model #1: Blazor Web Assembly



Hosting Model #2: Blazor Server



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Component structure is identical for both hosting models.

Demo

Server- and Client-side Blazor: Comparison

Demo

Exploring a demo app

https://github.com/RolandGuijt/BlazorExample

- Understanding the diff mechanism
- Getting to know the code structure

Partial Component Class Hierarchy Without Code-behind

ComponentBase (framework)

ConferenceList
(generated)

Partial Component Class Hierarchy with Code-behind

ComponentBase
(framework)

ProposalListModel

ProposalList
(generated)

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ComponentBase
(framework)

ConfArchComponentBase

ProposalListModel

ProposalList
(generated, partial)

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Lab time!
Part 1

https://4sh.nl/blazorworkshop

Demo

Component writing with:

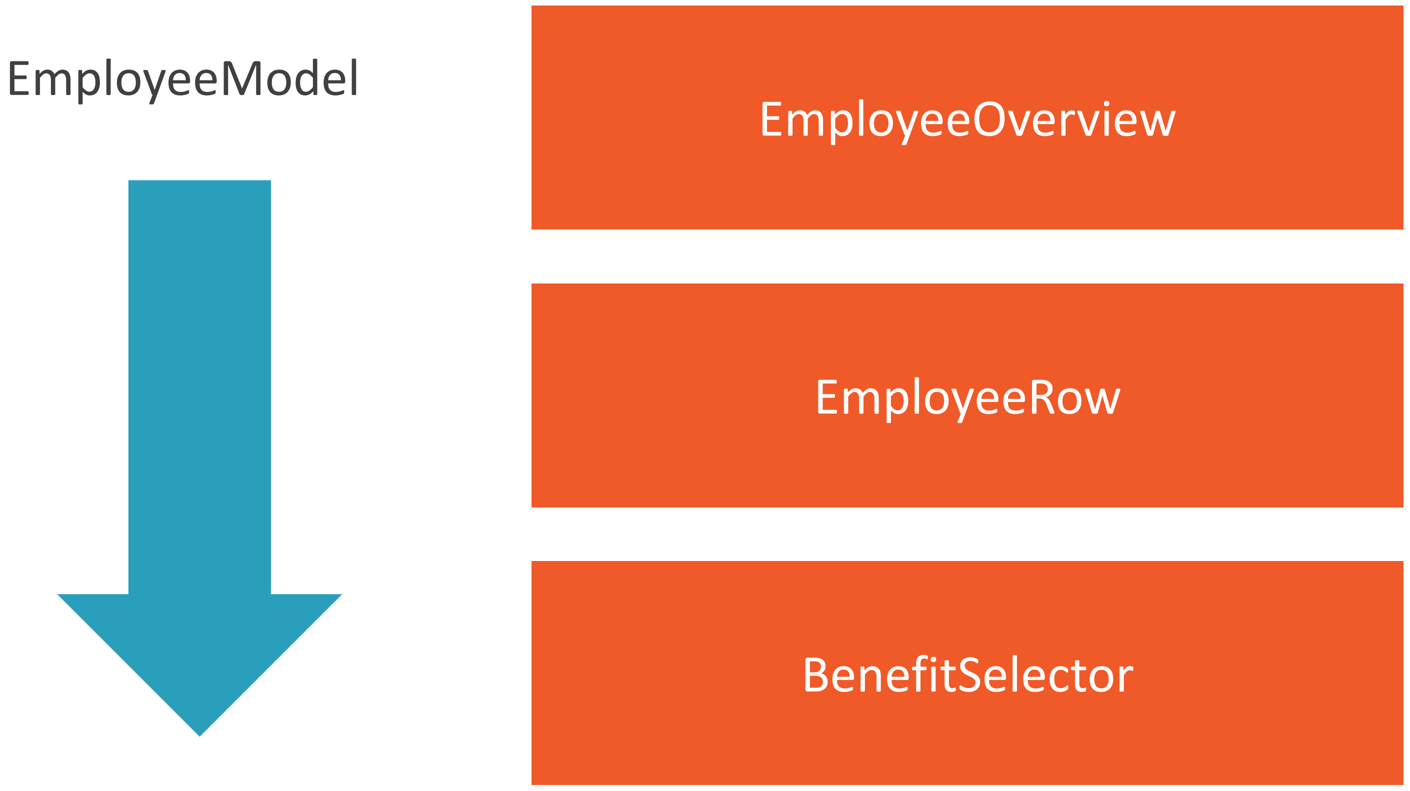
Child Content

@bind

Chained binds

More

Component Hierarchy



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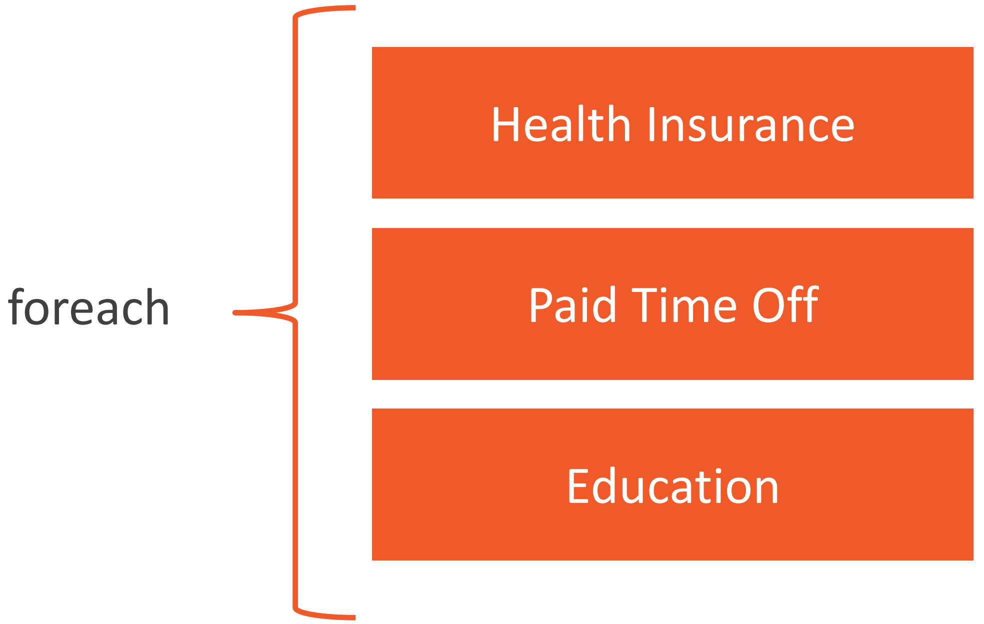
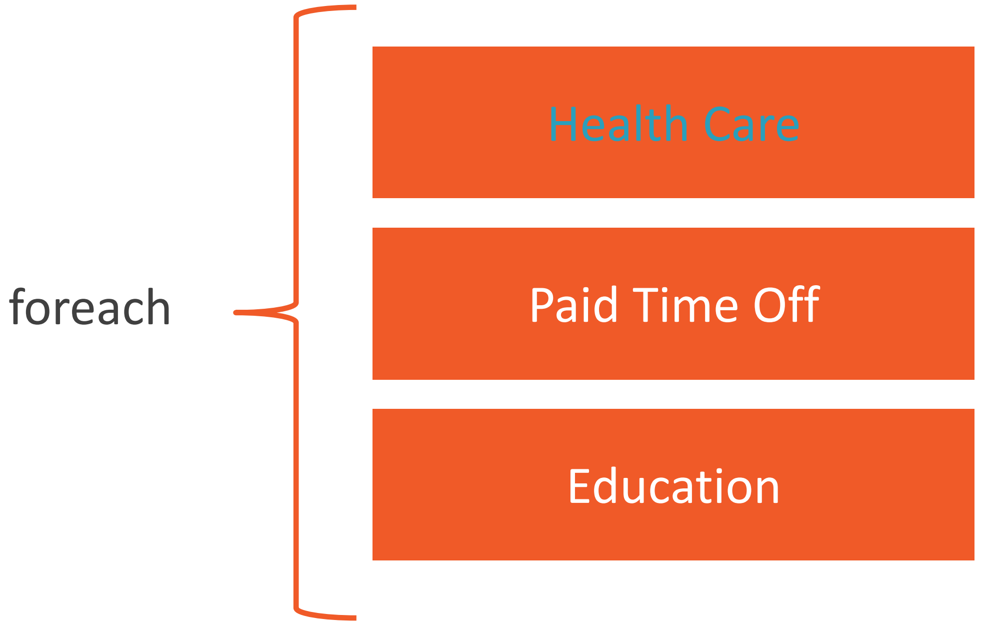
@key

Collection:
Benefit "Health Insurance"
Benefit "Paid Time Off"
Benefit "Education"

Collection:
Benefit "Health Care"
Benefit "Paid Time Off"
Benefit "Education"





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Collection:
Benefit "Health Insurance"
Benefit "Paid Time Off"
Benefit "Education"

Collection:
Benefit "Health Care"
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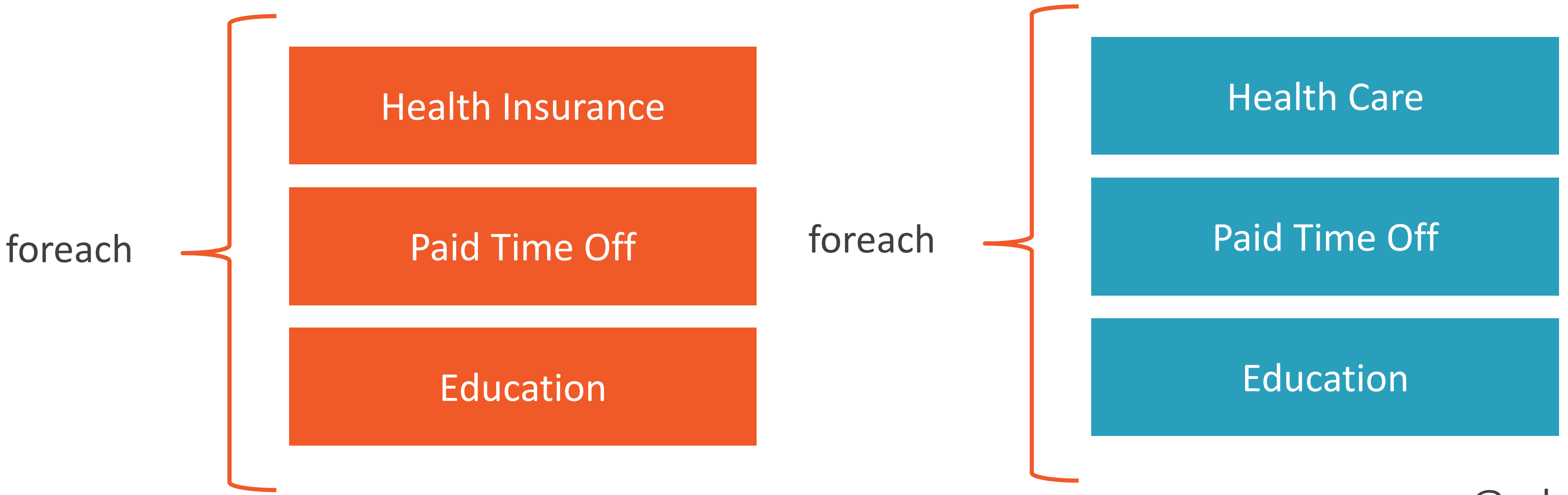

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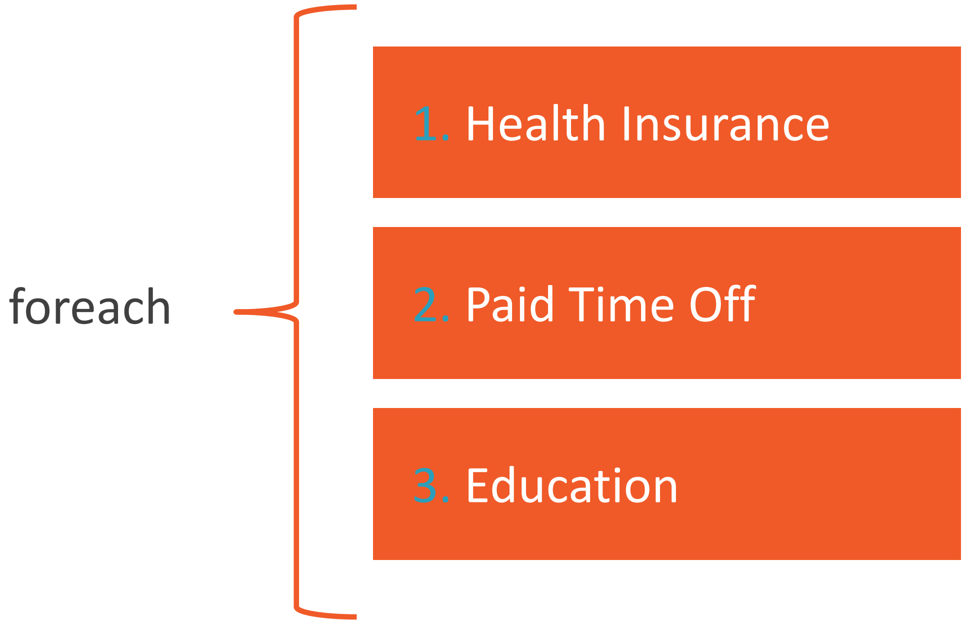
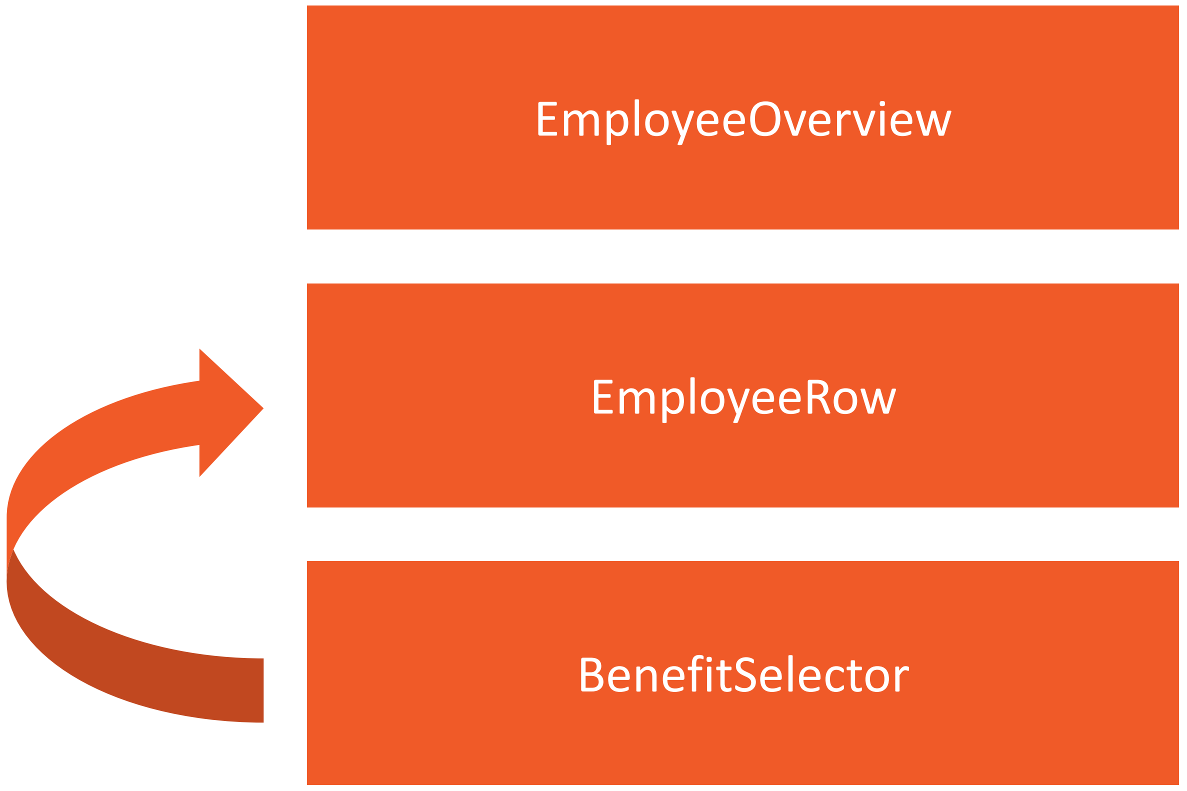
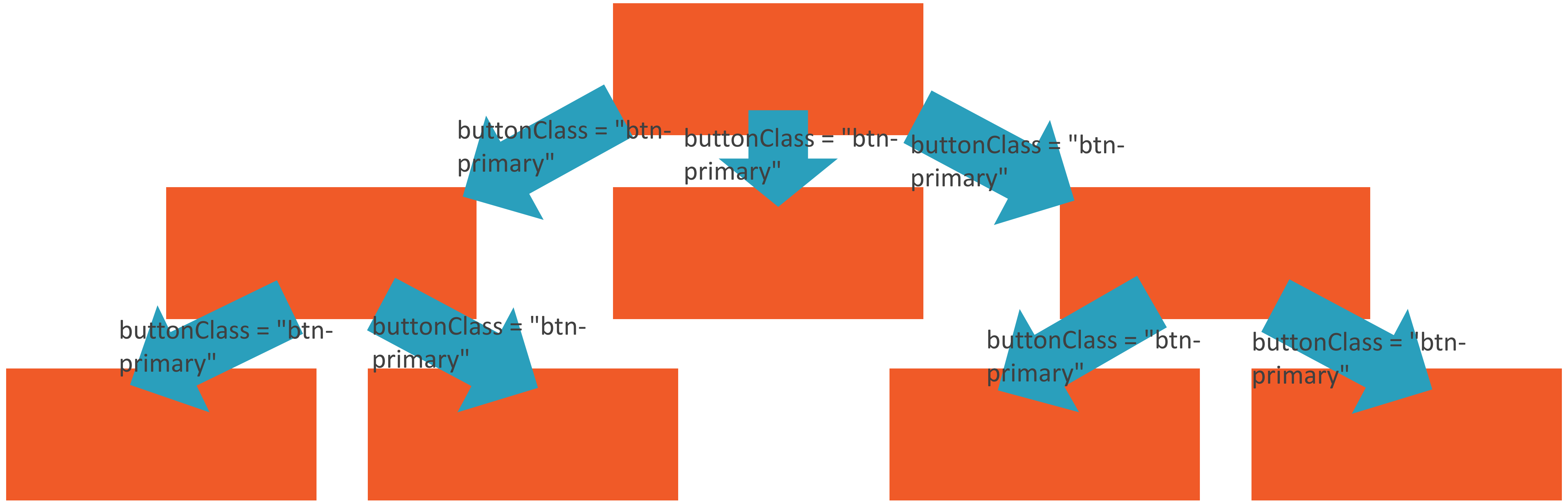
Collection:
Benefit 1 "Health Insurance"
Benefit 2 "Paid Time Off"
Benefit 3 "Education"



Component Hierarchy



Cascading Values


buttonClass = "btn-primary"
buttonClass = "btn-primary"
buttonClass = "btn-primary"
buttonClass = "btn-primary"
buttonClass = "btn-primary"
buttonClass = "btn-primary"
buttonClass = "btn-primary"

Cascading Values

```
<CascadingValue Value="@buttonClass">
        <CascadingValue Value="@inputClass">
                <EmployeeOverView>
                        <AddEmployeeDialog>
                        [CascadingParameter]
                        public string CascadingValue { get; set ; }
```

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Cascading Values

```
<CascadingValue Value="@buttonClass" Name="button">
        <CascadingValue Value="@inputClass" Name="input">
                <EmployeeOverView>
                        <AddEmployeeDialog>
                        [CascadingParameter(Name = "button")]
                        public string CascadingValue { get; set ; }
```

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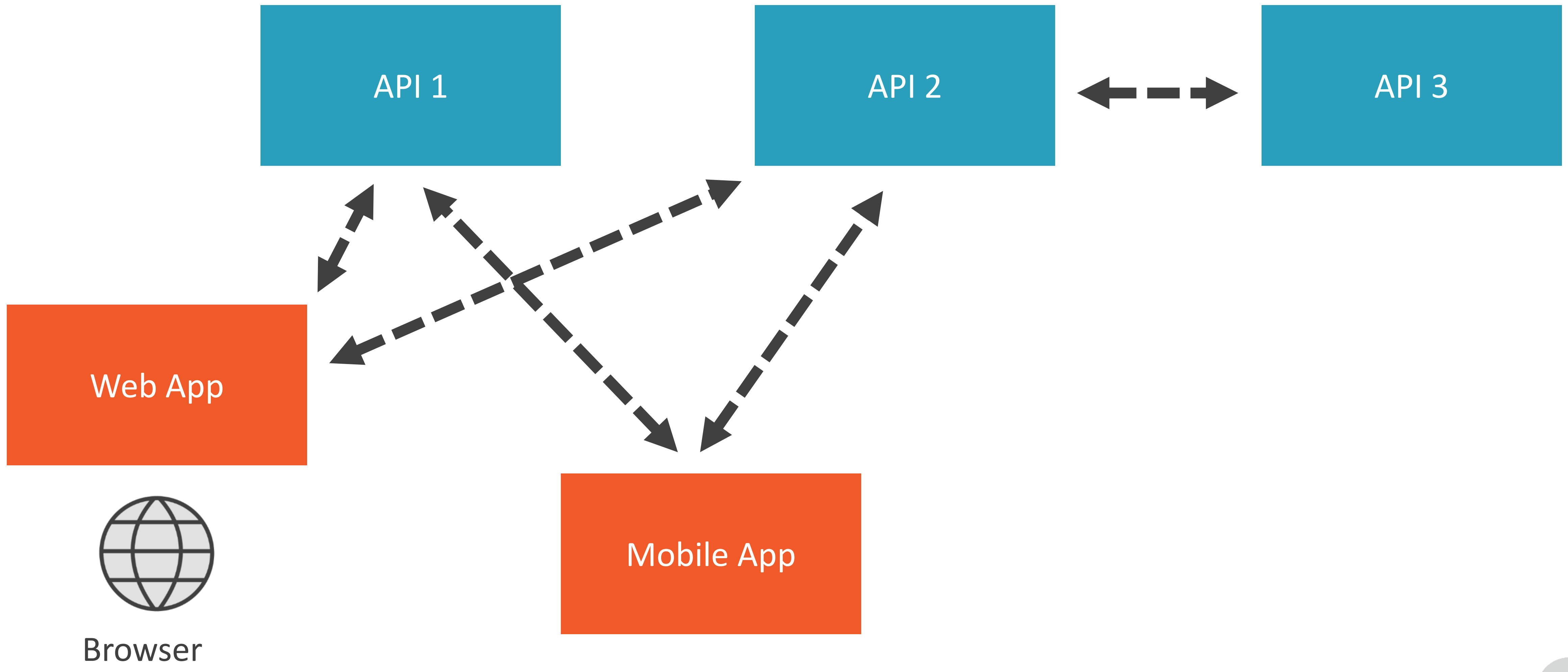
Demo

Templated Components

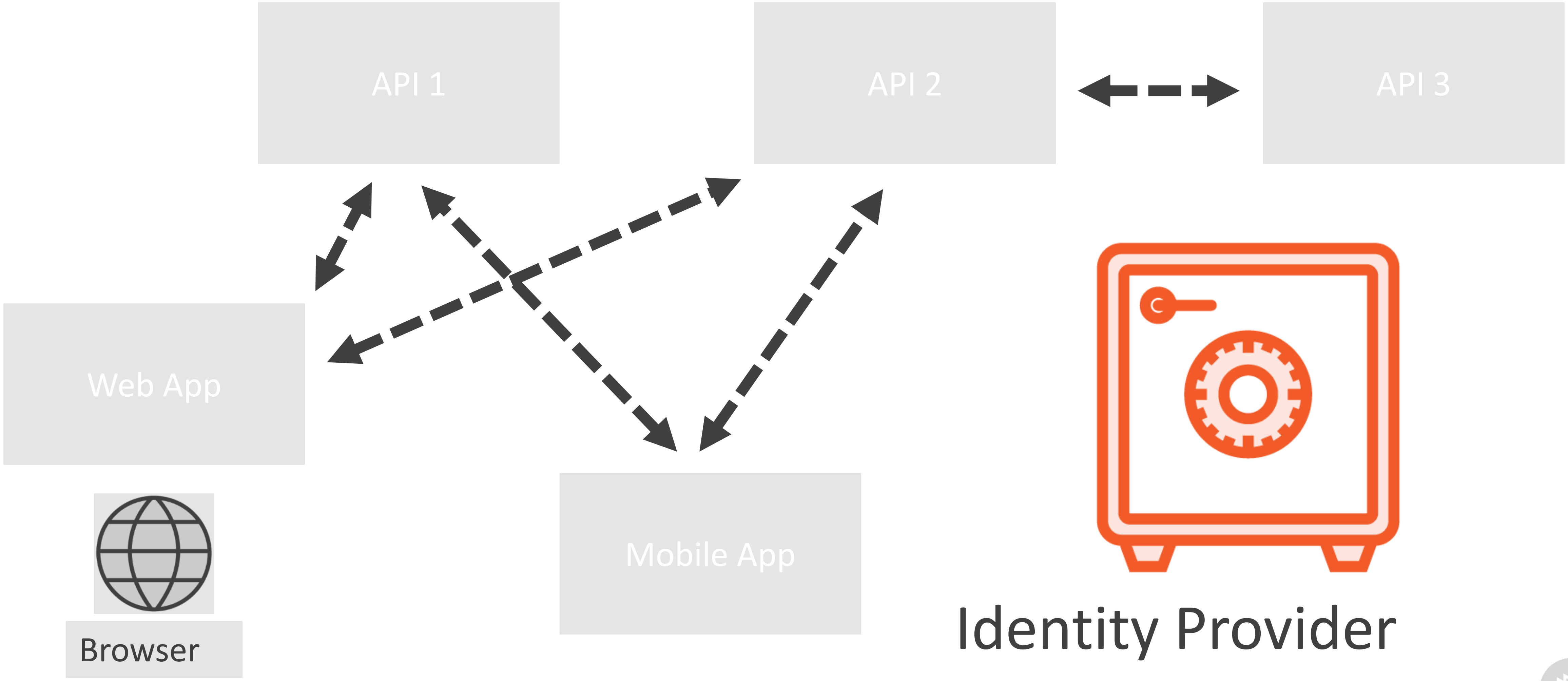
Auth

Uses standard ASP.NET Core authentication and authorization support

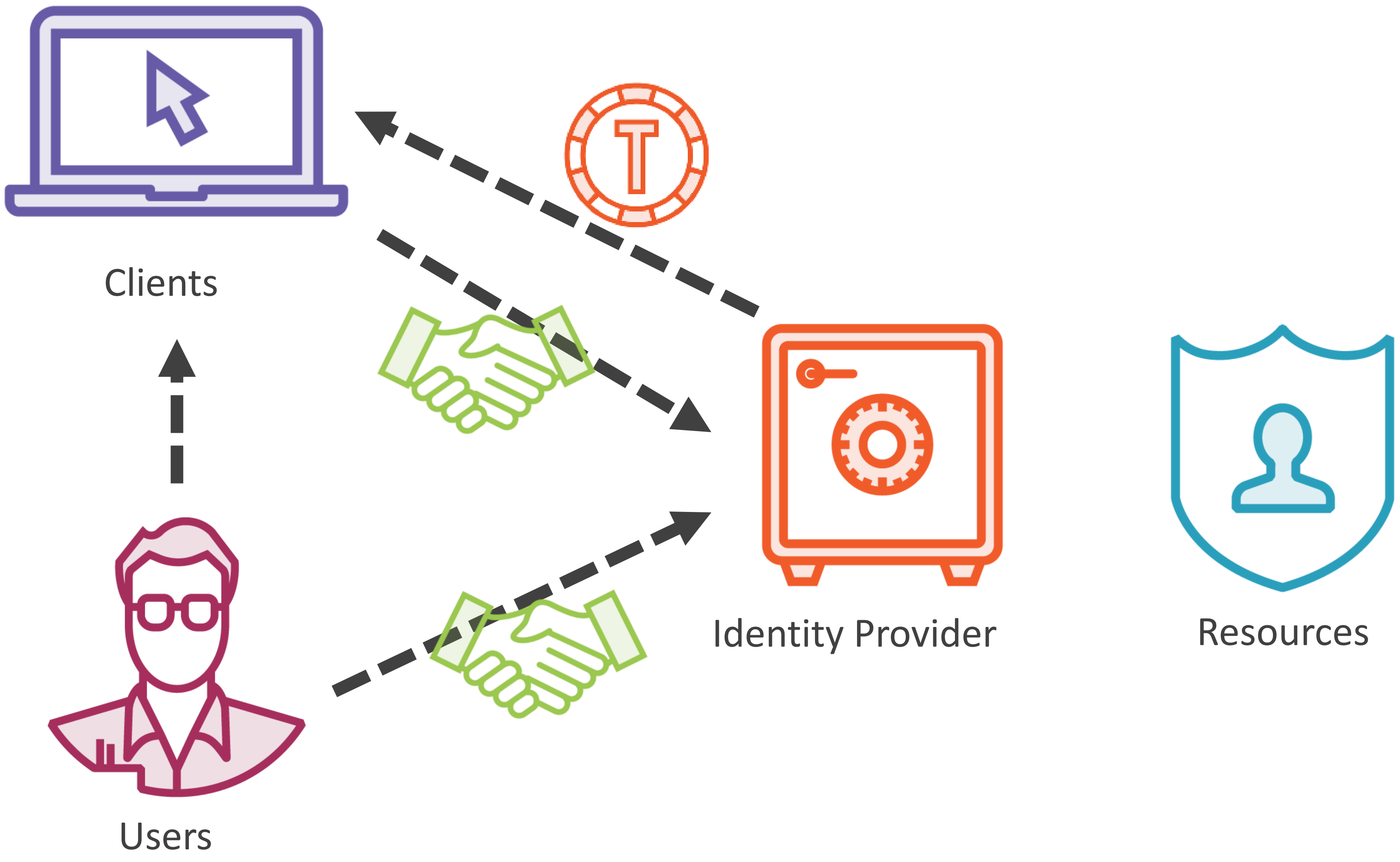
A Typical Modern Application



The Identity Provider



Concepts

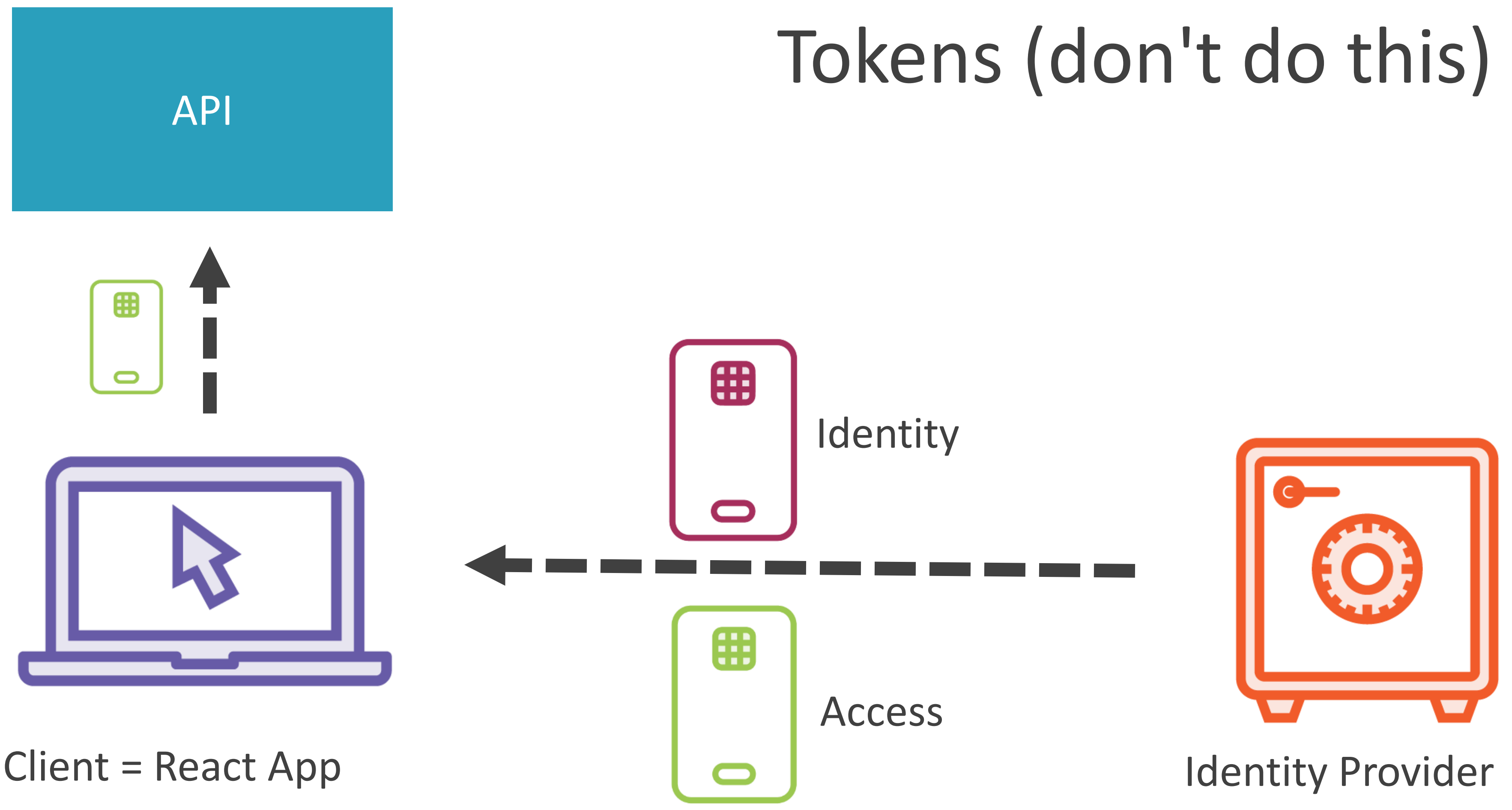


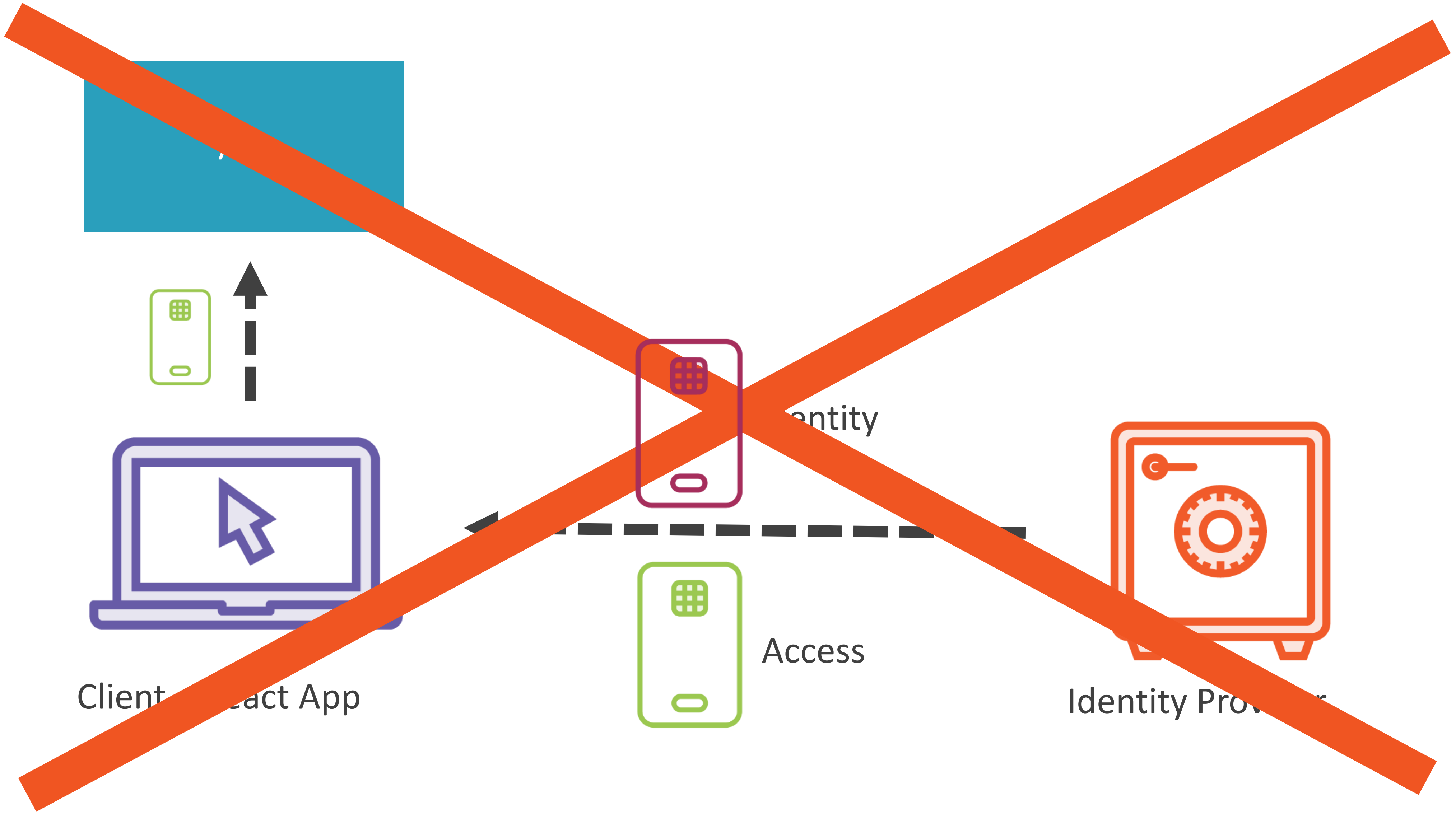
Demo

Auth

Authentication with Blazor Wasm

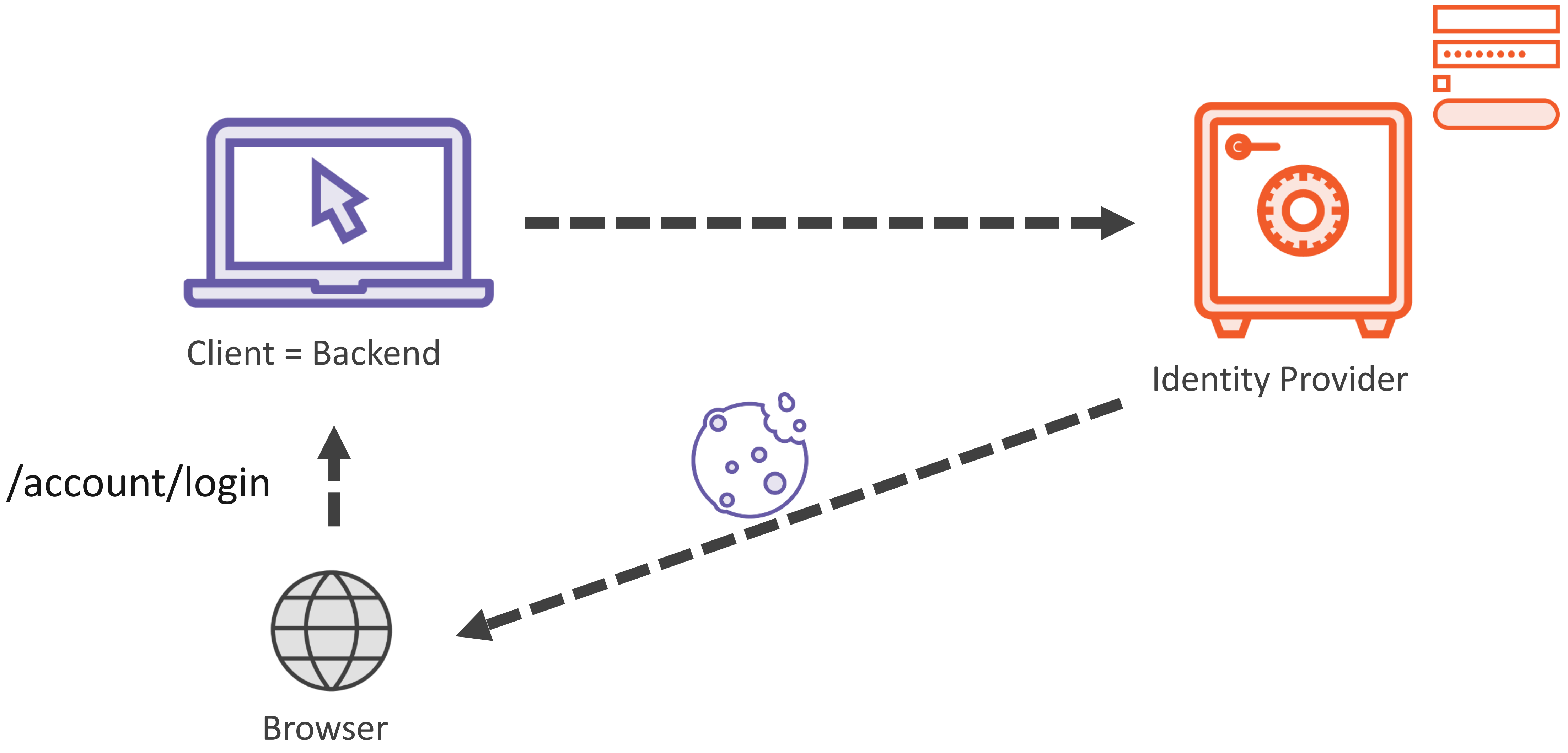
Tokens (don't do this)



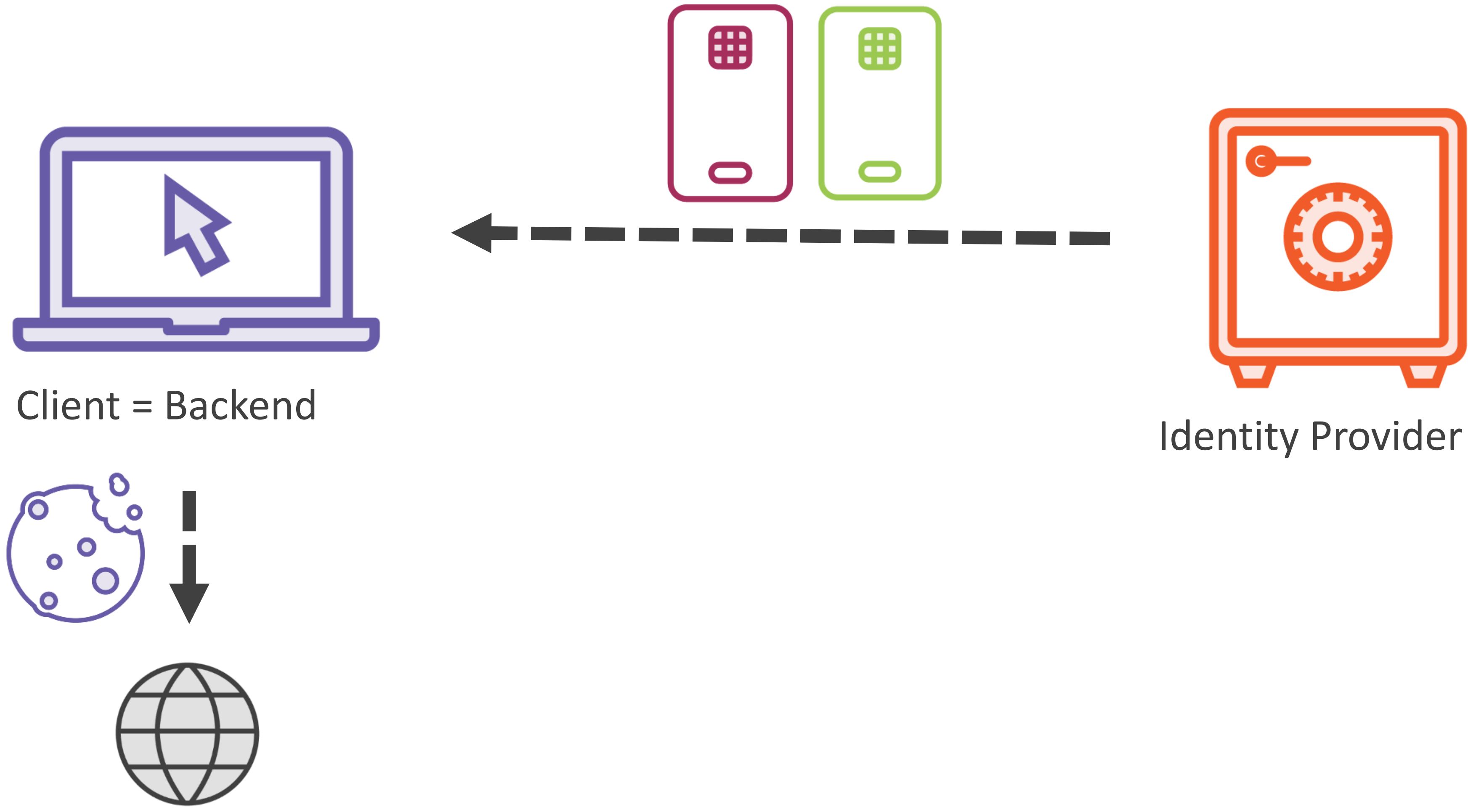


entity
Access
Client act App
Identity Prov r

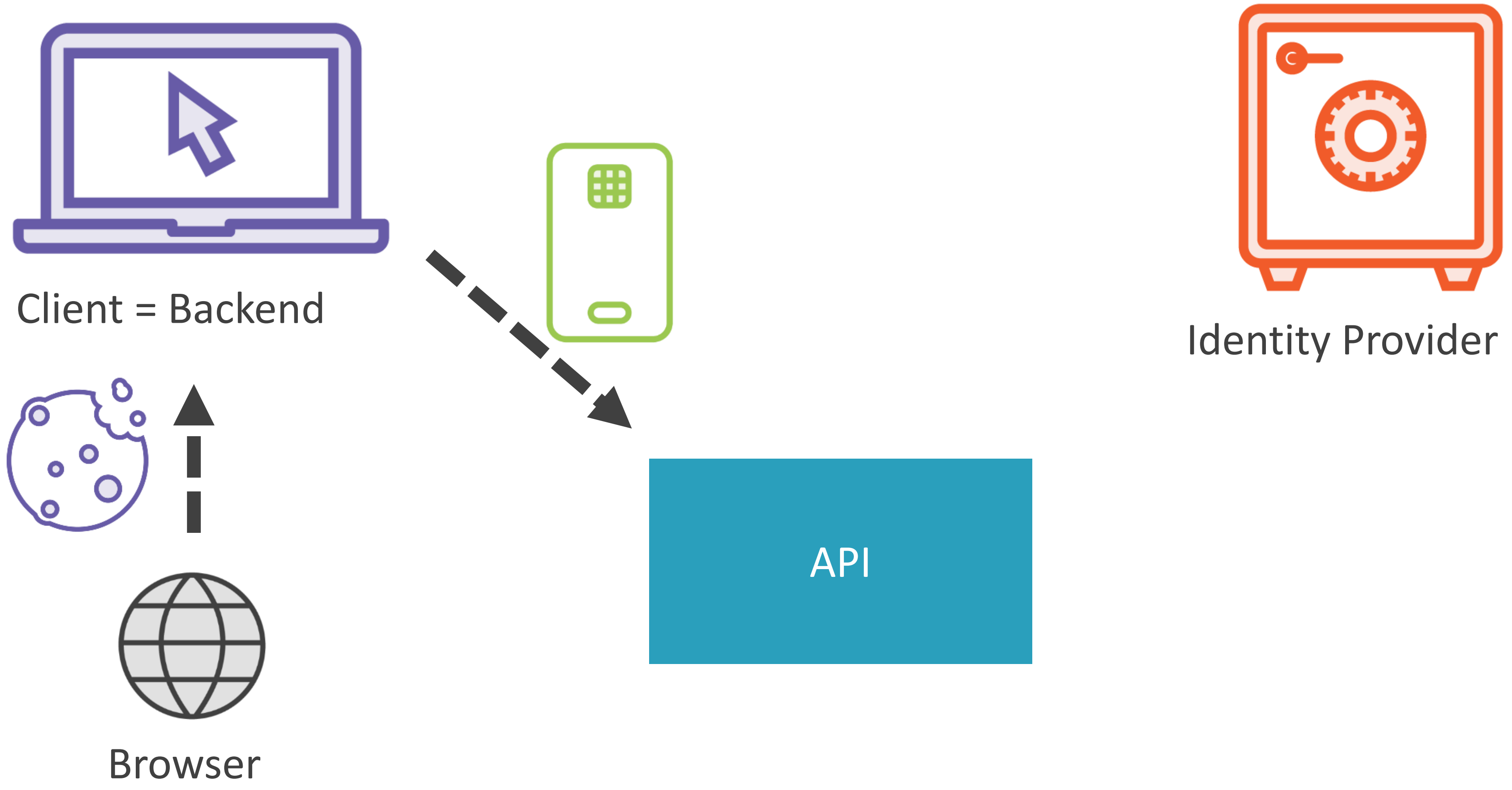
OpenId Connect with BFF



OpenId Connect with BFF



OpenId Connect with BFF



Lab time!
Part 2

Thanks

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