Implementing Authentication with ASP.NET Core Identity

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Overview

Creating a new Identity project

Retrofitting identity

Data store

Configuration in startup class

UI and helper classes

Working with claims

Roles

Two factor authentication

External identity providers

What is Identity?

Framework around cookie authentication

Contains helper classes and UI

Customizable

Configurable

Features

Login and logout

User registration

Third-party logins

Password management

Account lockout

Two-factor authentication

Identity Configuration

Sensible defaults

Deviate from defaults

https://4sh.nl/IdentityCustomDataStores

https://4sh.nl/IdentityConfiguration

Understanding
ASP.NET Core 3.x

Customizing Identity's UI

Needed for all pages?

_ViewStart.cshtml already sets the themed layout page

Some pages need more customization than other

Identity's UI

Login/logout

Confirm email address

Password management

Registration

Account lockout

Two factor authentication

Personal data

DbContext Options

Derive existing DbContext from IdentityDbContext

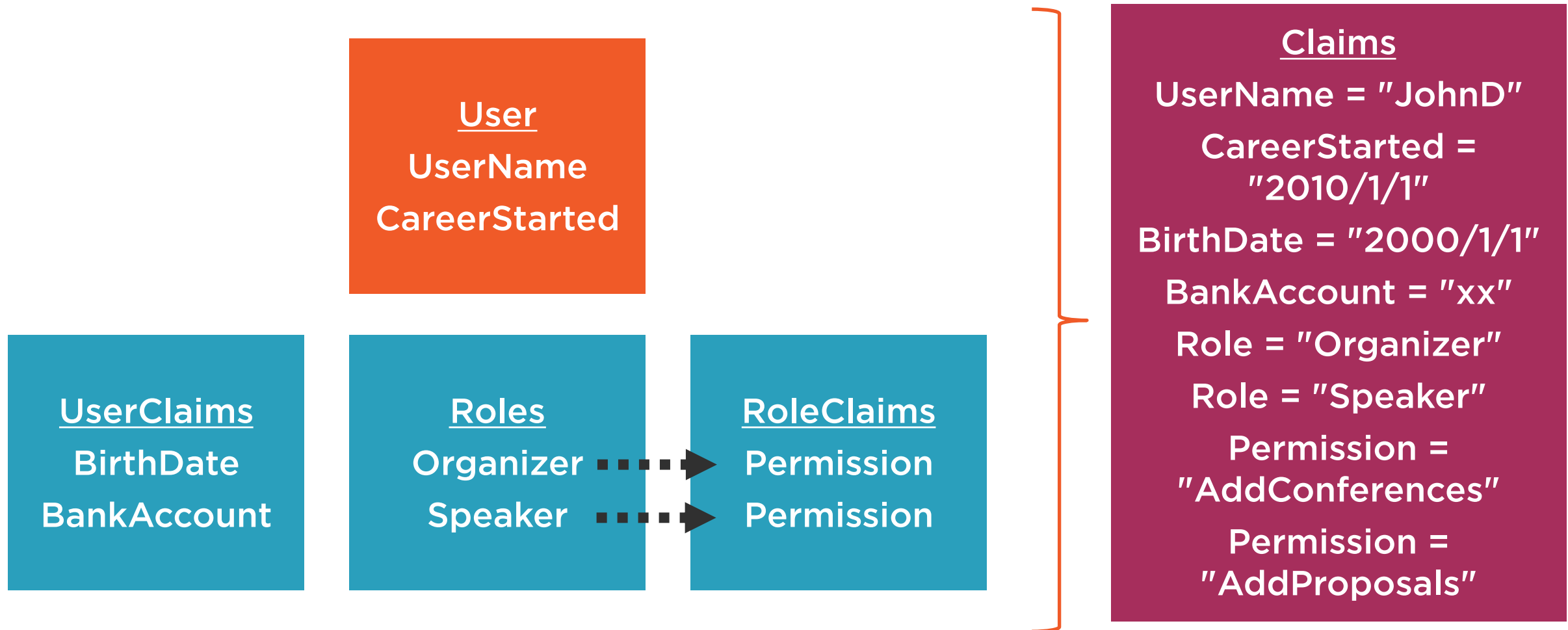Use a separate DbContext for Identity pointing to the same database

Use a separate DbContext for Identity using different databases

Role support is off, it needs to be switched on explicitly.

Claims and Roles

User
UserName
CareerStarted

UserClaims
BirthDate
BankAccount

Roles
Organizer ┈┈▶
Speaker ┈┈▶

RoleClaims
Permission
Permission

Claims
UserName = "JohnD"
CareerStarted = "2010/1/1"
BirthDate = "2000/1/1"
BankAccount = "xx"
Role = "Organizer"
Role = "Speaker"
Permission = "AddConferences"
Permission = "AddProposals"

SendGrid

Cloud service to send emails

SendGrid.com

Also available in Azure

Needs API key

NuGet package available

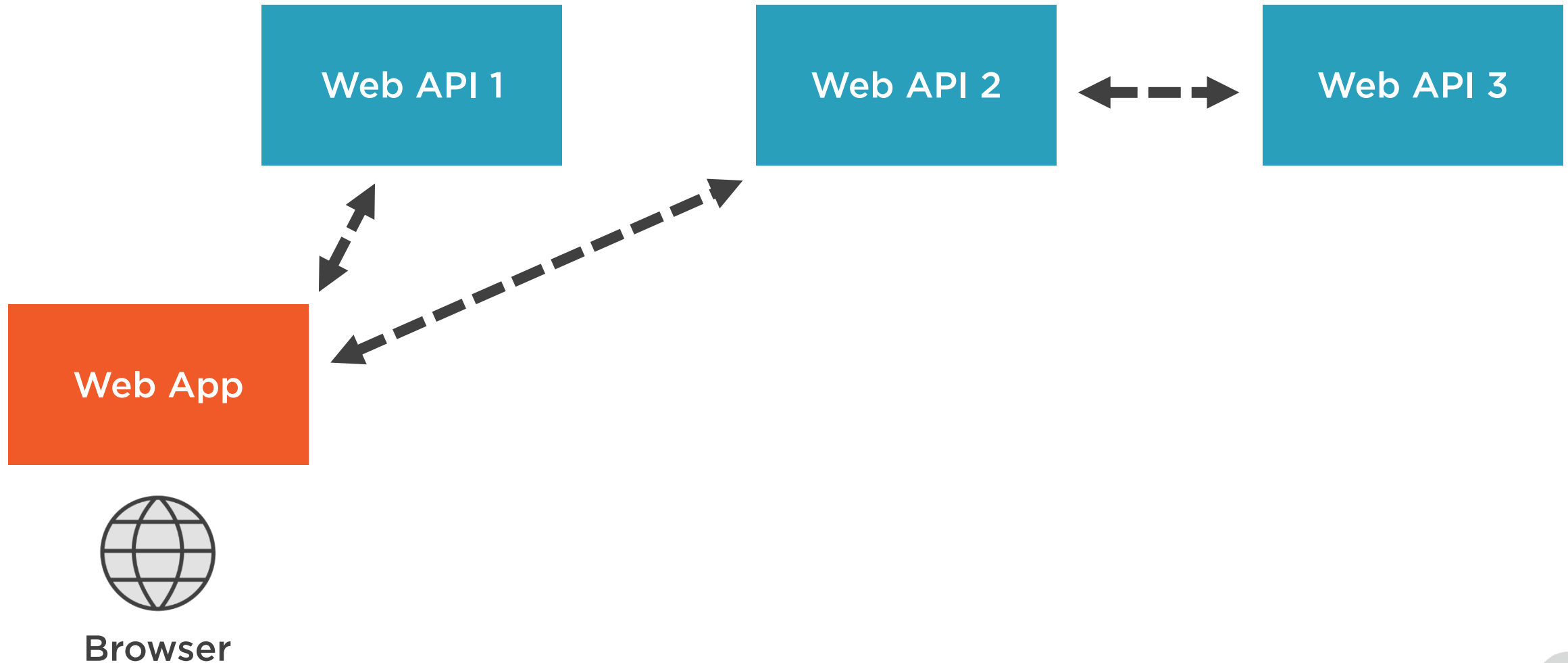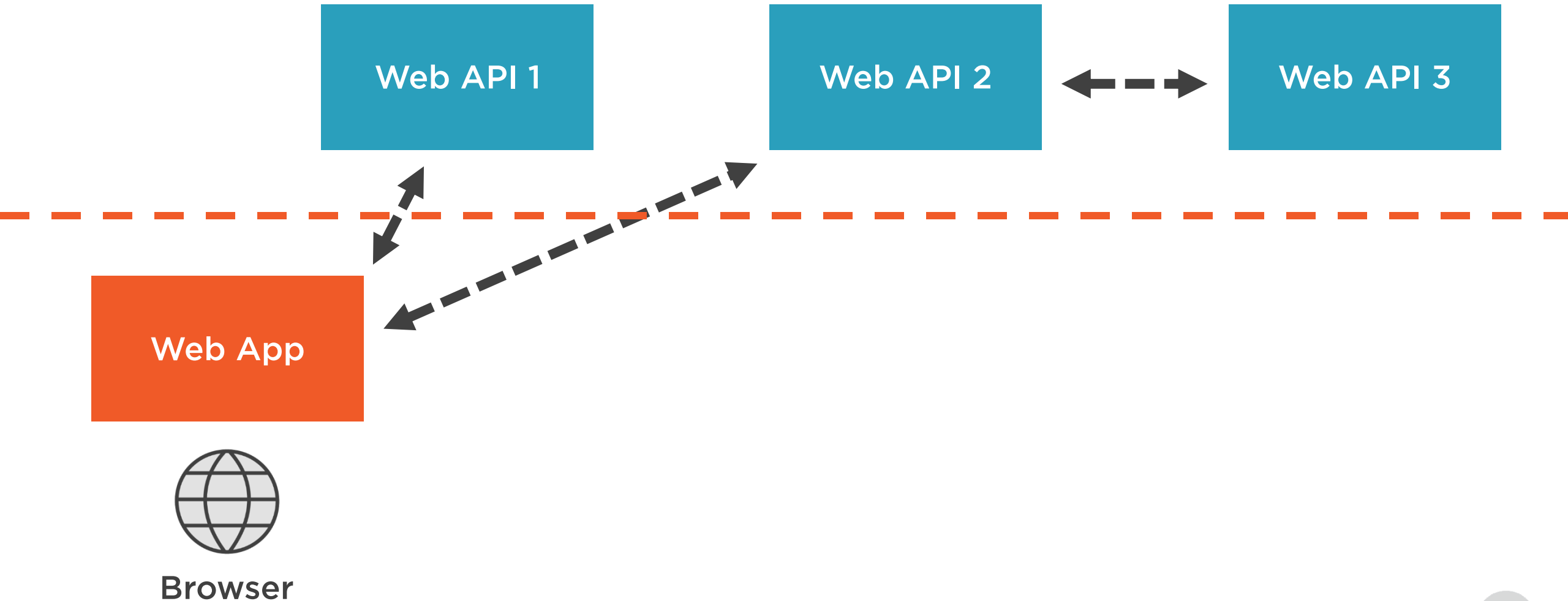Store settings in secrets.json and application.json

https://4sh.nl/qrcodejs

An Application Landscape

An Application Landscape

Identity in an Application Landscape

Cookies are for one URL

Use a hack or invent your own?

No. Very difficult to make it safe

Use OpenIdConnect

Summary

Claims-centered framework to add local authentication to your app

External identity providers support

Almost all inner components can be replaced

Configurable