

# Authentication and Authorization in ASP.NET Core

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UNDERSTANDING AUTHENTICATION AND AUTHORIZATION  
IN ASP.NET CORE



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# Module Overview



**Claims-based authentication and authorization**

**Identity cookie**

**ClaimsPrincipal**

**External identity providers**



# Authentication



**Name: Jane Doe**

**Birth date: 12/22/1996**



# Authentication

**Determining identity**

**Needs proof**

**Proof for application is password**

**On success: claims are issued**

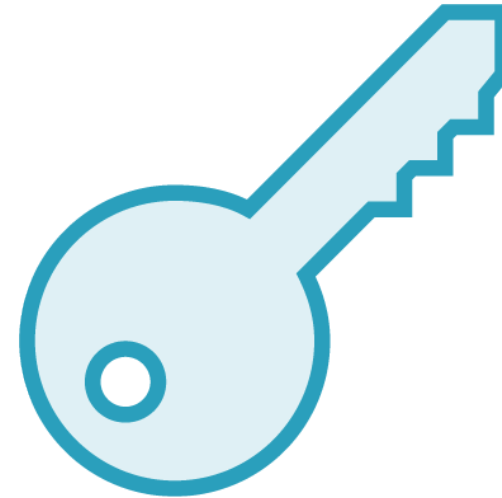


# Overview



**Authentication**

**Cookie  
Identity  
Identity Provider**



**Authorization**

**ASP.NET Core  
Authorization**



# Authorization

**Limited access**

**What actions a user can take**

**Needs authentication first**



# Run the Migrations

update-database

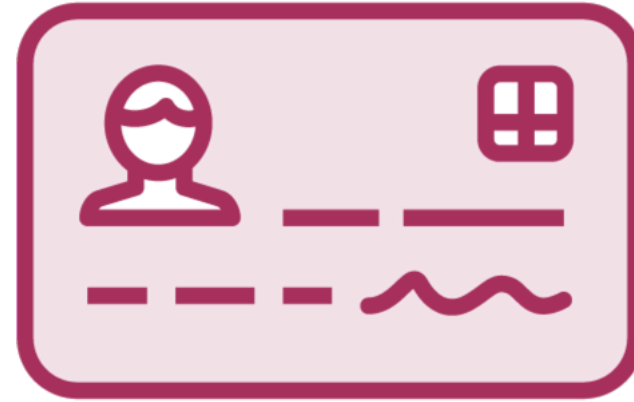


# Understanding ASP.NET Core 3.x

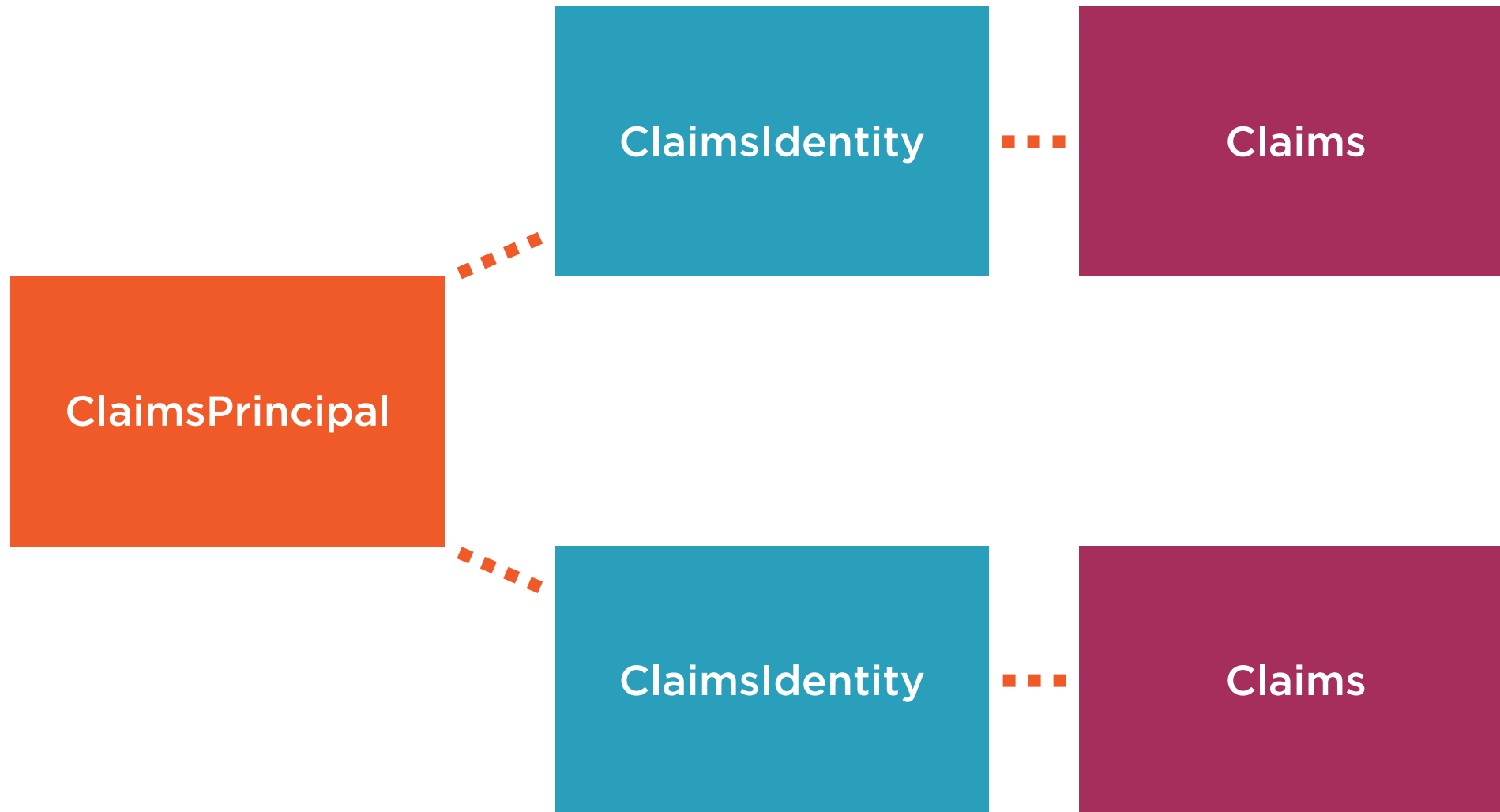




# Authentication Schemes



# Claims-based Identity



# Identity Cookie



# Identity Cookie

Tracks to which user a request belongs to

Safely stores user information

Symmetric encryption, key only on server

Used to re-construct the ClaimsPrincipal object on each request

Secured by ASP.NET Core Data Protection



# Problem with Identity Cookies

**Persistent cookies lifetime**

**User has access to app as long as  
cookie lives**

**Solution: react to event that fires upon  
each incoming request with a cookie**



# Identity Cookie



# External Identity Providers

Google

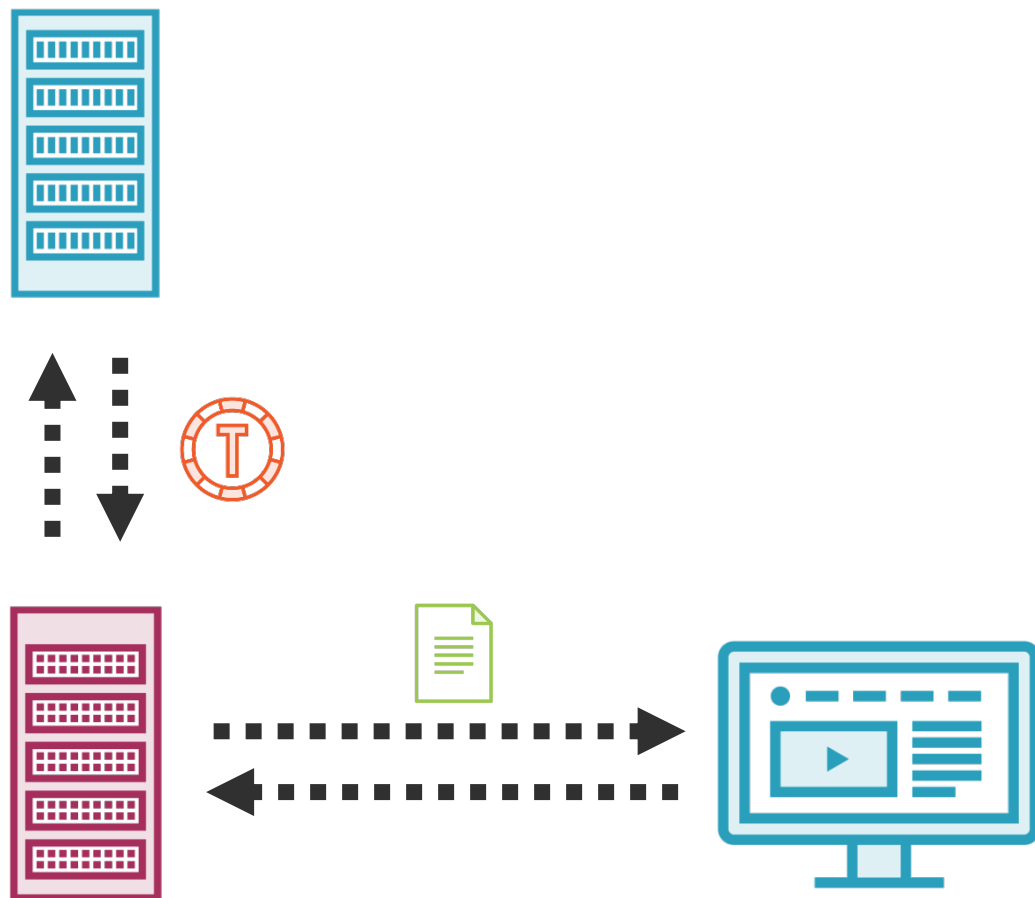
Facebook

Microsoft

Twitter



# External Identity Providers





<https://4sh.nl/GoogleAddApp>



# Secret Manager

```
dotnet user-secrets init
```

```
dotnet user-secrets set "Google:ClientId" "33rddrewr.."
```



Scheme  
Actions

**Authenticate**

**Challenge**

**Forbid**



# Summary



Understanding authentication and authorization

Implementing cookie authentication

Working with the ClaimsPrincipal object

Using external identity providers