

Entity Framework Core: Getting Started

CREATING YOUR FIRST APP USING EF CORE 5.0



Julie Lerman

MOST TRUSTED AUTHORITY ON ENTITY FRAMEWORK

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Updated completely for
EF Core 5.0

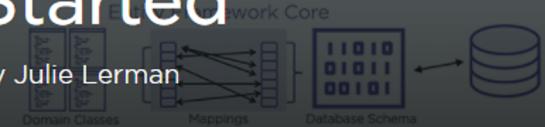
Using Visual Studio 2019



EF Maps Differently Than Most ORMs

Entity Framework Core: Getting Started

by Julie Lerman



This course helps those with experience in earlier versions of EF and EF Core, and developers completely new to Entity Framework. Learn how to build data models with EF Core 3.1, use EF Core to let your software interact with data in your...

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This course is part of: Entity Framework Core Path

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- ① Creating Your First App Using EF Core 3.1 ⌚ 27m 44s ▾
- ① Controlling Database Creation and Schema Changes ⌚ 19m 55s ▾
- ① Mapping Many-to-Many and One-to-One Relationships ⌚ 14m 34s ▾
- ① Interacting with Your EF Core Data Model ⌚ 37m 27s ▾
- ① Interacting with Related Data ⌚ 38m 46s ▾
- ① Working with Views and Stored Procedures and Raw SQL ⌚ 19m 52s ▾
- ① Using EF Core with ASP.NET Core ⌚ 28m 28s ▾
- ① Testing with the InMemory Provider Instead of a Real Database ⌚ 34m 13s ▾

Course author



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Julie Lerman is a software coach with 30 years of experience as a developer. She is a long-time Pluralsight author, Microsoft MVP, Microsoft Regional Director and Docker Captain who lives in the...

Course info

Level Beginner

Rating (159)

Duration 3h 42m

Released 11 Jan 2020

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Looking for EF Core 3.1?

bit.ly/EFCore31



Julie Lerman

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Julie Lerman is a software coach with 30 years of experience as a developer. She is a long-time Pluralsight author, Microsoft MVP, Microsoft Regional Director and Docker Captain who lives in the hills of Vermont and continues to be known as the world's top expert in Entity Framework. You can find...

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Preparing Your Move to Entity Framework Core 5: What's New and What's Improved 

(Course · Beginner · 1 hr 29m · Nov 25, 2020 · ★★★★★)

Fundamentals of Building .NET Applications on AWS 

(Course · Intermediate · 2 hr 31m · Aug 6, 2020 · ★★★★★ (30))

Entity Framework Core: Getting Started

(Course · Beginner · 3 hr 42m · Jan 10, 2020 · ★★★★★ (159))

Entity Framework Core 2.1: What's New Playbook

(Course · Intermediate · 3 hr 22m · Oct 8, 2018 · ★★★★★ (49))

Entity Framework Core 2: Mappings

(Course · Intermediate · 1 hr 59m · May 15, 2018 · ★★★★★ (98))

Entity Framework Core 2: Getting Started

(Course · Beginner · 2 hr 42m · Feb 5, 2018 · ★★★★★ (253))

Cross-platform SQL Server Management for Developers Using VS Code

(Course · Intermediate · 2 hr 21m · Sep 10, 2017 · ★★★★★ (22))

Entity Framework Core: Getting Started 

(Course · Beginner · 5 hr 22m · Feb 13, 2017 · ★★★★★ (189))

Older versions via my Pluralsight Author Page



Entity Framework Core

Microsoft's cross-platform data access framework for .NET



Course Overview

Building your first app that uses EF Core

Controlling database creation and schema changes

Adding more relationships

Interacting with your EF Core data model

Interacting with related data

Working with views, stored procedures and raw SQL

Using EF Core in an ASP.NET Core app

Using EF Core in your tests

Module Overview



What is EF Core?

Setting up a new solution

Adding EF Core APIs

Creating a data model and DB connection

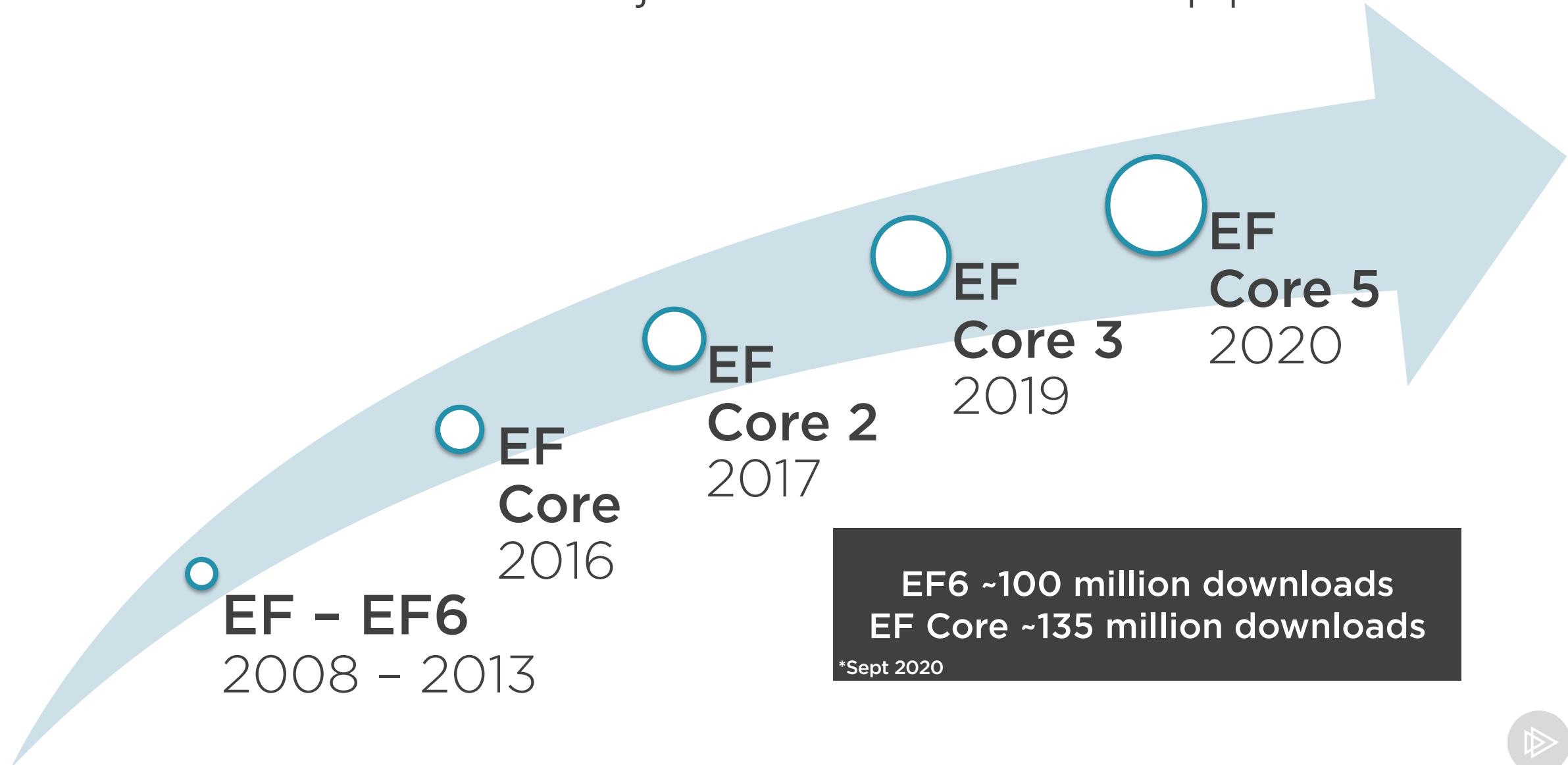
**Sneak peek at writing and reading data in
the application**



What is Entity Framework Core?



Microsoft's Object Relational Mapper



Entity Framework Core

Microsoft's official data access technology
for .NET development

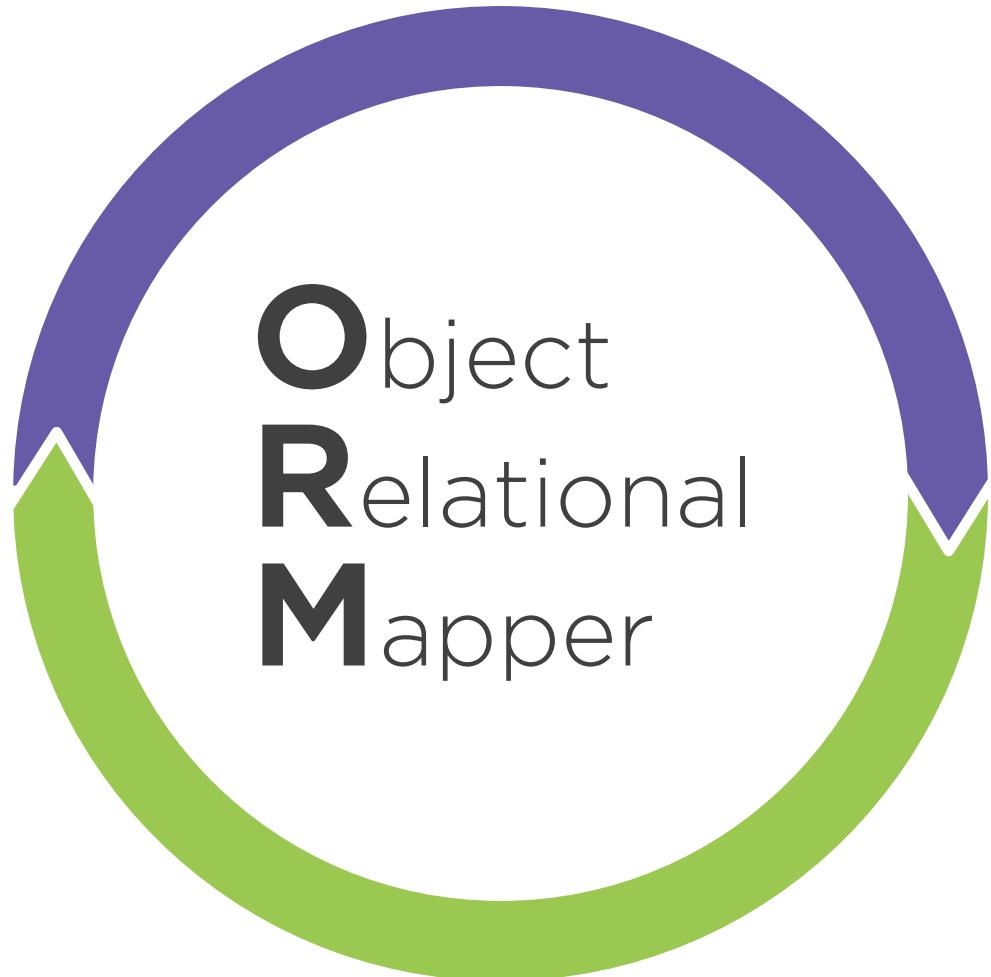
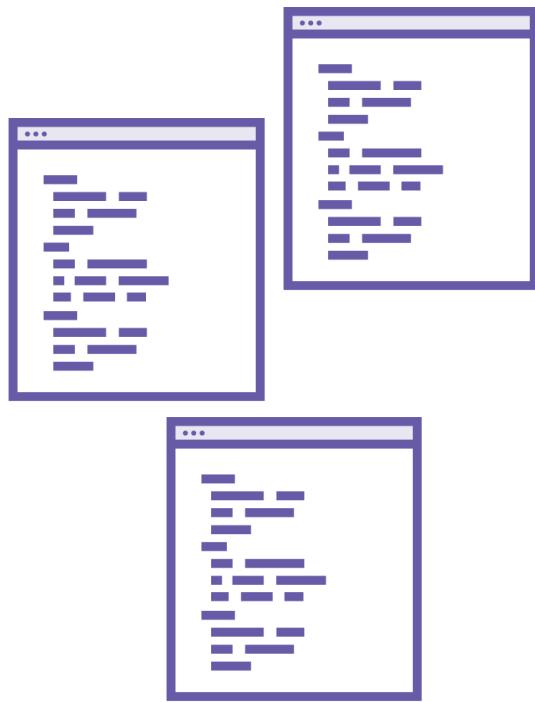
135 million downloads (adding every version)

~5 million of EF Core 3.1

Windows, macOS & Linux



EF Core Is an ORM



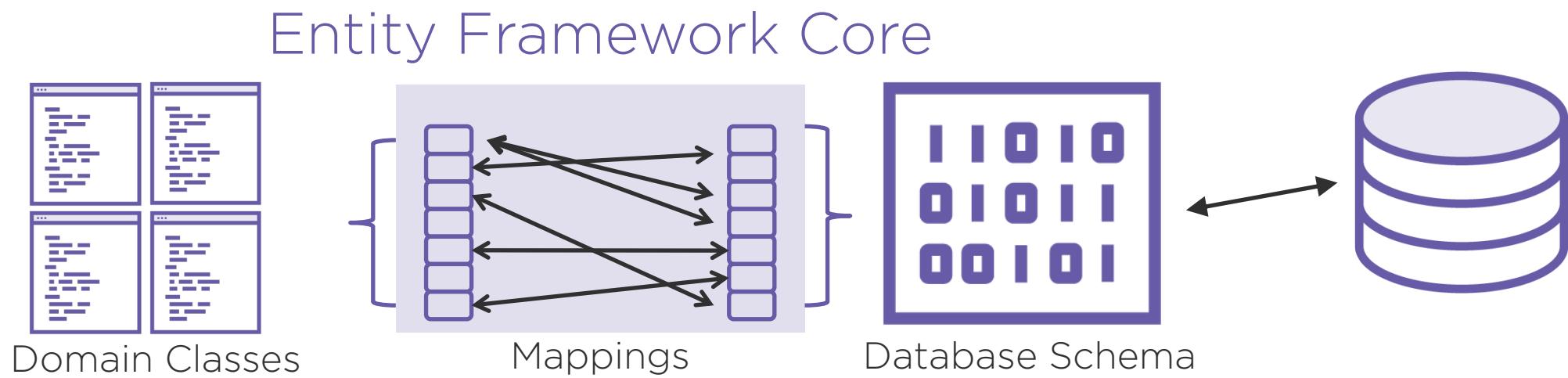
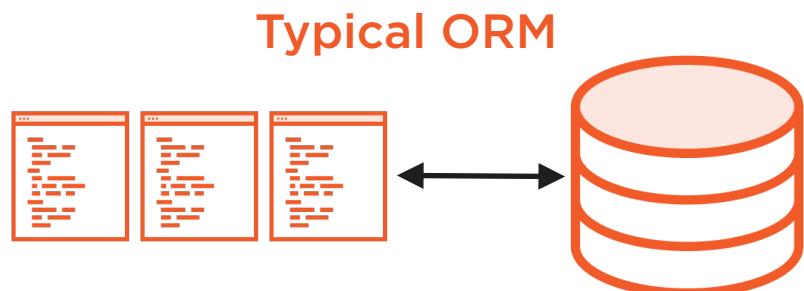
High Level ORM Benefits

Developer productivity

Coding consistency



EF Maps Differently Than Most ORMs



Getting the Correct Versions of .NET, SQL Server & Visual Studio for This Course



.NET Core/ASP.NET Core/EF Core

.NET Core 3.1

+

ASP.NET Core 3.1

+

EF Core 5

.NET 5.0

+

ASP.NET Core 5.0

+

EF Core 5.0



.NET Implementations Supported by EF Core 5

EF Core	5.0
.NET	5.0
.NET Standard	2.1
.NET Core	3.0
.NET Framework	(not supported)
Mono	6.4
Xamarin.iOS	12.16
Xamarin.Mac	5.16
Xamarin.Android	10.0
UWP	TBD
Unity	TBD



Installing .NET Core

dot.net

dotnet.microsoft.com/download



Setting Up to Follow Along



Visual Studio 2019



SQL Server LocalDb (installs with VS 2019)



.NET 5.0 SDK



You'll add EF Core 5.0 directly to the projects you create



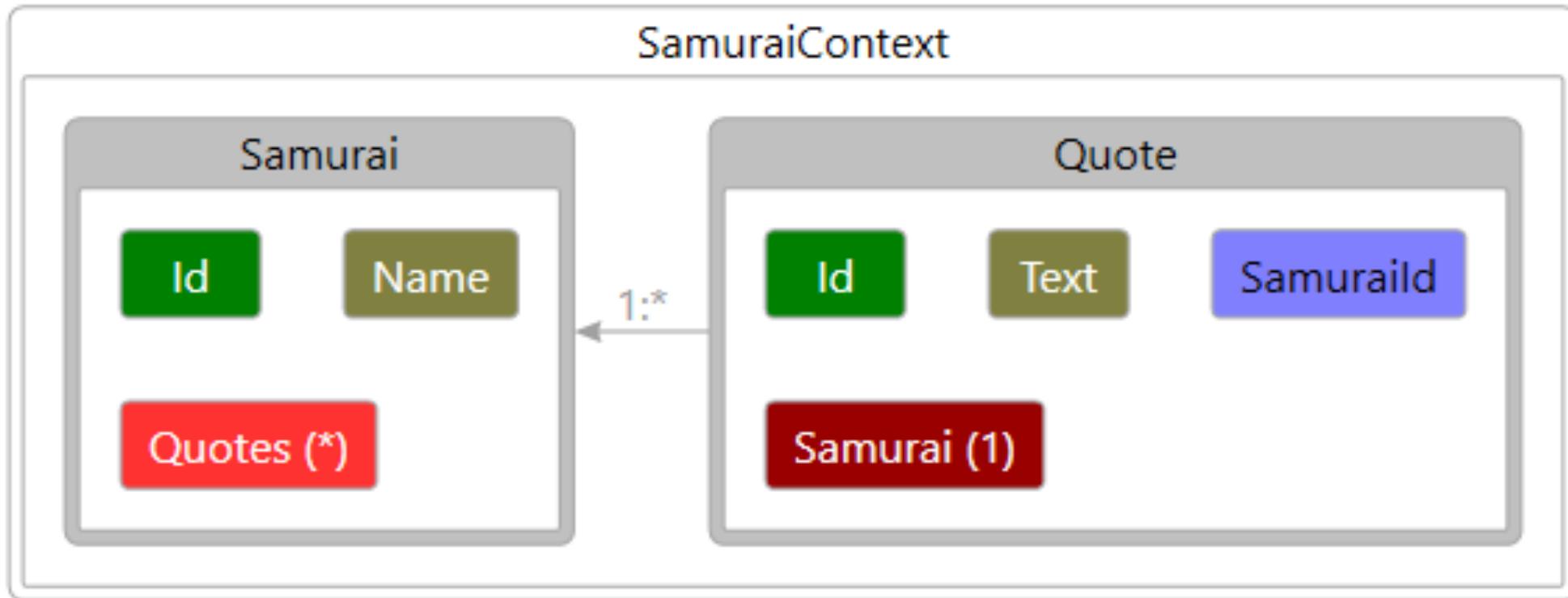
Setting up the Solution



Adding EF Core with the NuGet Package Manager



Visualizing the DbContext's Interpretation



Model view generated from EF Core Power Tools extension for VS2019
I'll demo using this tool later in the course



Creating the Data Model with EF Core



Specifying the Data Provider and Connection String

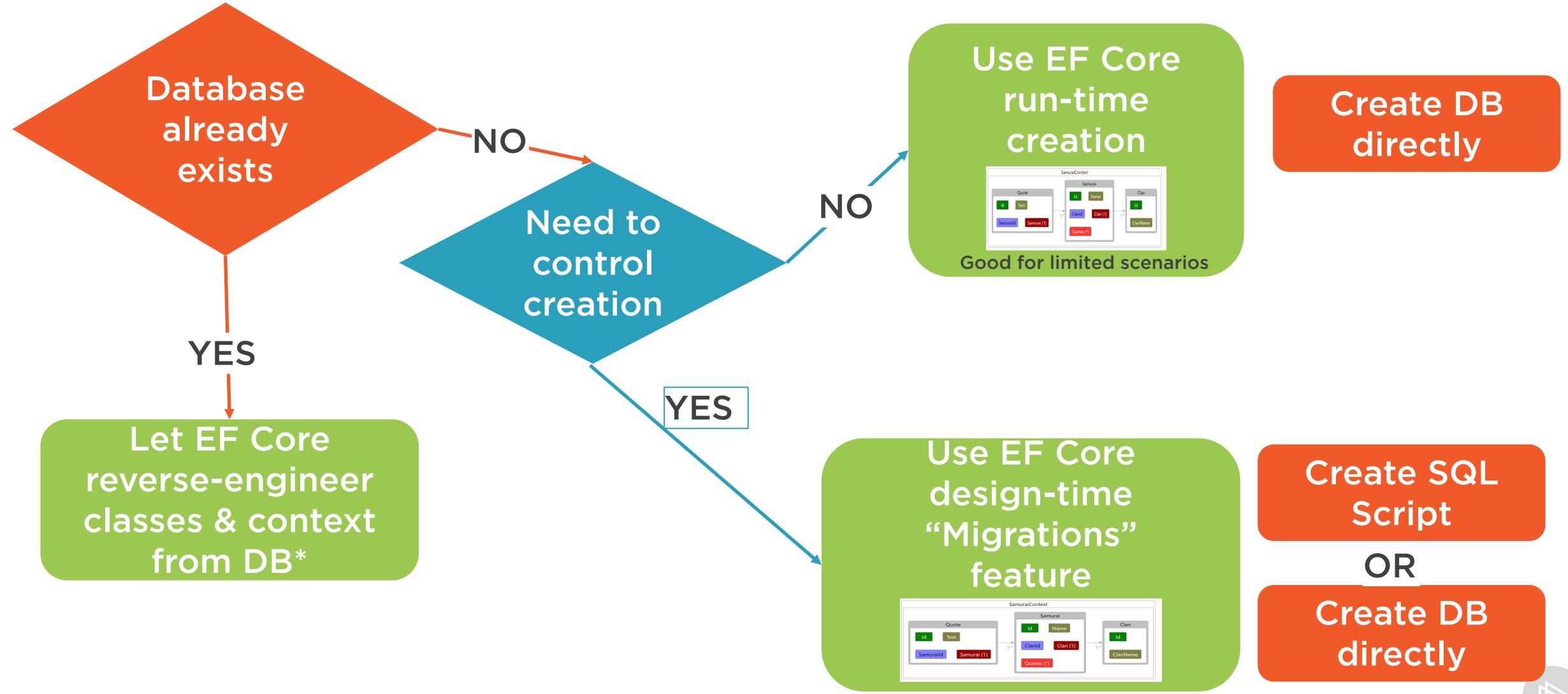


No More Database Magic

You must specify
data provider & connection string



What About My Database?



A Sneak Peek at Writing and Reading Data



The following code will be a simple hack so you can see EF Core do its job before learning more.



Review

Learned what EF Core is for

Created a data model with EF Core

Learned about the EF Core APIs and their storage provider APIs

Witnessed some basic interaction to insert and query data

Resources

Entity Framework Core on GitHub github.com/dotnet/efcore

EF Core Documentation docs.microsoft.com/ef

Install dotnet Core SDK dot.net or dotnet.microsoft.com/download

Plan for Entity Framework Core 5.0

<https://docs.microsoft.com/en-us/ef/core/what-is-new/ef-core-5.0/plan>

EF Core 5.0: Building on the Foundation codemag.com/Article/20100412

EF Core 3.0: A Foundation for the Future codemag.com/Article/1911062

EF Core providers docs.microsoft.com/ef/core/providers

EF Core Migrations in Team Environments

docs.microsoft.com/ef/core/managing-schemas/migrations/teams



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