

Creation of database applications using ORM (Entity Framework)

Course code: DOTNET_DB

The course is intended for developers and architects on the .NET platform and will provide students with the knowledge and skills needed to develop data-oriented applications using the latest Entity Framework Core technology.

Affiliate	Duration	Course price	ITB
Praha	3	16 500 Kč	30
Bratislava	3	660 €	30

The prices are without VAT.

Course terms

Date	Duration	Course price	Type	Course language	Location
 17.12.2025	3	16 500 Kč	Telepresence	CZ/SK	GOPAS Praha
 17.12.2025	3	16 500 Kč	Telepresence	CZ/SK	GOPAS Brno
 17.12.2025	3	660 €	Telepresence	CZ/SK	GOPAS Bratislava
 09.03.2026	3	660 €	Telepresence	CZ/SK	GOPAS Bratislava
 09.03.2026	3	16 500 Kč	Telepresence	CZ/SK	GOPAS Brno
 09.03.2026	3	16 500 Kč	Telepresence	CZ/SK	GOPAS Praha
 17.06.2026	3	16 500 Kč	Telepresence	CZ/SK	GOPAS Praha
 17.06.2026	3	660 €	Telepresence	CZ/SK	GOPAS Bratislava
 17.06.2026	3	16 500 Kč	Telepresence	CZ/SK	GOPAS Brno

The prices are without VAT.

What we will teach you

- You get an overall overview
- You will learn to use LINQ and querying relational databases
- You will learn how to project changes to a data source using Savechanges
- You will learn to use Migrations

Required entry skills

- The course assumes knowledge and experience with C# programming at the level of the GOC2125 course
- The course can be taken without prior knowledge of c# and the .Net platform, but in that case a very good programming knowledge of other platforms and languages such as Java or C++ is required.

Teaching methods

- Expert interpretation with practical examples, exercises on computers.

Studying materials

- Printed presentations of the discussed material.

Course outline

Introductory overview

- History
- NuGet packages
- Model

Mapping

GOPAS Praha
Kodaňská 1441/46
101 00 Praha 10
Tel.: +420 234 064 900-3
info@gopas.cz

GOPAS Brno
Nové sady 996/25
602 00 Brno
Tel.: +420 542 422 111
info@gopas.cz

GOPAS Bratislava
Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 248 282 701-2
info@gopas.sk



Copyright © 2020 GOPAS, a.s.,
All rights reserved

Creation of database applications using ORM (Entity Framework)

- Entities
- Property
- Keys, alternative keys
- Generated ID
- Association
- Backing fields
- Owned types
- Model Level Filters
- Table Splitting, Table Sharing
- Heredity, TPT, TPH
- Value Converters, Value Comparators
- Keyless entities
- ctor parameters
- Query tags
- Shadow properties
- Shared entities, property bags
- Flexible mapping
- Seeding

Interviewees

- LINQ, parameters
- pure SQL
- function
- query compilation
- Include, Explicit loading, Filtered Include
- Lazy Loading
- Split queries
- tracking, no tracking queries

SaveChanges

- validation
- batching
- ID generation
- transactions
- ChangeTracker
- concurrency

Migration

- work with migrations
- touch ef
- IMigrator
- script, idempotent, transaction

Other platforms

- Works on other platforms
- Working with "other" DBs

GOPAS Praha

Kodaňská 1441/46
101 00 Praha 10
Tel.: +420 234 064 900-3
info@gopas.cz

GOPAS Brno

Nové sady 996/25
602 00 Brno
Tel.: +420 542 422 111
info@gopas.cz

GOPAS Bratislava

Dr. Vladimíra Clementisa 10
Bratislava, 821 02
Tel.: +421 248 282 701-2
info@gopas.sk



Copyright © 2020 GOPAS, a.s.,
All rights reserved