

IT Boot Camp Training Program

Nr	#080102
Title	Software Engineering (.NET, C#, APIs, ASP.NET, Security) for Advanced
Date	1.7.2024 - 26.7.2024
Duration	20 working days
Language	English
Fees	7500 CHF zzgl. MwSt
Place	First 2 days in Zürich by Digi2Cloud, remaining days per online 8 hours daily, from 09:00 to 17:30 (1/2 hour break)
Requirements	<ul style="list-style-type: none"> - Basic knowledge of computer science and programming in C# - Basic knowledge of networking and HTTP - Your own computer able to run latest version of Visual Studio OR Visual Studio Code
Key Learnings	<ul style="list-style-type: none"> - ASP.NET - Databases & C# ORMs - SQL & MSSQL + MongoDB - Modern IT security - Well designed API - REST, RPC, gRPC

Description	
	Day 1: SW engineering lecture: IT security, DDD, CQRS, well designed API, obsolete paradigms, databases & SQL lecture, legolike approach
	Day 2: Individual project assignment, start & setup, ASP.NET basics, DI & IoC, logging, configuration, metrics, attributes
	Day 3: EF Core, IQueryable & IEnumerable
	Day 4: EF Core migrations
	Day 5: Advanced SQL exercises: transactions, locking
	Day 6: ASP.NET views, Razor pages, View Components, layout, tag helpers, session & state management
	Day 7: Application Model, Filters, Routing, Middleware, Exception handling
	Day 8: Blazor deep dive
	Day 9: OAuth & OIDC lecture
	Day 10: OAuth & OIDC exercises
	Day 11: Encryption exercises: RSA, ES
	Day 12: Localization & Globalization
	Day 13: Caching, IMemoryCache, Redis, ramdisks
	Day 14: Testing: NUnit vs xUnit, regression testing
	Day 15: Benchmarking & load testing (jmeter)
	Day 16: Endpoint layer, Swagger & OpenAPI, REST, gRPC, SignalR
	Day 17: Containerisation basics, dockerfile, docker compose
	Day 18: Code generation, reflection, Roslyn analyzers
	Day 19: Project overview, team & individual coaching
	Day 20: Project overview, team & individual coaching