

IT Boot Camp Training Program

Nr	#080101
Title	Software Engineering for Beginners (.NET, C#, APIs, ASP.NET, Security)
Date	13.5.2024 - 7.6.2024
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"> • No prior knowledge required • Your own computer able to run latest version of Visual Studio OR Visual Studio Code
Key Learnings	<p>Computer Science basics and C# programming</p> <ul style="list-style-type: none"> • Networking basics • C# language • .NET environment • Object oriented programming • Async & multithreaded applications • Data structures & algorithms • Files & Sockets <p>Participant of this course will have a solid understanding of computer science and C# and have higher than average chances to get a job in a Swiss job market as a C#/.NET junior developer.</p>

Description	<p>Day 1: CS theory, Networking, Programming, Lego-like approach Day 2: Project start & setup, types, variables, control flows, array, List, Dictionary, statements, stack/heap, namespaces, string/String, Day 3: Exception handling, OOP, constructors, fields, properties, readonly, collections, LINQ, date & time, exercises Day 4: Value/reference nullability, null, as, is, explicit/implicit conversion, boxing/unboxing Day 5: async/await, Task, TCS/CTS exercises, Thread API, thread starvation, race condition, deadlock exercise Day 6: HTTP & text encoding + exercises Day 7: File API, Socket API Day 8: HTML/CSS basics & exercises Day 9: IDisposable, locking, structs, mutability & immutability Day 10: Trees & recursion exercises Day 11: Deadlock, race condition, thread starvation exercises Day 12: lambdas, Action, Func, delegates, events + WinForm exercise Day 13: Records, code generation, collection expressions Day 14: Local functions, indexers, structs, records, comparison, hash code Day 15: HTTP routing & middleware Day 16: Code organization & conventions Day 17: git lecture Day 18: NuGet lecture, Github Copilot introduction Day 19: Project overview, team & individual coaching Day 20: Project overview, team & individual coaching</p>
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Zürich, 04.04.2024