

C# Advanced

Course Introduction



SoftUni Team
Technical Trainers



SoftUni

Software University

<https://softuni.bg>

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#csharp-advanced

SoftUni Diamond Partners



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Course Objectives

C# Advanced Module Goals

- Working with **linear data structures**
- Getting familiar with **streams** and **files**
- Creating **custom** data structures
- Building class **hierarchies**
- Working with **exceptions**
- Applying **principles** and good **practices** for building **quality software**
- Testing application correctness



C# Advanced Course Goals

- Working with **linear data structures**
 - **Stacks, queues** and **multidimensional arrays**
- Getting familiar with **streams** and **files**
- Creating **custom** data structures
 - **List<T>**, **Stack<T>** and **LinkedList<T>**
- Simple **algorithms**
 - **Recursion, Sorting** and **Searching**



Practical Programming Exam

- 3 practical problems for 4 hours
 - The first two problems may include:
 - Stacks and Queues
 - Multidimensional Arrays
 - Dictionaries
 - Defining Classes
- Automated judge system
 - <http://judge.softuni.bg>
- Solutions are evaluated for correctness only
 - Code quality is still not measured



Theoretical Exam



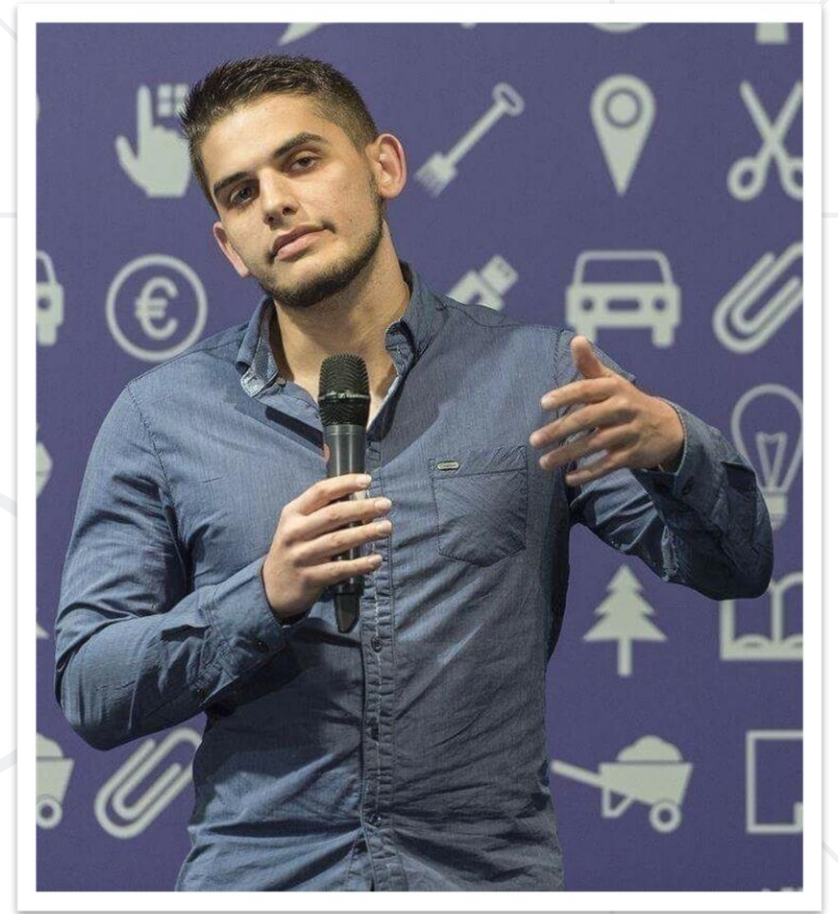
- You will have **30 minutes** once you start
 - Multiple choice with **one** correct answer
 - English
- Automated quiz system
- Available during the **practical** exam and **30 minutes after it**
 - You can submit your answers just **one time**
 - Advice: Start it when you **finish** the **practical exam**



The Team

Your Trainers and Mentors

- **Manager, Software Engineering @ Nuvolo**
- **Worked at Amazon**
- **John Atanasoff award**
- **Participated in many programming contests**
- **10+ Years of Experience as a Developer**



- **Experienced C# Developer:**
 - Over 12 years of experience in the IT industry.
 - Specialized in creating and implementing high-performance solutions for corporate clients.
- **Professional Background:**
 - DXC Technology
 - Hewlett Packard Enterprise
 - HP
- **Successfully completed projects for prestigious clients:**
 - E.ON, BMW, MEWA, Swedavia





Course Organization

C# Advanced Course – Timeline

09-Jan-2024

17-Feb-2024

10-Apr-2024

C# Advanced

**6 weeks * 4 times / week
12 credits**

Start: 09-January-2024

Theoretical Exam: 17-February-2024

Practical Exam: 17-February-2024

Theoretical Exam Retake: 10-April-2024

Practical Exam Retake: 10-April-2024

- Your **homework** is mainly work in class
 - **Lesson days** → slides + live demos + exercises
 - **Exercise days** → only exercises
- How to submit your homework?
 - Submitted in the **judge system**
- Do your homework when it's due
 - **Assignments pile up quickly**







Course Web Site, Forum and FB Group

- Official web site:

<https://softuni.bg/trainings/4376/csharp-advanced-january-2024>

- Official discussion forum:

<https://softuni.bg/forum/categories/30/>

- Official Facebook group:

<https://www.facebook.com/groups/CsharpAdvancedJanuary2024>

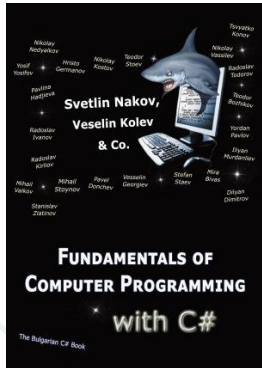
- Community Facebook group:

<https://www.facebook.com/groups/SoftUniCSharpCommunity/>



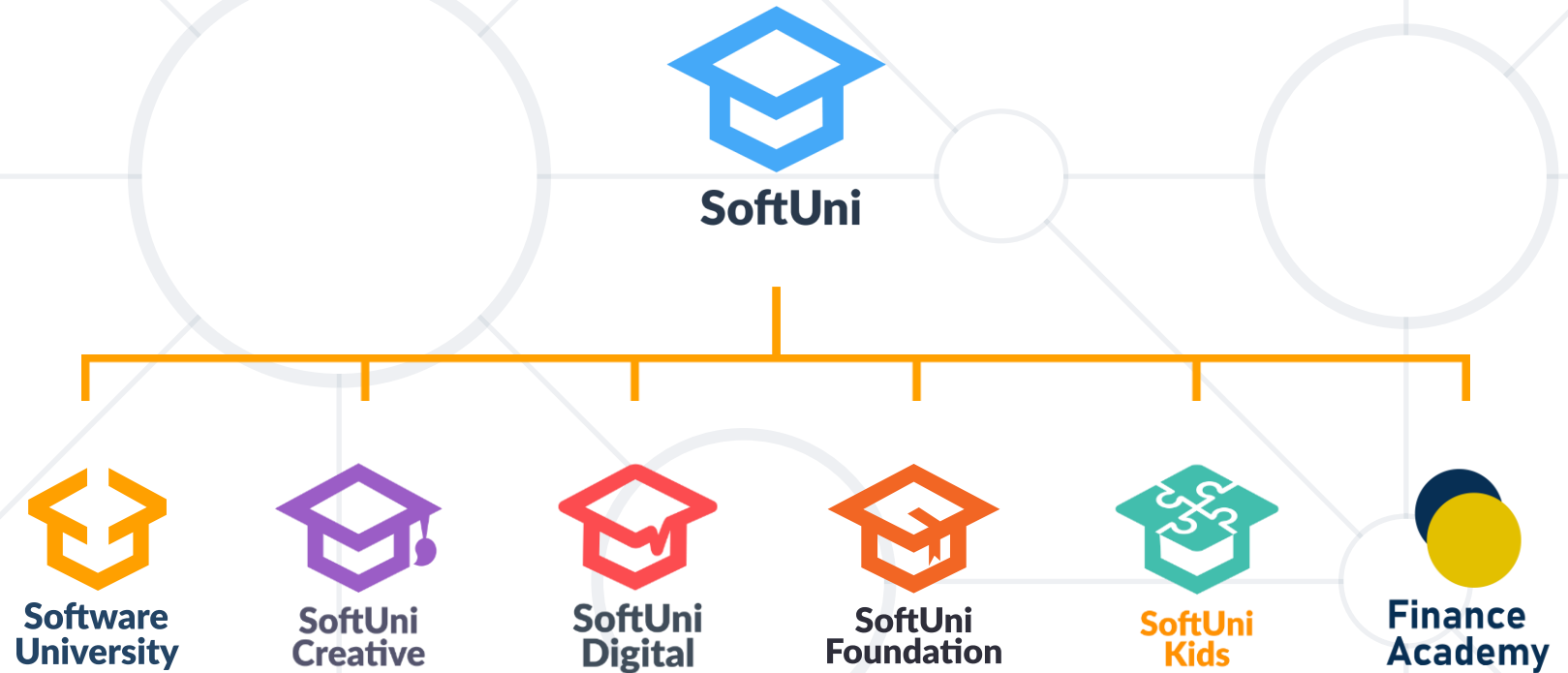
- The course assignments require to **search in Internet**
- This is an important part of the learning process
- Some exercises intentionally have no hints
- Learn to find solutions!
- Software development includes **everyday searching and learning**
- No excuses, just **learn to study!**
- Developers learn new technologies, tools, languages every day!





- The official textbook for the course
 - "Fundamentals of Computer Programming with C#", by Svetlin Nakov & Co., 2018, ISBN 9786190007784
 - English and Bulgarian versions (as PDF, ePub, ...)
 - Freely downloadable from:
www.introprogramming.info
 - The C# Programming courses @ SoftUni.bg partially follow the book

Questions?



- Software University – High-Quality Education, Profession and Job for Software Developers

- softuni.bg, about.softuni.bg

- Software University Foundation

- softuni.foundation

- Software University @ Facebook

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- Software University Forums

- forum.softuni.bg



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