

# C# Advanced

## Course Introduction



SoftUni Team  
Technical Trainers



**SoftUni**

Software University

<https://softuni.bg>

[sli.do](https://sli.do)

**#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**

- C# Web Developer
- 9+ years experience in .NET ecosystem
- Graduated the first class @ SoftUni
- Back-End Developer @ Excitel Technology
- Experienced with:  
*.NET Framework, JavaScript, Azure, Unity, SEO and others*



- Founder @ card games websites and apps
- Technical Trainer @ **SoftUni**
  - 6+ years experience
- **Microsoft** Certified Trainer 3+ years
- Experienced with:  
*.NET Core, Unity, Azure, JavaScript, SEO and others*





# Course Organization

# C# Advanced Course – Timeline

13-May-2024

22-Jun-2024

12-Aug-2024

**C# Advanced**

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

**Start: 13-May-2024**

**Theoretical Exam: 22-June-2024**

**Practical Exam: 22-June-2024**

**Theoretical Exam Retake: 12-August-2024**

**Practical Exam Retake: 12-August-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/4520/csharp-advanced-may-2024>

- Official Facebook group:

<https://www.facebook.com/groups/CsharpAdvancedMay2024>

- Community Facebook group:

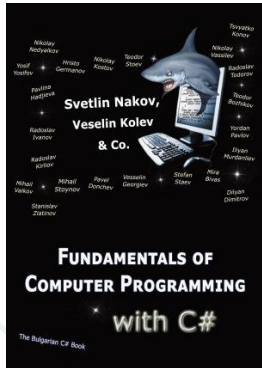
<https://www.facebook.com/groups/SoftUniCSharpCommunity/>



- 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!

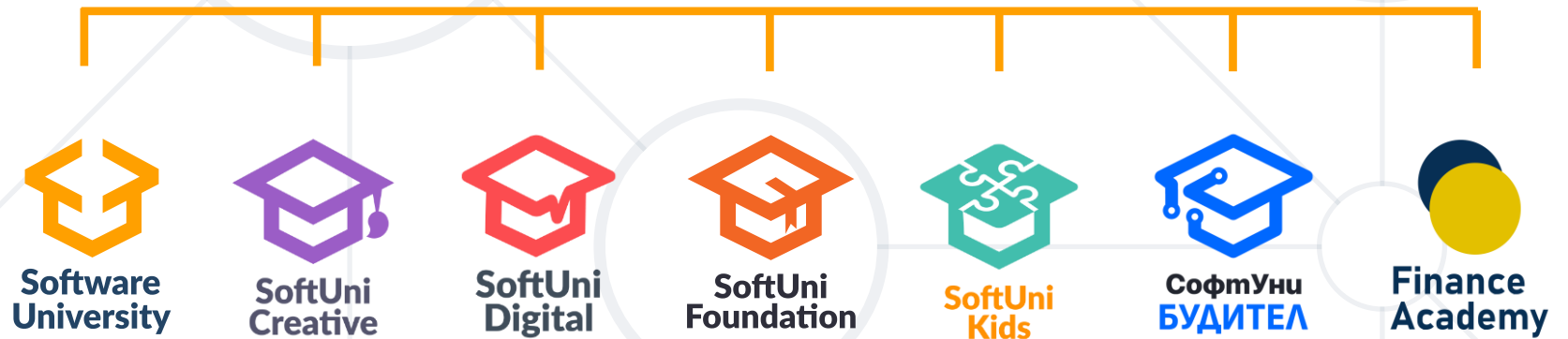


# The Free C# Fundamentals Textbook



- 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](http://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](http://softuni.bg), [about.softuni.bg](http://about.softuni.bg)

- Software University Foundation

- [softuni.foundation](http://softuni.foundation)

- Software University @ Facebook

- [facebook.com/SoftwareUniversity](https://facebook.com/SoftwareUniversity)



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