

# C# OOP

## Course Introduction



**SoftUni**

**SoftUni Team**  
**Technical Trainers**



**Software University**

<https://softuni.bg/>

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

**#csharp-advanced**

# SoftUni Diamond Partners



# Table of Contents

1. Course Objectives
2. Training and Team
3. Course Organization
  - Course Infrastructure
  - Evaluation Criteria





# Course Objectives

# Why OOP?



- **Object-oriented programming** is an important paradigm
- Anyone involved in software development should be familiar with **OOP** and **Object-oriented modelling**
- All modern languages are either object-oriented or support classes and objects
  - Modern frameworks, libraries and APIs are object-oriented
- OOP is a **basic requirement** for starting a job as developer

# Course Program

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1. Inheritance
  2. Encapsulation
  3. Interfaces and Abstraction
  4. Polymorphism
  5. Exception Handling
  6. SOLID
  7. Reflection and Attributes
  8. Unit Testing
  9. Mocking and Test Driven Development
  10. Design Patterns
  11. Workshop
  12. Exam Preparation

# Practical Exam

- **2 practical** problems for **4 hours**:
  - Create a simple project that:
    - Follows the **OOP principles**
    - **Implements functionality** based on a description
  - Test a provided class
- Automated judge system with **real-time feedback**
  - Upload a zip project to the judge system





# Theoretical Exam

- You will have **30 minutes** once you enter
  - 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

- 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*



- Product Technical Lead @ **OneBit Software**
- The winner of **SoftUniada 2023**
- "**Youth Award**" prize from **BAIT**
- Author of **numerous libraries** that are successfully applied in **many projects**
- Regular participant in programming **competitions, Olympiads, and hackathons**





# Course Organization

# C# OOP Course – Timeline

24-Jun-2024

10-Aug-2024 14-Aug-2024

**C# OOP**

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

**15 credits**

**Start: 24-Jun-2024**

**Theoretical Exam: 10-Aug-2024**

**Practical Exam: 10-Aug-2024**

**Theoretical Exam Retake: 14-Aug-2024**

**Practical Exam Retake: 14-Aug-2024**

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









- Official web site:

<https://softuni.bg/trainings/4526/csharp-oop-june-2024>

- Official Facebook group:

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

- Community Facebook group:

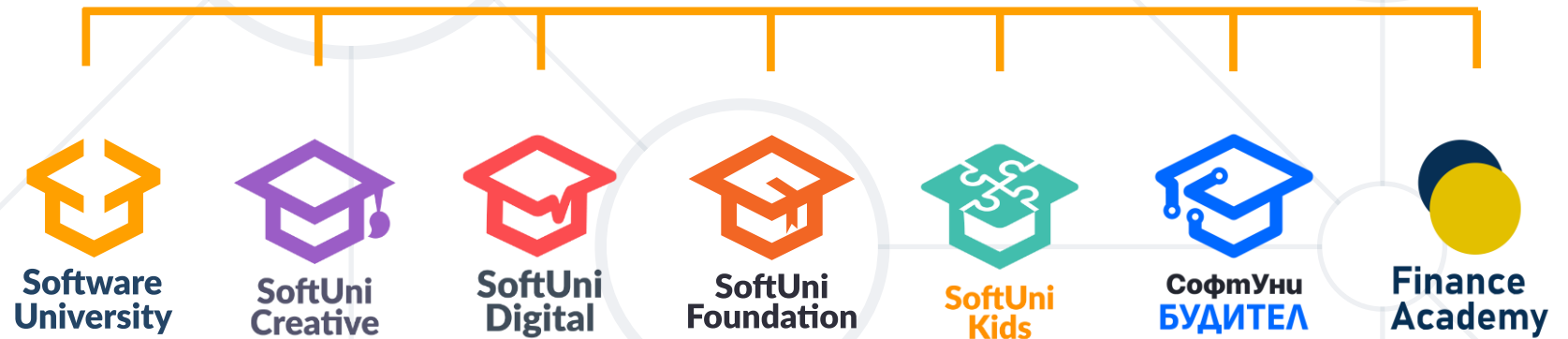
<https://www.facebook.com/groups/SoftUniCSharpCommunity/>



- 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!



# 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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