C# OOP

Course Introduction

SoftUni Team

Technical Trainers

Software University

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sli.do

#csharp-advanced

SoftUni Diamond Partners

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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

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

Viktor Dakov

- **Manager, Software Engineering @ Nuvolo**

- Worked at **Amazon**

- **John Atanasoff award**

- Participated in many programming contests

- 10+ Years of Experience as a Developer

Doncho Georgiev

- **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# OOP Course – Timeline

Software University

20-Feb-2024

06-Apr-2024   16-Apr-2024

**C# OOP
6 weeks * 4 times/week
15 credits**

**Start: 20-February-2024
Theoretical Exam: 06-April-2024
Practical Exam: 06-April-2024
Theoretical Exam Retake: 16-April-2024
Practical Exam Retake: 16-April-2024**

Homework Assignments & Exercises

- 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

SoftUni Certificate

Practical Exam 100%

Evaluation

Homework 5% (bonus)

CPE Certificate

Course Web Site, Forum and FB Group

- Official web site:

  https://softuni.bg/trainings/4377/csharp-oop-february-2024

- Official Facebook group:

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

- Community Facebook group:

  https://www.facebook.com/groups/SoftUniCSharpCommunity/
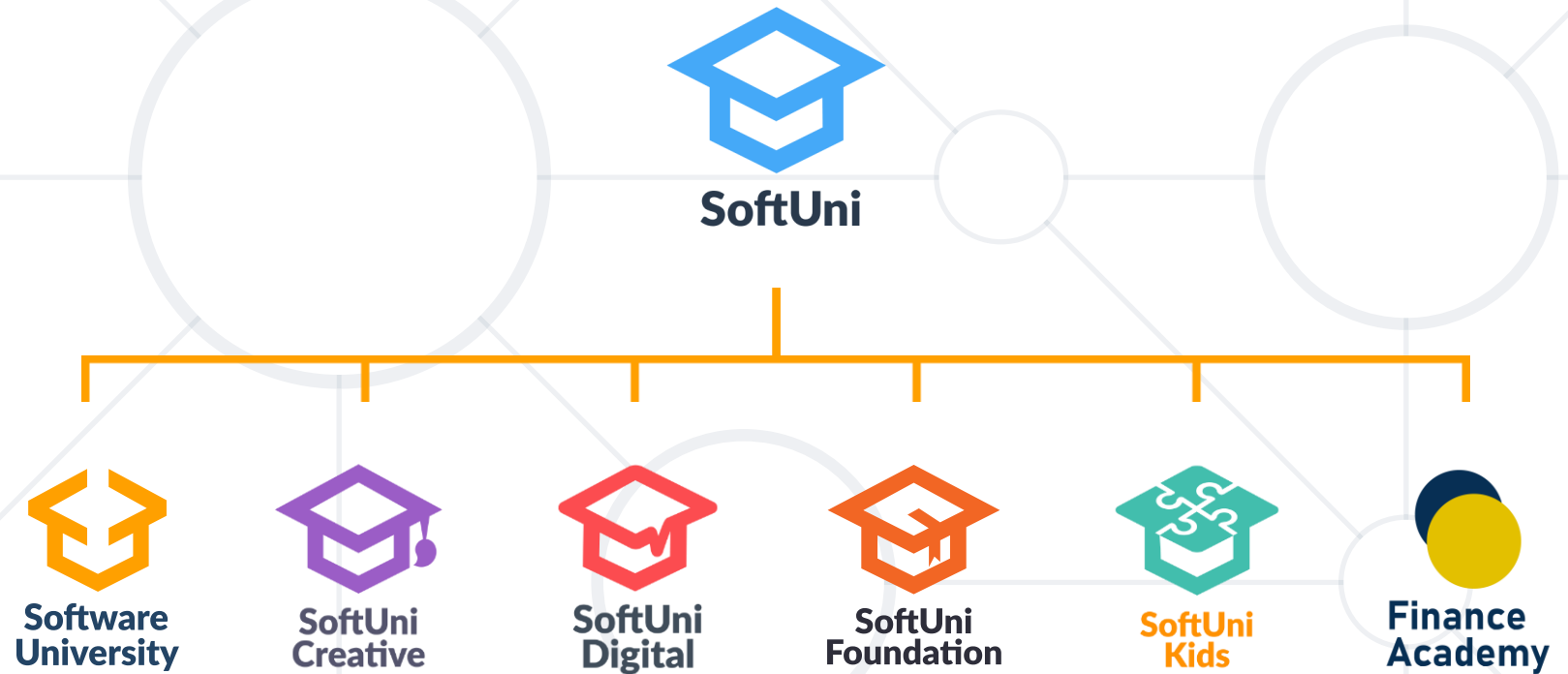
Learn to Search in Internet

- 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?

Trainings @ Software University (SoftUni)

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

  - softuni.bg, about.softuni.bg

- Software University Foundation

  - softuni.foundation

- Software University @ Facebook

  - facebook.com/SoftwareUniversity

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