Data Structures Fundamentals (with Java)

Course Introduction

SoftUni Team

Technical Trainers

Software University

SoftUni

Software University

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QA Sessions sli.do

#DS-Java

SoftUni Diamond Partners

Course Objectives

Course Objectives

- Working with data structures and analyze algorithmic complexity

- Implementing data structures

- Comparison between similar operations in different data structures

- Building solid knowledge base on data storage implementation details and optimization problems in real time environment

Course Objectives

- The course will be conducted by recording.

- The videos and learning resources will be available on the day of the class at 10:00 a.m., from the course page.

- There will be a live Exam Preparation with the lector where you can ask questions and go over the more complex points of the material.

- The date of the Exam Preparation is on 03 October at 18:30.

Time Management

Software University

05-Sep-2023   07-Oct-2023   14-Oct-2023

**Introduction to Data Structures Fundamentals
(with Java)
5 weeks * twice/week**

Start: 05-Sep-2023

**Exam Regular: 07-Oct-2023
Exam Theoretical Regular - 07-Oct-2023**

**Exam Retake: 14-Oct-2023
Exam Theoretical Retake: 14-Oct-2023**

Practical Programming Exam

- Exam

  - 4 practical problems for **four** hours

  - Two conditions in the competition

    - 2 Correctness - 100 points each

    - 2 Performances - 50 points each

    - Everything included in the course

Theoretical Exam

- You will have 30 minutes once you enter

- 20 questions with:
  - Multiple choice with only one correct answers
  - English

- Automated quiz system

- Available online at the day and time of the practical exam
  - You can submit your answers just once

The Team

Nikolay Bankin

- Software Engineer with many years of experience with various technologies

- Teacher at TUES

- Many years of experience as a Trainer

- He has worked with Scala, Akka, Java and JavaScript

Martin Paunov

- Java Developer @ VMware

- Experience with Java, C++, C#

- Technical Trainer @ SoftUni

- Interested in Astrophysics

Georgi Georgiev

- Technical trainer @ SoftUni

  - C++, C#, Java, Data Structures and others

- Developer @ vrs.racing

  - Java, JavaScript, C++

- Experience

  - 5+ years training, 11+ years coding

- Wrote a driving simulator once in high school (DriveFreeZ)

- Played around with OpenGL, Bullet Physics SDK, WinRT

Course Organization

Homework Assignments & Exercises

- Your homework:
  - Lesson days → slides + demos + exercises + tests
  - One week after each lesson you will find a solution to the Lab on the course page
- How to submit your homework?
  - For practical problems:
    Submitted in the **judge system**
  - For tests **https://quiz.softuni.bg/**
- Do your homework when it's due
  - Assignments pile up quickly

SoftUni Certificate

Practical Exam 100%

Evaluation

Homework 5%

CPE Certificate

Course Web Site, Forum and FB Group

- Official web site:

  https://softuni.bg/trainings/4275/data-structures-fundamentals-with-java-september-2023

- Official discussion forum:

  https://softuni.bg/forum

- Official Facebook group:

  https://www.facebook.com/groups/DataStructuresFundamentalswithJavaSeptember2023
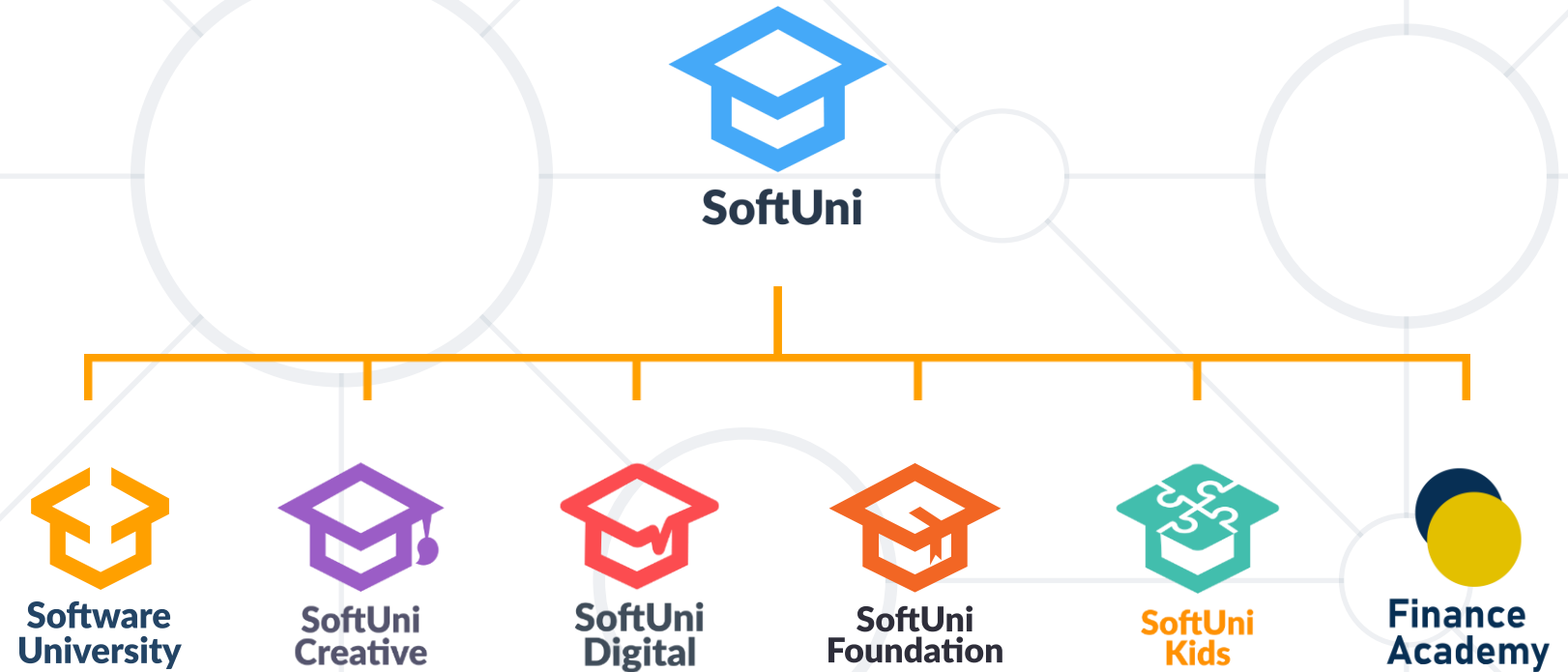
Learn to Search in Internet

- 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

- Software University Forums

  - forum.softuni.bg

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