

Back-End Technologies Basics

Course Introduction



SoftUni Team
Technical Trainers



SoftUni



Software University

<https://softuni.bg/>

You Have Questions?

sli.do

#QA-Auto-BackEnd

SoftUni Diamond Partners



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Course Objectives and Scope

Course Goals



- Develop fundamental understanding of **back-end technologies** and **JavaScript**, enabling effective testing and problem-solving in QA
- Practice **unit** and **integration testing** techniques, and apply these skills in practical projects and exercises
- Gain **knowledge** in **advanced QA** practices, including API and database testing, and the use of container technologies

Course Scope

- Exploring and practicing with:
 - Different Data Formats: JSON, and YAML, XML
 - JavaScript
 - Unit Testing with JavaScript
 - Databases (NoSQL)
 - Integration Testing
 - Unit Testing with Mocking
 - RESTful API Backend Apps
 - Code Coverage
 - Mutation Testing
 - Containers, Docker and Docker Compose





Training Team

- **Senior Software Engineer at Moteefe**
- 10+ years experience with **MEAN** and **.NET** ecosystems
- Expert in **Node.js**, **React**, and **Amazon Web Services**
- Values quality programming and all related to software quality improvements



- **QA Automation Developer** with over 6 years of experience
- Programming background since high school
- Education in **Computer and Software Engineering** from TU
- Professional experience with companies like Seeburger and Automate the Planet
- Current Role: **Senior QA Automation Developer at Nuvolo**





Course Organization

Software Technologies Course Timeline

08-Jan-2024

25-Feb-2024

15-Apr-2024

Back-End Technologies Basics
7 weeks * 3 times / week
12 credits

Start: 08-Jan-2024
Theoretical Exam: 25-Feb-2024
Practical Exam: 25-Feb-2024
Theoretical Exam Retake: 15-Apr-2024
Practical Exam Retake: 15-Apr-2024




Exam

Exams

- Both exams will be conducted in English
- **Practical Exam**
 - Practical Tasks for 6 hours
 - Judge system
- **Theoretical Exam**
 - 10 questions for 30 minutes
 - Multiple-choice with **1 correct** answer
 - Automated **quiz system**



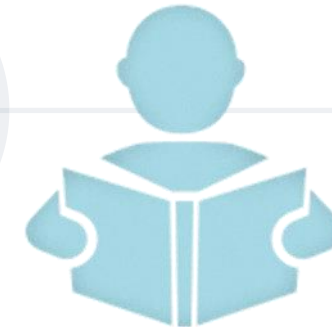


**Practical
Exam
100%**

Evaluation



- 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!
 - Quality assurance includes **everyday searching and learning**
 - No excuses, just **learn to study!**
 - QAs learn new technologies, tools, languages every day!



Course Web Site, Forum and FB Group

- Official web site:

<https://softuni.bg/trainings/4398/back-end-technologies-basics-january-2024>

- Official discussion forums:

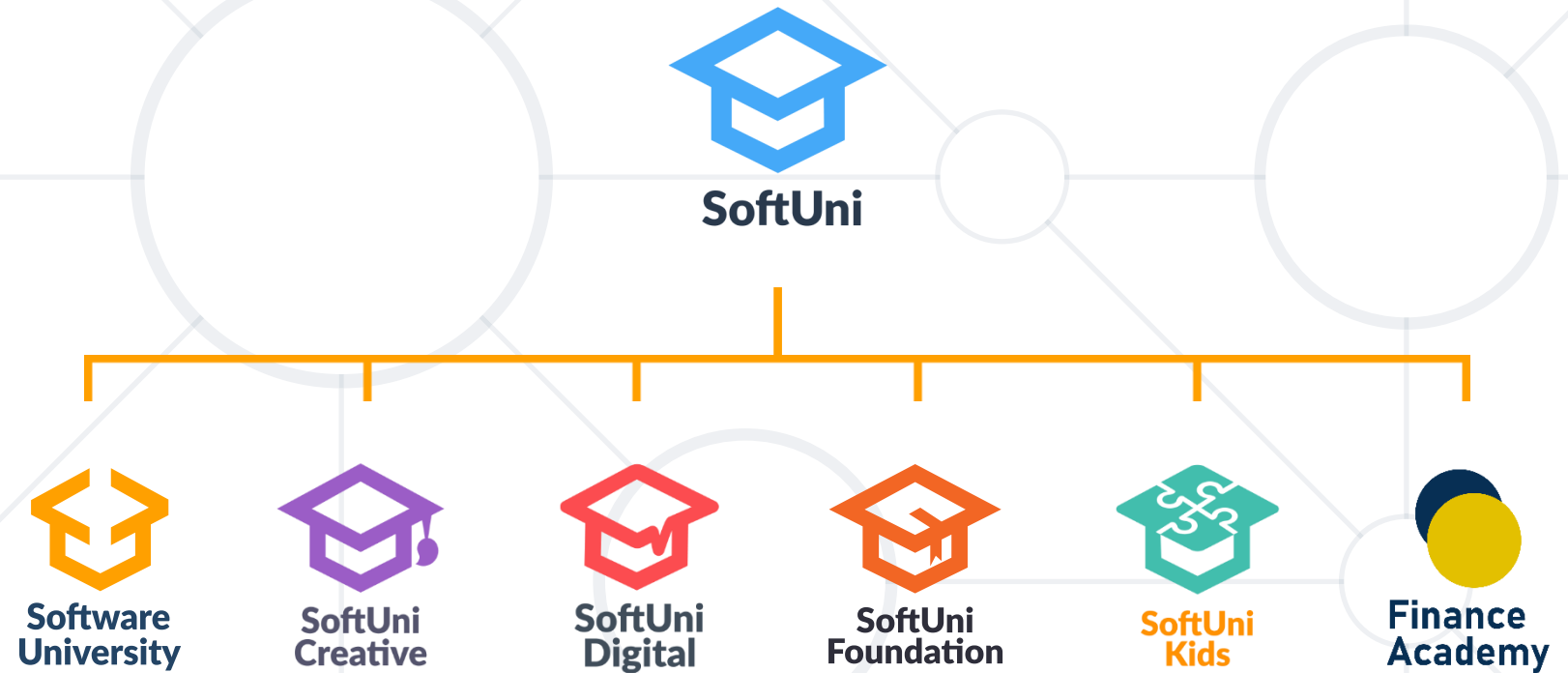
<https://softuni.bg/forum>

- Official Facebook group:

<https://www.facebook.com/groups/BackEndTestAutomationJanuary2024>



Questions?



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