## Certificate nr 169 - 24

This document certifies that:

Jaanus Saar (ID code: 38502220233)

has completed the mandatory study program "Software and Application Development and Analysis" by kood/Jõhvi

Time of study: 13.09.2023 - 20.11.2024

Total study volume: 3750 academic hours

Completed modules:

- Go (1250 academic hours)
- Javascript (1250 academic hours)
- Cloud DevOps (1250 academic hours)

Registry code: 80583085

EHIS reg. nr: 224202





## Certificate Cover Letter

A graduate of the adult retraining program "kood/Jõhvi" is prepared to work as a junior full-stack software developer.

Study volume: 3750 academic hours (up to 24 months), of which:

- 1250 academic hours (up to 8 months) learning Go coding language;
- 1250 academic hours (up to 8 months) learning JavaScript coding language
- 1250 academic hours (up to 8 months) Rust language or one specialisation module (Videogames, BlockChain & Crypto, Artificial Intelligence, Cloud DevOps, UI UX, Mobile Applications or Cybersecurity)

Retraining program provider: 01 Edu System (Nicolas Sadirac)

Technologies learned: CSS, Docker, .NET, Django, Electron, Laravel, React, Ruby on Rails, GraphQl, HTML, C, C#, C++, Go, Java, JS, PHP, Python, Ruby, Rust, Shell, SQL, Unix

**Technical skills learned**: Elementary algorithms, AI, Back-end, Elementary programming, Blockchain, Front-end, Game programming, TCP/IP, Mobile development, Statistics, System administration

## Main learning outcomes:

- Writing program code in the following programming languages: Javascript, Go, Rust, basic knowledge of C, C++, Ruby-on-Rails, PHP, Python
- Designs the product and its architectural solutions
- Implements, installs and tests solutions
- Participates in both independent and team-based software development work

## Grading:

- Learning outcomes are evaluated on an ongoing basis both through control modules built into the 01Edu System, which checks the reliability of the program code written by the learner, and by technical tutors
- The quality of the learner's work is sufficient if the program code works to fulfill the purpose of the task presented in the program according to the instructions. If the code works, a student received a predetermined number of points in the program according to this task. If the code does not work and there is no result, the learner does not get points and cannot move on to the next task until they reach the correct solution
- The minimum number of points (XP) to complete the program is 4,767,000