Rares Mihalache

raresmihalache.github.io
raresmihalache000@gmail.com | (+40) 773-943-356

Summary: Highly motivated developer, interested in everything that relates to technology, especially embedded systems, web and game development. Eager to learn new technologies and find solutions to all kinds of problems.

LINKS

Github:// **raresmihalache**
LinkedIn:// **raresmihalache**

SKILLS

PROGRAMMING

Advanced:

- C
- Java
- Arduino
- MySQL

Intermediate:

- Python
- C++
- Spring
- x86 Assembly

Beginner:

- JavaScript
- Django
- C#
- NumPy
- .NET
- Pandas

OTHERS:

- Data Structures
- Git
- Algorithms
- Linux
- Regex
- HTML
- LaTeX
- CSS

EDUCATION

TECHNICAL UNIVERSITY OF CLUJ-NAPOCA

Bachelor in Computer Science
2019 - 2023 (expected)
Cluj-Napoca, Romania

"UNIREA" NATIONAL COLLEGE

High School Diploma
2015-2019
Targu-Mures, Romania

PROJECTS

TOWN HALL APPLICATION | Open Source Application

- Designed a system used by town halls for issuing documents.
- Two actors: admin and client. Admin can perform CRUD operations. Each client can have multiple houses. For each house he can request some type of documents.
- This application was built using Layered architecture.
- Used Java Reflection to get all fields of an entity and store them in tables' headers.
- Technologies used: Java, JPA, Hibernate, MySQL, Git
- Link: https://raresmihalache.github.io/TownHall

POLYNOMIAL CALCULATOR | Open Source Application

- Open Source Application based on calculating operations with polynomials. It is an OOP based project.
- The app consists of a GUI designed with Java Swing and the logic follows MVC architectural pattern. The user must give one or two polynomials, depending on the operation he wants to perform, press a button and the result is given in a text-field.
- Technologies: Java, Regex, Git
- Link: https://raresmihalache.github.io/PolynomialCalculator

ATM - ARDUINO MEGA 2560

- Designed an ATM using multiple components (motors, RFID card reader, H-Bridges, etc.)
- Used SPI protocol to communicate between microcontroller and card reader. Multiple RFID 13.56 MHz cards have been used to write data on each card.
- Assigned specific functionality for each push button on the breadboard. When a button is pressed, an ISR is called. A button may have multiple effects, depending on the state of the machine.
- Link: https://github.com/RaresMihalache/ATM arduino
- Demo: https://www.youtube.com/atm

FOOD DELIVERY MANAGEMENT SYSTEM | Open Source Application

- Designed a delivery management system for a catering company.
- Implemented CRUD operations for users, menu items and orders.
- Defined 3 types of users (actors): employee, client and admin. They all have certain capabilities.
- Persisted data in memory and secured it using serialization. By future system executions, this data will be available.
- Implemented GUI using JavaFX and Swing.
- Link: https://github.com/RaresMihalache/Food-Delivery-Management-System