



Francesco Maxim

Date of birth: 08/04/2002 | **Nationality:** Romanian | **Gender:** Male | **Phone number:** (+40) 0783117797 (Home) | **Email address:** francesco.maxim@icloud.com | **Website:** francescomaxim.github.io | **LinkedIn:** <https://www.linkedin.com/in/francescomaxim/> | **Address:** Cluj-Napoca, Romania (Home)

ABOUT ME

Passionate and hard working university student. Aiming to use my knowledge that I have acquired from my coursework as well as self study and with my hard work to satisfy my mission at your organization and also willing to learn more from this job.

WORK EXPERIENCE

07/2024 – CURRENT Cluj-Napoca, Romania

WORKING STUDENT - FRONTEND DEVELOPER NTT DATA

As a working student front-end developer, I focus on building user interfaces and enhancing user experiences for web applications. My primary tool is Angular, a powerful JavaScript framework that I use to develop dynamic, responsive, and single-page applications. I work with JavaScript to add interactivity and functionality to the web pages, while HTML5/CSS3 are used for structuring content and styling, ensuring the web pages are visually appealing and user-friendly. I also use Bootstrap, a front-end framework, to create responsive designs that work seamlessly across different devices and screen sizes.

EDUCATION AND TRAINING

10/2022 – CURRENT Cluj-Napoca, Romania

STUDYING COMPUTER SCIENCE Tehnical University

I study a variety of subjects that provide a strong foundation in computer science and software engineering. In Computer Vision, I focus on image processing, object detection, and machine learning techniques for enabling computers to interpret visual data. Operating Systems covers the architecture and management of system resources, including processes, memory, and security. Database Management Systems (DBMS) teaches me to design and manage databases efficiently, focusing on SQL, data modeling, and transaction handling. In Web Development, I learn to build dynamic and interactive websites using both front-end technologies like HTML, CSS, JavaScript and back-end frameworks like Node.js and Django. Additionally, Project Management equips me with skills in planning, executing, and managing software projects using methodologies like Agile and Scrum. Together, these subjects prepare me to develop, manage, and innovate in various tech domains.

Website <https://ac.utcluj.ro/acasa.html>

DIGITAL SKILLS

HTML5 | CSS3 | Bootstrap v5.0 | Javascript ES6+ | Angular | API | PHP | SQL | C | C++ | Java | Python | Assembly x86 | VHDL | Git | Linux

HONOURS AND AWARDS

2021

Special Prize – Mathématiques sans Frontières

PROJECTS

2024

FRANCY'S 2.0

"Francy's Coffee 2.0" is a fully responsive website for a large coffee business, developed using HTML5, CSS3, and JavaScript. The site features a visually engaging homepage that highlights the brand's story, a comprehensive menu showcasing various beverages and pastries, an interactive store locator with maps for easy navigation, and a robust e-commerce section for online orders. JavaScript enhances user experience through interactive elements like dynamic product displays and a shopping cart system. CSS3 is utilized for smooth animations and transitions, ensuring a polished look and feel. This design prioritizes usability, providing a seamless experience for customers across all devices.

Link francescomaxim.github.io/francys20

2024

FRANCY'S

"Francy's Coffee" Project is a modern and responsive website built using HTML5 and CSS3 for a small local coffee shop. The website features a welcoming homepage with information about the café, a menu showcasing drinks, a contact section with a reservation form, and an interactive map. The design is clean, using a warm color palette that reflects the cozy atmosphere of the café. CSS3 elements are utilized for smooth transitions and subtle animations, providing an enjoyable experience for users on all devices.

This project emphasizes simplicity and accessibility, reflecting the brand's values and inviting customers to explore the café's ambiance online.

Link francescomaxim.github.io/francys

2024

PORTOFOLIO WEBSITE

"Professional Portfolio" is a responsive website designed to showcase an individual's work, built with HTML5, CSS3, and Bootstrap. It features a clean homepage introducing the individual, a detailed resume section highlighting skills, experience, and education, and a visually appealing portfolio gallery displaying key projects.

Bootstrap ensures a mobile-friendly layout for easy navigation across devices. CSS3 adds smooth animations and transitions, enhancing the modern aesthetic. This portfolio effectively presents professional qualifications in a polished, accessible manner.

Link francescomaxim.github.io

2024

ORDER MANAGEMENT APP

The project involves the implementation of an Order Management Application using Java and SQL, following a layered architecture and adhering to SOLID principles. Reflection techniques will be employed to enhance the flexibility and dynamism of the application. This system will handle operations such as order creation, updating, deletion, and retrieval, along with customer and product management.

2024

INTER-PROCESS COMMUNICATION MECHANISMS IN C

The project involves implementing inter-process communication mechanisms in the C programming language (in Linux), using named pipes to facilitate communication between a program and a testing program. The main tasks include creating a shared memory region, writing to and reading from this memory, mapping files into memory, and managing request and response messages between processes.

2024

QUEUES MANAGEMENT APPLICATION USING THREADS AND SYNCHRONIZATION MECHANISMS

The project involves the implementation of a Queue Management Application using Java, focusing on multithreading and synchronization mechanisms. This system simulates a queue management scenario, such as in a customer service center, where multiple threads represent customers being served by different service counters. The project aims to demonstrate the effective use of concurrency and synchronization to manage queues and ensure thread-safe operations.

2024

BANKING SYSTEM

The project involves the implementation of a basic banking system using Java, SQL for database management, and an API for real-time exchange rates. This system simulates fundamental banking operations such as account creation, balance checking, deposits, withdrawals, and currency conversion. The aim is to provide a practical experience in building a full-stack application integrating a relational database and external APIs.

2024

POLYNOMIAL CALCULATOR

The project involves the implementation of a Polynomial Calculator in Java, utilizing regular expressions and pattern matching for parsing and processing polynomials. The calculator will support operations such as addition, subtraction, multiplication, differentiation, and integration of polynomials. JUnit will be used for testing the functionality of the calculator to ensure correctness and reliability.

2024

MIPS PIPELINE

The project involves the implementation of a MIPS Pipeline processor using VHDL. A pipeline MIPS processor breaks down the instruction execution process into several stages, allowing multiple instructions to be processed simultaneously, thereby improving performance.

2024

MIPS SINGLE CYCLE

The project involves the implementation of a MIPS Single Cycle processor using VHDL. A single cycle MIPS processor executes each instruction in exactly one clock cycle, meaning that all operations (fetch, decode, execute, memory access, write-back) are completed within a single clock cycle.

2023

BANKING SYSTEM

The project involves the implementation of a basic banking system using VHDL. This system simulates basic banking operations such as account creation, balance checking, deposits, and withdrawals. The aim is to understand how digital systems can be designed and implemented for real-world applications using hardware description languages.

2023

SNAKE GAME

The project involves the implementation of a classic Snake game using Assembly x86 language and the Canvas library for graphics. The Snake game is a simple but engaging game where the player controls a snake to eat food and grow in length, avoiding collisions with the walls or itself. This project aims to combine low-level programming skills with basic graphics handling.

2023

CALCULATOR

The project involves the implementation of a basic calculator application using x86 assembly language and the Canvas library for graphical display. This calculator will support basic arithmetic operations such as addition, subtraction, multiplication, and division. The aim is to understand how to create interactive applications with graphical interfaces using low-level programming.

2023

TIC TAC TOE

The project involves the implementation of a classic Tic-Tac-Toe game using Assembly x86 language and the Canvas library for graphics. The Tic-Tac-Toe game is a simple two-player game where players take turns marking spaces in a 3x3 grid. The goal is to place three of their marks in a horizontal, vertical, or diagonal row. This project aims to combine low-level programming skills with basic graphics handling.

2023

TICKET VENDING MACHINE FOR TRAINS

The project involves the implementation of a Ticket Vending Machine (TVM) for trains using VHDL (VHSIC Hardware Description Language). The TVM will simulate the functionality of a real-world vending machine, handling operations such as ticket selection, payment processing, and ticket dispensing. This project aims to demonstrate the design and implementation of a digital system using VHDL.