

Leonardo Colaço

☎ +90 5338506155 ✉ leonardocolacogg@gmail.com 🌐 Portfolio Web Page 🔗 LinkedIn 🐙 GitHub Profile

Education

Eastern Mediterranean University

Mar 2021 - Expected Feb 2025

Bachelor of Engineering in Computer Engineering

Famagusta, Cyprus

- **Relevant Coursework:** Artificial Intelligence, High End Embedded Systems, Software Engineering, Client/Server Programming, Computer Architecture, Data Structures and Algorithms, Database Management Systems, Digital Logic Design and Systems, Operating Systems, Computer Networks

Projects

Leo's NyanChat (Fullstack Web App) | Javascript, MongoDB, Express.js, React.js, Node.js, Tailwind CSS, Socket.io

2024

- Developed a messaging web application with the **MERN tech stack, socket.io, and daisyUI**.
- **React.js** for frontend – **Express.js** for backend – **MongoDB** as the database – **Render** for app deployment.
- Set up user **authentication routes** with an **Express.js** server. The authentication and authorization is handled with **JSON Web Tokens**. **Protected user authentication and message routes** with a middleware.
- Used a **bcrypt algorithm** to encrypt a new user's password when storing it into the database.
- **Real-time messaging** was implemented using **socket.io**, displaying **online user status**, as well as **instant messaging**.
- The entire UI design used the **daisyUI** library from **Tailwind CSS**.
- Implemented a **search algorithm** to look up other users and select their conversation.

Leo's Spotifyer | RESTful API, React.js, Node.js, Javascript, HTML and CSS, JSON

2024

- Designed a **web app that displays a Spotify user's activity** and data after receiving authentication from the user through Spotify's **Oauth2.0 authentication flow**
- In order to display a user's data I **used the API call to receive an access token** to use the API, that can then be used in exchange for authorization code. This **authorization code is necessary to grant access** to the JSON with the user's data (depending on the permitted scope of the data), and is then neatly displayed on the web page.

Leo's Pokédex | Javascript, HTML and CSS, RESTful API, JSON

2023

- Designed a web page that fetches stats about a specific Pokémon using **PokeAPI**.
- **The search bar algorithm was designed using Javascript** with the objective of displaying results based on the user's currently typed characters.

Team Generator | Javascript, Python, HTML and CSS

2023

- Using Javascript, **the program takes a user input to generate name boxes for each member**, as well as the desired number of teams.
- The members are **randomly assigned to each team through a Javascript algorithm**, together with a random color for the team. Same team colors are avoided as well.
- A Python version of the algorithm is also available in my GitHub repository for this project.

Lexical Analyzer | Python

2024

- Designed a python program that performs **lexical analysis**.
- It reads in a stream of characters, **identifies** the lexemes in the stream, and **categorizes them into tokens**.

Portfolio Website | Javascript, HTML and CSS, GitHub

2023

- Designed and deployed my **personal portfolio website** to display my projects, resumé, and skills through GitHub Pages.

Experience

Federação Internacional des Femmes des Carrières Juridiques (FIFCJ)

Jan 2016 - Jan 2020

Graphic Design

Maputo, Mozambique

- Responsible for designing flyers for events of the organization using Photoshop.

Technical Skills

Languages: Python, Javascript, Java, C, HTML and CSS, SQL, PHP

Technologies: Git, React.js, MongoDB, Express.js, Tailwind CSS, Postman, Node.js, Linux, Adobe Xd, Figma, Photoshop, Sony Vegas

Concepts: Frontend Programming, Backend Programming, APIs, Database Management, Operating Systems, OOP, Algorithms, Frameworks, Web Development, Network Security, Penetration Testing