Short summary of side projects on my GitHub account

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Languages: Python, Java, C++

Frameworks: Django, Flask, SQLAlchemy, Odoo ERP,

JavaFX...

Projects implemented in Python

• life:

 Conway's Game of Life with colors. https://qithub.com/japinol7/life

- o Tests: No unit tests, but includes a test suite.
- Notes: GUI under construction
 For the moment you will have to use the keyboard keys and the line command parameters.
 Apart from these GUI elements, this version is fully operational.
- movies_lib_explorer
 - Movies Library Metadata Explorer using Django and Django REST framework https://github.com/japinol7/movies_lib_explorer
 - o Tests: Unit tests implemented using django.test with unittest.
 - Notes:

This is a very simple Movies Library Metadata Explorer using Django. It includes a REST API for some catalog models using Django REST framework. Its purpose is to be used as a Django web app example.

- teams-generator-services
 - Teams Generator Services
 https://github.com/japinol7/teams-generator-services
 - Tests: Some unit tests implemented for the main service using pytest:
 https://github.com/japinol7/teams-generator-services/tree/main/services/generate-teams
 - o Notes:

Some microservices related to the generation of RPG teams. This project uses AWS and Docker containerization.

- maze-solver
 - Maze Solver https://github.com/japinol7/maze-solver
- flask-api-calls
 - Flask API Calls
 https://github.com/japinol7/flask-api-calls
 - Notes:

This is a very simple Flask web app example that calls some APIs, such as NASA APIs, Marvel Comics, Spotify or OpenAI (ChatGPT).

- music-lib-explorer
 - Music Library Metadata Explorer https://github.com/japinol7/music-lib-explorer
 - Notes:

This is a very simple Music Library Metadata Explorer. Its purpose is to be used as a Flask + SQLAlchemy web app example.

erp-invoice-model

- Very Basic Invoice Model Example
 https://qithub.com/japinol7/erp-invoice-model
- Tests: Unit tests implemented using unittest:
- Notes: Run this example this way:
- o \$ python -m unittest

the-codemaster

- Game: The CodeMaster. Nightmare on Bots' Island https://github.com/japinol7/the-codemaster
- Tests: End-to-end tests and a test suite framework to run them.
 https://github.com/japinol7/the-codemaster/tree/master/suiteoftests
- o Notes: Python game using pygame and pygame-gui.

tictactoe

- Game: Tic Tac Toe
 https://github.com/japinol7/tictactoe
- Tests: Some unit tests implemented for the ComputerPlayer class using pytest: https://github.com/japinol7/tictactoe/tree/main/tests/unit/model
- Notes: Python game using pygame.
 Computer Players use a simple version of the Minimax decision rule algorithm.

sudoku-solver

- Sudoku Solver. Solves sudokus https://github.com/japinol7/sudoku-solver
- Tests: Test for the backtracking algorithm solution using pytest: https://github.com/japinol7/sudoku-solver/tree/main/tests

hanoi-towers

- Game: The towers of Hanoi with graphics. A mathematical puzzle game. https://github.com/japinol7/hanoi-towers
- Tests: Tests for the iterative and recursive solvers using pytest:
 https://github.com/japinol7/hanoi-towers/tree/main/tests/unit/model
- Notes: Python game using pygame.

simple-tier-list

- Simple tier list. https://github.com/japinol7/simple-tier-list
- o Notes: Python application using pygame and pygame-gui for the GUI.

Projects implemented in Java

- retail-kiosk
 - JAP Merch's Retail Kiosk <u>https://github.com/japinol7/retail-kiosk</u>
 - o Tests: Only some tests for the Item model using JUnit 5.
 - Notes: Uses JavaFX.

Additional projects implemented in Python

- small-python-projects
 - Some very basic examples of Python programming https://github.com/japinol7/small-python-projects
 - Tests: Code katas in cyber-dojo project with TDD (tests first) using pytest:
 https://github.com/japinol7/small-python-projects/tree/master/projects/cyber_dojo
- small-odoo-addons
 - Small addons examples of Python programming with the Odoo CE 18.0 ERP framework. https://github.com/japinol7/small-odoo-addons
 - JAP Sales:
 - Duplicate a sale line with the duplication button.
 - Create an Invoice from Selected Sale Lines.
- odoo-integration-examples
 - Odoo integration examples in Python using json-rpc and xml-rpc. https://github.com/japinol7/odoo-integration-examples
- poetry-lib-explorer
 - Poetry Library Explorer
 https://github.com/japinol7/poetry-lib-explorer
 - o Warning:

The poems in this project were written by myself when I was younger. Read them under your own risk; Although these poems are not great, they all have copyright.

Notes:

This is a very simple Poetry Library Metadata Explorer. Its purpose is to be used as a Flask + SQLAlchemy web app example.

- snakes
 - o Game: Snakes

https://github.com/japinol7/snakes

Notes: Python game using pygame.

- three-clocks
 - o Game: Three Clocks

https://github.com/japinol7/three-clocks

Notes: Python game using pygame and pygame-gui.

- fibonacci
 - Fibonacci

https://github.com/japinol7/fibonacci

Notes:

Benchmarks some algorithms that calculate elements of the Fibonacci sequence.

Additional projects implemented in C++

- snake
 - Game: Classic snake game derivative. https://github.com/japinol7/snake
 - Notes:C++ game using the C graphics library: SDL2.