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://github.com/japinol7/life
    - 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
    - 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
    - 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://github.com/japinol7/erp-invoice-model
  - Tests: Unit tests implemented using `unittest`:
  - Notes: Run this example this way:
  - `$ 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
  - Notes: Python game using pygame.

- 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.

Projects implemented in Java

- retail-kiosk
  - JAP Merch's Retail Kiosk
    https://github.com/japinol7/retail-kiosk
  - 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 ERP framework CE 16.0.
    https://github.com/japinol7/small-odoo-addons
    - JAP Sales:
      - Duplicate a sale line with the duplication button.
      - Create an Invoice from Selected Sale Lines.

- poetry-lib-explorer
  - Poetry Library Explorer
    https://github.com/japinol7/poetry-lib-explorer

  - 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
  - Game: Snakes
    https://github.com/japinol7/snakes

  - Notes: Python game using pygame.

- 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.