

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` 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`.

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-dojos project with TDD (tests first) using `pytest`:
https://github.com/japinol7/small-python-projects/tree/master/projects/cyber_dojos
- 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`.
- three-clocks
 - 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.