Short summary of side projects on my GitHub account

@japinol

Name: Joan A. Pinol
GitHub: https://github.com/japinol7
Twitter / X: https://www.twitter.com/japinol

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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.

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

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 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.

- 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.