

Slice It Off! - Specification

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1 Gameplay

1.1 Goal

The goal of the game is ultimately beat the highscores. There should just a right amount of luck making game interesting while also requiring some the skill.

1.2 Mechanism

Game consists of play area, enemies moving in that area and player with slicing tool. Goal here is to make total area where enemies moving small enough to pass the level. Slicing can be done vertically or horizontally. If there is enemies left on both sides after slicing both parts of the play area will remain. All the cleared areas will be destroyed.

1.3 Scoring

One can get points by passing levels. Still majority of possible points comes from different bonuses. One can for example get bonus by being fast, not isolating enemies, picking up collectibles.

2 The Look

In one word game should look "retro". This essentially means blocky fonts, limited colors and definedly no rounded edges anywhere.

3 Technical

3.1 Used techniques

3.1.1 Python

Programming will be done by Python. Specifically version 3.8 or newer. No trick included in Python is ruled out, but external dependencies are tried to keep at the minimum.

3.1.2 Pygame

Project makes heavy use of pygame library. Pygame sprites are the basic building blocks. Game logic somewhat inbaked to the game objects for easy handling.

3.2 Development Environment

3.2.1 Build System

Poetry will be used for develop, build and publish the package. Poetry keeps track of dependencies. There will be also `./dev.sh`-script to help out firing up development tools like pytest , coverage and pylint .

3.2.2 Testing & Quality

There will be comprehensive unit testing with branch coverage reports. For that pytest and coverage python packages will be used. Pylint takes care that code is good in quality and commented properly.

4 Distribution

4.1 Open source

Source code will be licensed as GPL-2 and it's freely available at git.hix.fi .

4.2 Publishing

The ultimate goal is to make game so good that in can be published as PyPA package. Then everyone can install it easily as `pip install sliceitoff`. To be honest I bet there will not be enough time to polish the game that much.