INTERNATIONAL UNIVERSTITY

KHOA CÔNG NGHỆ THÔNG TIN

Project: Angry Birds

Group 7 Members:

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1. Introduction

Our group will remake one of the famous mobile game in the world which is known as Angry Birds with Python and Object-Oriented Programing knowledge.

Github Link: https://github.com/lordhanzo123/OOPProject

2. Tools and Techniques

Python: interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together.

Pygame: a cross-platform set of Python modules designed for writing video games. It includes computer graphics and sound libraries designed to be used with the Python programming language.

Pymunk: a easy-to-use pythonic 2d physics library that can be used whenever you need 2d rigid body physics from Python.

Object-oriented programming : a computer programming model that organizes software design around data, or objects, rather than functions and logic. An object can be defined as a data field that has unique attributes and behavior.

3. Tasks

Our project have 4 classes:

Main.py: Run the program

In charge: Nguyễn Hà Văn

Characters.py: Create and control the birds and the pigs

In charge: Nguyễn Hà Văn

Level.py: Create and control levels for the game

In charge: Nguyễn Quốc Ngọc Long

Polygon.py: Create beam and draw polygon

In charge: Khưu Khôn Lâm

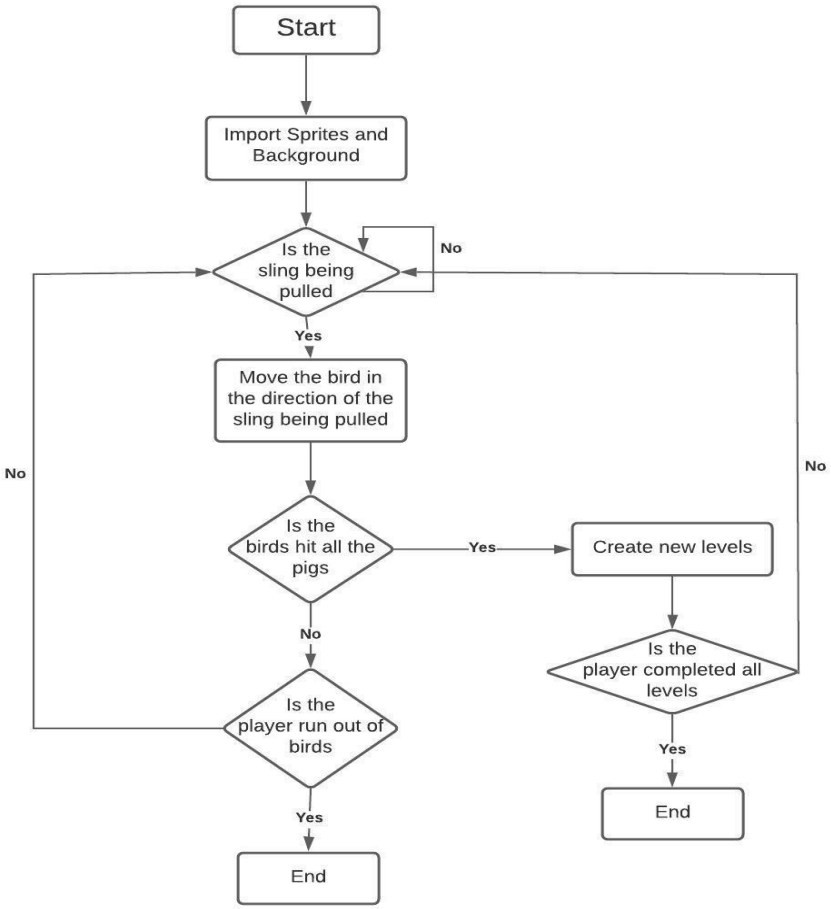
Documentation:

In charge of report: Nguyễn Hà Văn

In charge of diagrams: Khưu Khôn Lâm

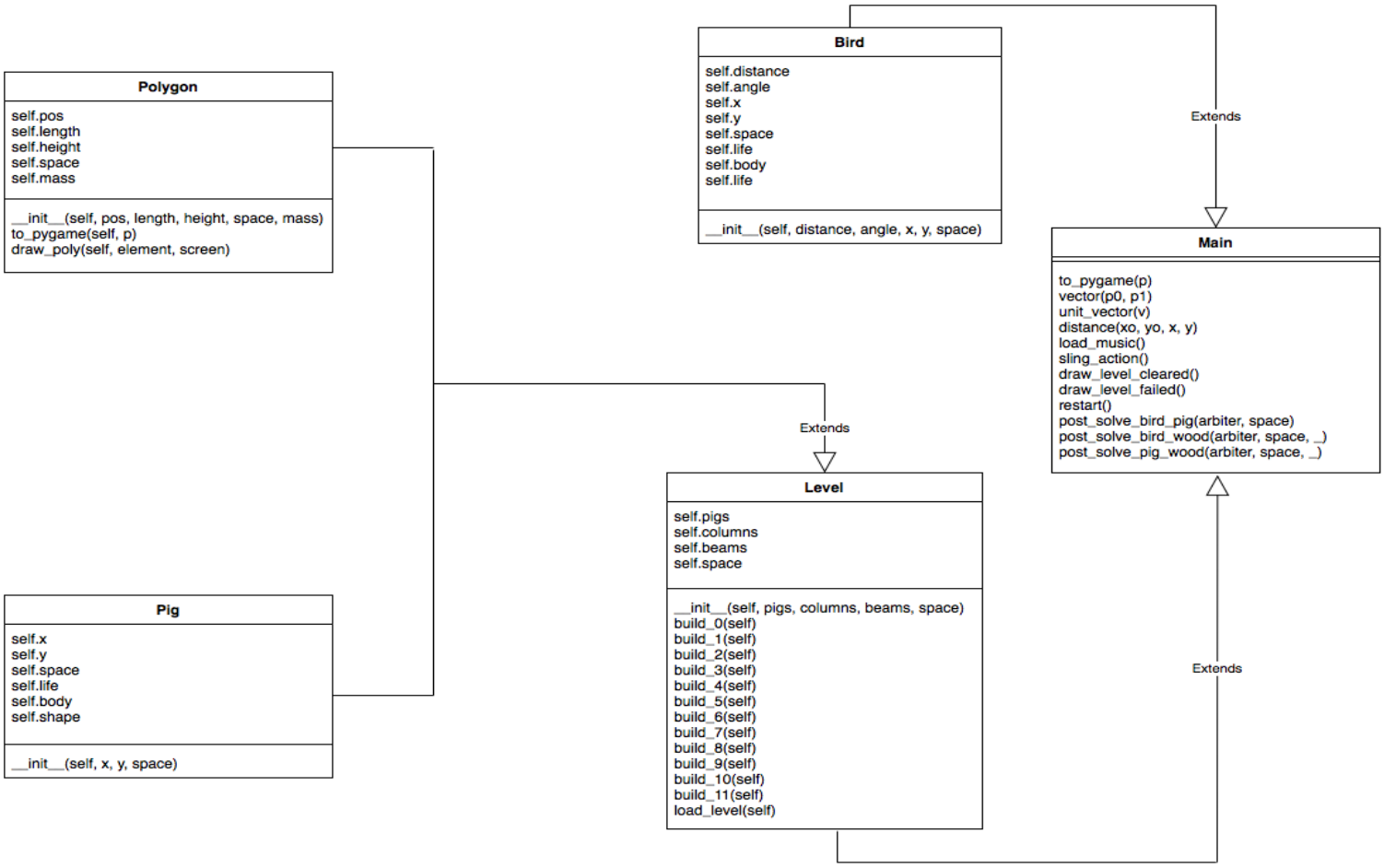
4. Game Logic

We explain the game rules with a flow chart:



5. Class Diagram

These are our class diagram for this project:



6. References

Pygame : https://www.pygame.org/wiki/GettingStarted

Pymunk API : http://www.pymunk.org/en/latest/pymunk.html