The early days of video arcade games and home entertainment systems provided many entertaining games with a large variety of play style and objectives, while not requiring multi-million dollar development budgets. Check out some classic arcade games.

Assignment

Your assignment is to create a simple arcade game using Python and Pygame. You are not constrained on the game you create. You are required to achieve a minimum complexity level. It is important that you achieve the requirements before adding additional features. Note that your next assignment will likely build on top of this one, so you don’t have to build everything up front.

At a minimum, your program should include:

- A player controlled movable object. It can be controlled by keyboard and/or mouse. At least one instance of this class is required.
- At least one other kind of object that moves according to an algorithm specified by your code. For example, it may be a ball that bounces off of walls, or an enemy player that always walks toward the player object. At least 2 instances of this class is required.
- An objective. The goal the player is trying to accomplish.
- An end of game. If the player reaches the objective, they should win, and the game is over. There should also be a means for the player to lose.

You must use classes and objects to construct this program. There must be a top level class that represents the game, and classes and objects created for all of the elements in the game. If you don’t use inheritance and polymorphism, you’re probably missing an opportunity for modularity.

You probably want to start by using another pygame project you have worked on. Or, you could download the Pygame starter kit again, by clicking here.