Go eat egg! Snake!

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Overview

Snake is a video game that first appeared in 1976. Originally, it was known as Blockade and only available as an arcade game. I used to play this game a lot during my childhood, so for this project, I will build a game called "Go eat egg! Snake!" using `Pygame`.

The player is represented as snake, which grows if it eats an egg. The goal of the game is to eat as many eggs as possible without hit itself or hit the walls. This is very easy in the early phase of the game but is increasingly more difficult as the length of the snake grows and speed increases.
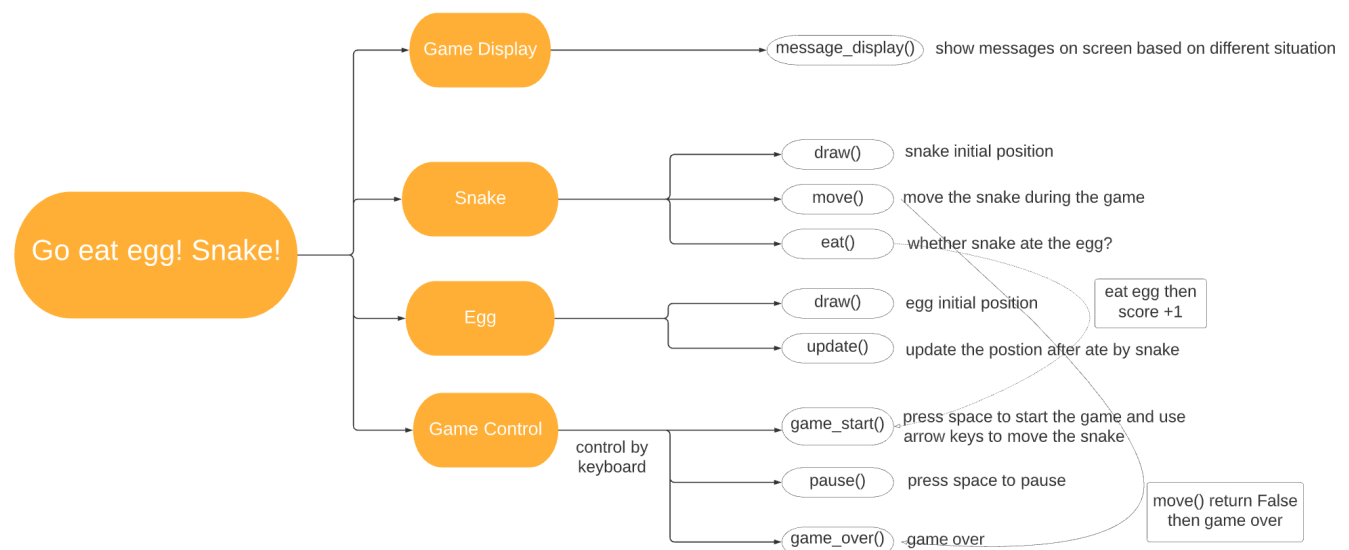
Instructions

The first thing we will need to do in order to play "Go eat egg! Snake!" is to install `Pygame`. To do that, we can simply use the following command:

```
pip install pygame
```

To run "Go eat egg! Snake!" game, simply run: `python snake.py` in terminal.

Structure

Here's a structure diagrams with main classes, methods and functions:

I Build this game framework using the module `Pygame`, which contains functions to control the size, font and color for display window and pass message on the screen.

The snake is shown as rectangles by using the function `draw.rect()`, to move the snake, I use the key events present in the `keydown` class of `Pygame` ,user can control the snake movement by keyboard arrow keys. Game will end when the snake collides with its own body or hit the wall (screen boundaries). Also user can choose to quit the game by clicking the quit button on the screen. Every time when snake eats the egg, the score will add one point and the new egg position will be randomly generated, at the meantime, length of snake will grow and the speed of snake movement will also be increased.