Game was made by Iliya Gavrilov

Game Ping-Pong

Game Fing-Pong

What was my task?
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What was my task?

Initially, my task was to program a simple game, as shown in the picture in the lower right corner. But I decided it was too boring, and decided to add new mechanics that came to my mind - playing with a bot, menu, counters, it turned out that it was in the lower left corner. This took a little time for me.

But I want to say thank you to my teacher, thanks to him I got acquainted with GitHub and interesting Python modules.



Supposed version



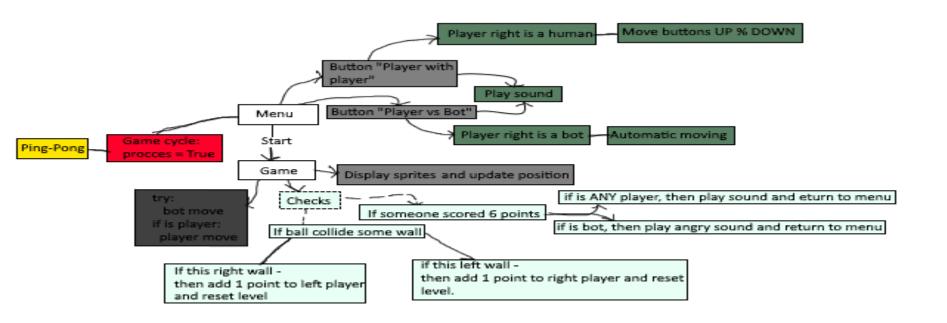
What does the game consist off?

I will tell you in the order of what I saw, first in the game we are greeted by a menu on which there are two buttons – 2 players or a bot and a player - you can click on any of them. The game start sound will play.

Next, the game will begin, you will play for the red racket, your opponent for the blue racket (Possibly a bot).

A ball will fly across the field, which you must hit and score to your opponent.

If the ball touches someone's wall, then a new round will occur after 3 seconds and a point will be added to the opposing player. To win you need to collect 6 points. If you win or lose, you will return to the menu.



By the way, here is the Mind map of Ping-Pong game.

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What is the distinctive feature of the game?

I consider the Menu and the ability to play with a bot to be a distinctive feature of the game, since I have never seen Ping Pong games with such an option before. Next I will tell you how I programmed them.

First, about the menu, it's not difficult to create a menu - I created a separate cycle While, in which I displayed buttons described in a separate class and labels. Then it processed whether the button was pressed.



But my favorite part is creating the bot. It was programmed in a separate class with two methods - Think and Move.

You can see the code in the picture.

It can be understood like this: If the ball is moving towards the bot, then you need to get the coordinates of the ball and find out the vertical movement (up or down).

The loop then begins until the ball's intended point reaches the end. At the output we have the expected point.

```
if ball.speed x > 0:
   if ball.speed y > 0:
      select x = ball.rect.x
      select y = ball.rect.y
      while select y < BOTTOM and select x < RIGHT:
         select_y += ball.speed_y
         select x += ball.speed x
      while select y > TOP and select x < RIGHT:
         select y += ball.speed y
         select x += ball.speed x
   global Y select
     select y = ball.rect.y
     Y select = select y
if self.rect.y < BOTTOM - (self.height - 50) and Y select > self.rect.centery *(random): # We make sure that the bot makes mistakes in calculations from time to time, and gives the pl
if self.rect.y > 0 and Y select < self.rect.centery *(random)
```

Demonstration of the program

Now I will introduce you to the game: The first top photo shows the game at the very beginning of the login, where you can select the mode.

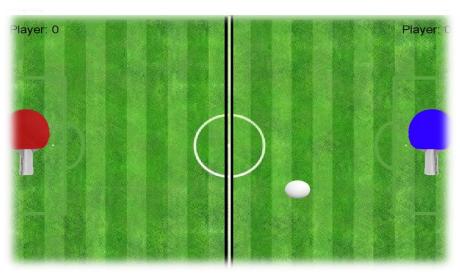
Next below is the gameplay where you have to defend your side and try to send the ball towards the enemy.

The very bottom shows the end of the game where the red player won. After this you will see the menu again.

Throughout the game you will be accompanied by music (Good music) and sound effects, for example, after a win or loss.







Thank you for your attention

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Illibe happy to answer questions about the game or the code. I will also be happy to hear suggestions for improving the game!