



# Bratislava #11

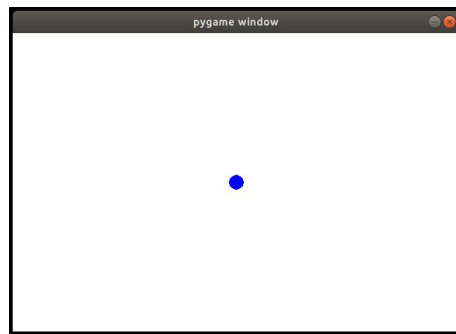
Making games with python

























































# Game programming (0)

- <https://realpython.com/pygame-a-primer/>
- Let's fetch the code from github (reviewing git)
  - Install git
  - Login to github > <https://github.com/pyladies-bratislava/pyladies-bratislava>
  - Clone the repository (copy the github clone line)
  - Create a virtual environment > `python3 -m venv .env`
  - Activate the virtual env > `source .env/bin/activate`
  - Install requirements > `pip install -r requirements.txt`
  - Check what's inside :)

# Game programming (1)

- Open the file game1.py
- Let's go over it
  - Game loop
  - Create a game window
  - Exit the game
- Play with the sizes and colors
  - Can you put other shapes on the screen?
- Questions?



1		RGB(0,0,0)
2		RGB(255,255,255)
3		RGB(255,0,0)
4		RGB(0,255,0)
5		RGB(0,0,255)
6		RGB(255,255,0)
7		RGB(255,0,255)
8		RGB(0,255,255)
9		RGB(128,0,0)
10		RGB(0,128,0)
11		RGB(0,0,128)
12		RGB(128,128,0)
13		RGB(128,0,128)
14		RGB(0,128,128)
15		RGB(192,192,192)
16		RGB(128,128,128)
17		RGB(153,153,255)
18		RGB(153,51,102)
19		RGB(255,255,204)
20		RGB(204,255,255)
21		RGB(102,0,102)
22		RGB(255,128,128)
23		RGB(0,102,204)
24		RGB(204,204,255)
25		RGB(0,0,128)
26		RGB(255,0,255)
27		RGB(255,255,0)
28		RGB(0,255,255)
29		RGB(128,0,128)
30		RGB(128,0,0)
31		RGB(0,128,128)
32		RGB(0,0,255)
33		RGB(0,204,255)
34		RGB(204,255,255)
35		RGB(204,255,204)
36		RGB(255,255,153)
37		RGB(153,204,255)
38		RGB(255,153,204)
39		RGB(204,153,255)
40		RGB(255,204,153)
41		RGB(51,102,255)
42		RGB(51,204,204)
43		RGB(153,204,0)
44		RGB(255,204,0)
45		RGB(255,153,0)
46		RGB(255,102,0)
47		RGB(102,102,153)
48		RGB(150,150,150)
49		RGB(0,51,102)
50		RGB(51,153,102)
51		RGB(0,51,0)
52		RGB(51,51,0)
53		RGB(153,51,0)
54		RGB(153,51,102)
55		RGB(51,51,153)
56		RGB(51,51,51)

# Game programming (2)

- Open the file game2.py
- Let's go over it
  - Place a player in the game
  - Move the player
- Play with the position, colors and shapes of the player
  - How can the player stay in the screen?
- Questions?



# Game programming (3)

- Open the file game3.py
- Let's go over it
  - OOP in practice
    - Sprite class
- Refactor code using sprites
  - The output should be the same as game2.py
  - The player shouldn't move out of the screen
- Questions?



# Game programming (4)

- Implement the Enemy class and collisions
- Get the clock right
- Questions?