POSSIBILITIES OF PYTHON IN GAME CREATION

Казанский федеральный
УНИВЕРСИТЕТ

MENU START

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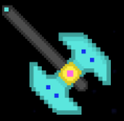

MY PROJECT

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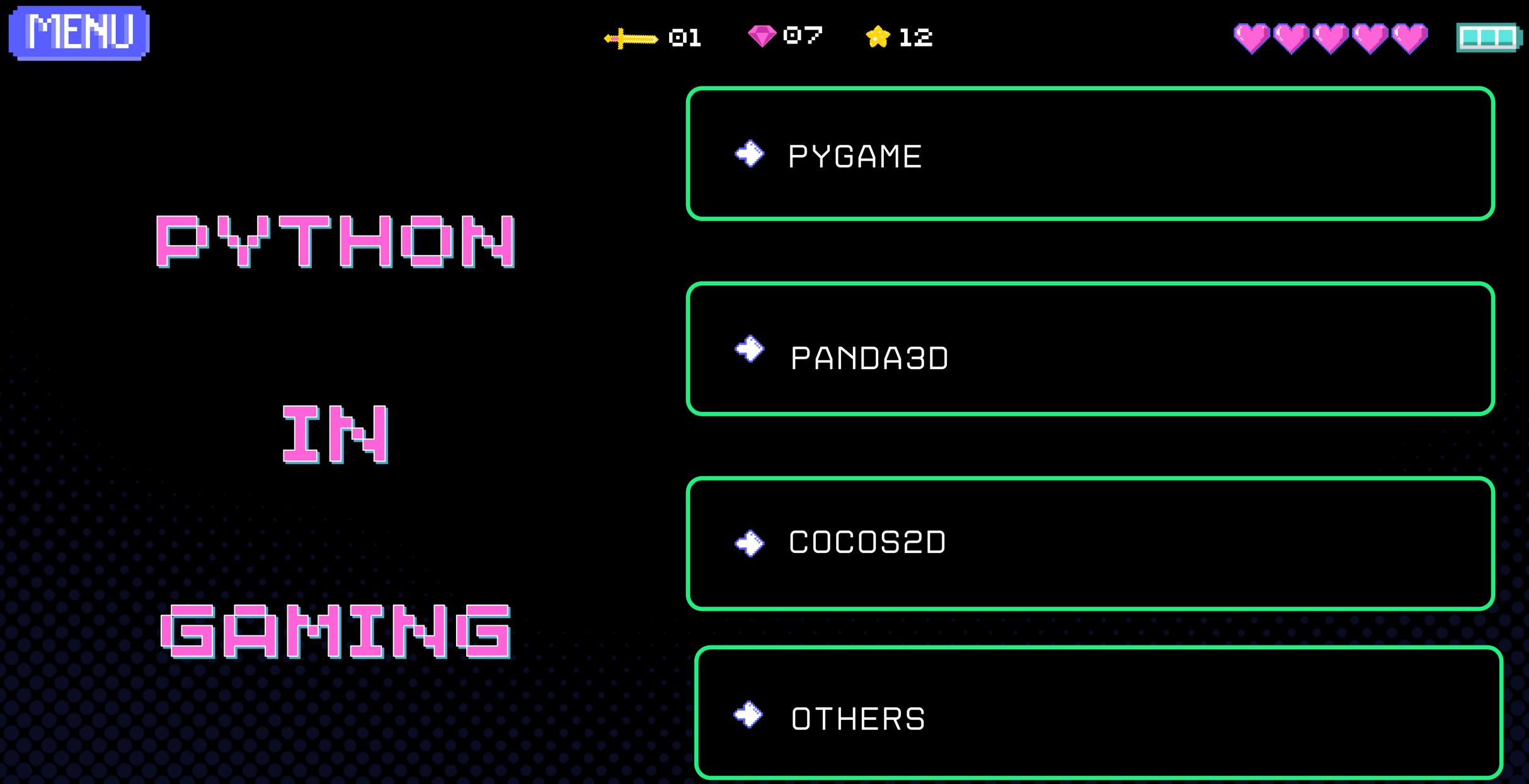
WHAT IS PYTHON

PYTHON IS A PROGRAMMING LANGUAGE WIDELY USED IN WEB APPLICATIONS, SOFTWARE DEVELOPMENT, DATA SCIENCE AND MACHINE LEARNING (ML). DEVELOPERS USE PYTHON BECAUSE IT IS EFFICIENT AND EASY TO LEARN, PLUS IT CAN RUN ON MANY DIFFERENT PLATFORMS.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OTHERS

PROS AND CONS

DINAMIC TYPING

LIBRARY TOOLS

CREATE A PROTOTYPE

CLEAN AND READABLE SINTAX

SLOW

COMPATIBLE WITH AI

HARD TO FIND ERRORS

LOW COMPATIBILITY WITH GAMING ENGINES

DON'T SUPPORT MULTIREADING

CAN'T WRITE OWN ENGINE

MENU

MY PROJECT

mi-serpiente.py

```python
import turtle
import random
import time

# screen
screen = turtle.Screen()
screen.title("SNAKE GAME")
screen.setup(width=700, height=700)
screen.tracer(0)
screen.bgcolor("#1d1d1d")
# borders
turtle.speed(5)
turtle.pensize(4)
turtle.penup()
turtle.goto(-310, 250)
turtle.pendown()
turtle.color("red")
turtle.forward(600)
turtle.right(90)
turtle.forward(500)
turtle.right(90)
turtle.forward(600)
turtle.right(90)
turtle.forward(500)
turtle.penup()
turtle.hideturtle()
# score
score = 0;
delay = 0.1
```

while True › if snake.distance(fruit) < 20

mi-serpiente.py

```python
# score
score = 0;
delay = 0.1
# snake
snake = turtle.Turtle()
snake.speed()
snake.shape("square")
snake.color("green")
snake.penup()
snake.goto(0, 0)
snake.direction = 'stop'
# food
fruit = turtle.Turtle()
fruit.speed(0)
fruit.shape("square")
fruit.color("white")
fruit.penup()
fruit.goto(30, 30)

old_fruit = []
# score
scoring = turtle.Turtle()
scoring.speed(0)
scoring.color("white")
scoring.penup()
scoring.hideturtle()
scoring.goto(0, 300)
scoring.write("Score: ", align="center", font=("Courier", 24, "bold"))
```

mi-serpiente.py

```python
# define how to move
1 usage
def snake_go_up():
    if snake.direction != "down":
        snake.direction = "up"


1 usage
def snake_go_down():
    if snake.direction != "up":
        snake.direction = "down"


1 usage
def snake_go_left():
    if snake.direction != "right":
        snake.direction = "left"


1 usage
def snake_go_right():
    if snake.direction != "left":
        snake.direction = "right"


1 usage
def snake_move():
    if snake.direction == "up":
        y = snake.ycor()
```

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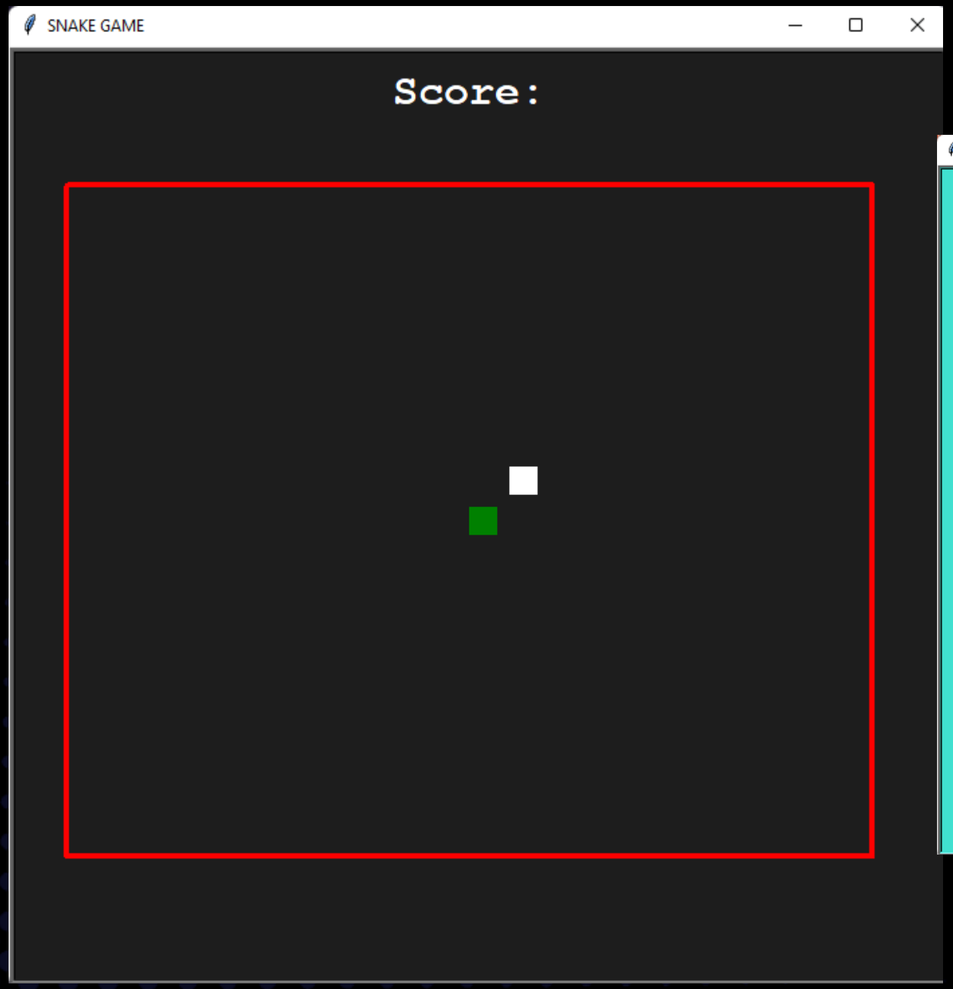
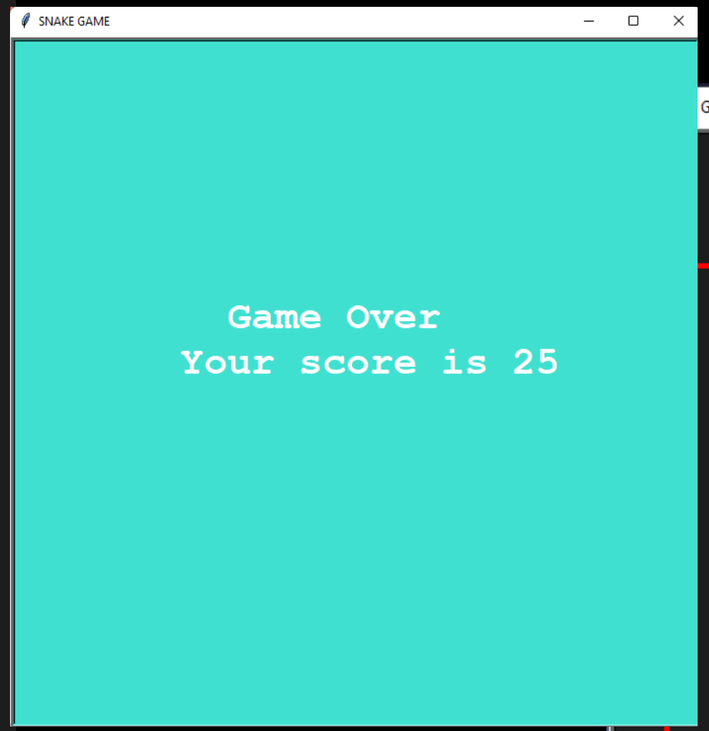
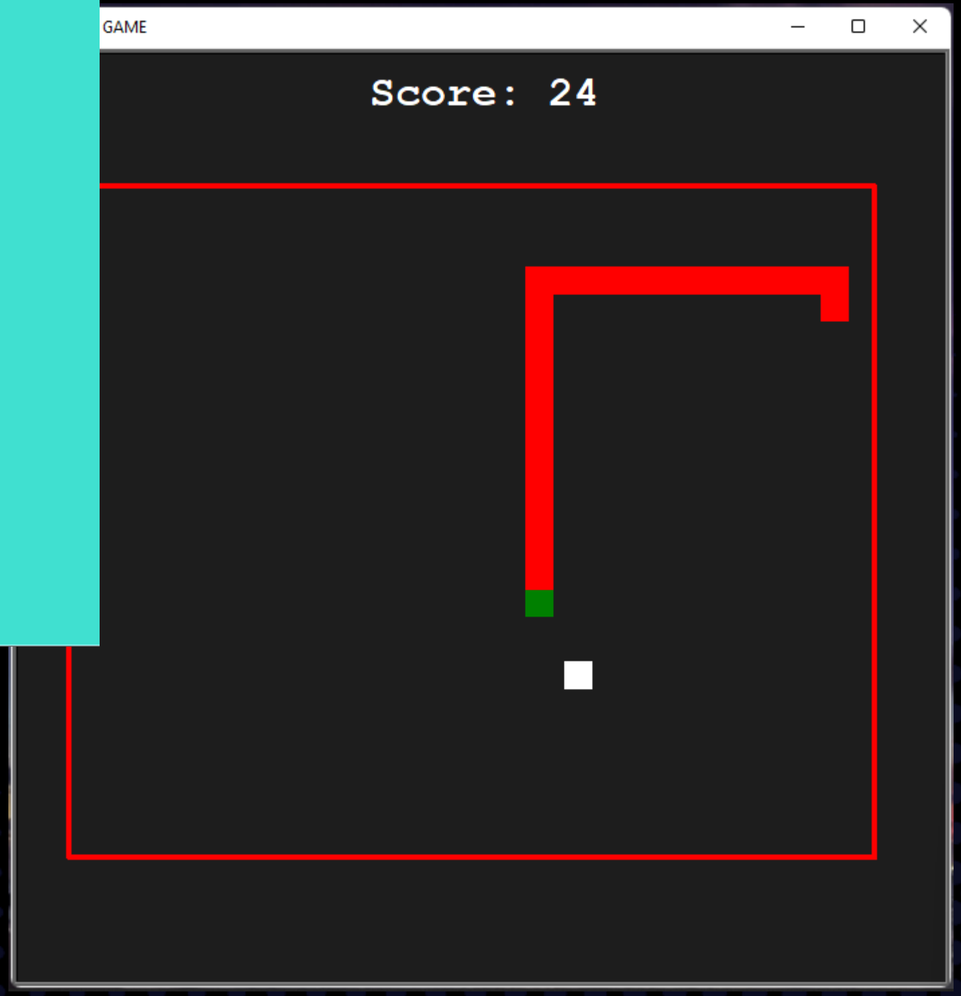
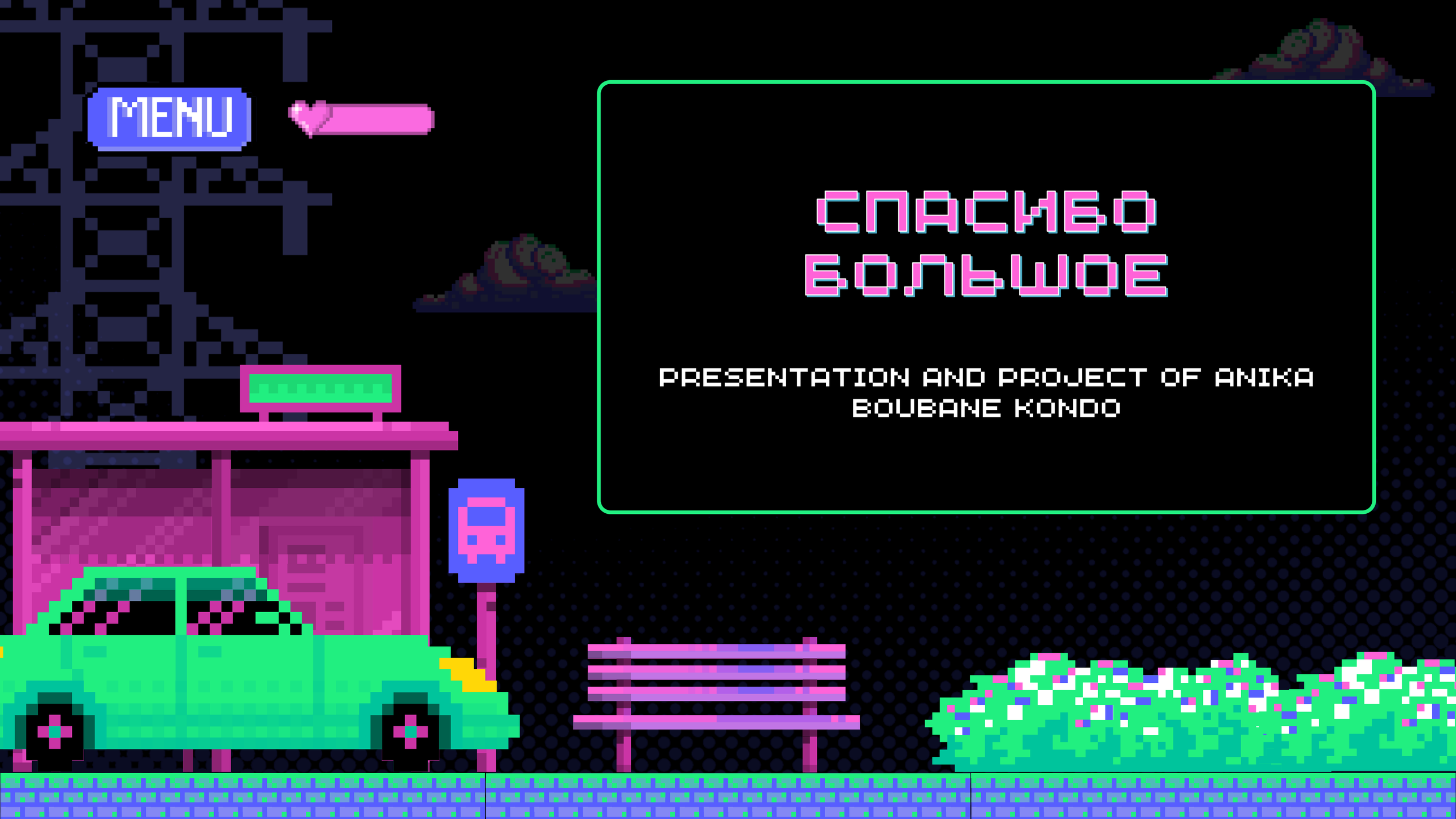
MY PROJECT





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PRESENTATION AND PROJECT OF ANIKA
BOUBANE KONDO