20191984
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Intro to Visual Media
Programming
-
pygame1 assignment

Pygame
Snake Game

GitHub Link

I used a different source code than the one used in class.
I tried to add extra features as well as change the colours

```
Source Code - https://drive.google.com/file/d/1emT36o2VQTlETRcKjfduQGutqOcDhT_e/view
    Changes made:
    -added background music, used two channels to play multiple sound files at once
    -added button sound effects, game sound effects, losing sound effects
    -changed coloring to pastel tones
    -added the option to use WASD keys as well as arrow keys
    -changed some of the fonts / text size
```

```python
pg.mixer.init()
pg.init()
bg_music = pg.mixer.Sound("bgmusic.wav")  #
chan1 = pg.mixer.find_channel()
chan1.set_volume(0.6)
chan1.queue(bg_music)


def m1(self):
    pg.mixer.init()
    pg.init()
    pg.mixer.music.load("boost.wav")
    pg.mixer.music.set_volume(3)
    pg.mixer.music.play()
    time.sleep(0.1)

def m2(self):
    pg.mixer.init()
    pg.init()
    pg.mixer.music.load("nohealth.wav")
    pg.mixer.music.play()
    time.sleep(0.8)

def buttonsound(self):
    pg.mixer.init()
    pg.init()
    pg.mixer.music.load("buttonsound.wav")
    pg.mixer.music.play()
    time.sleep(0.2)
```

Sound

```python
def add_apple(self):
    self.score +=1
    m1(self)
    block = pg.Surfa
    block.fill((253,
    self.images.appe
```

```python
def over(self):
    m2(self)
    chan1.stop()
```

The background music is outside of any function and is queued automatically in a channel upon starting the code.

The other three sounds are defined as separate functions because they won't be overlapping any time during the game.

All buttons play the buttonsound

```python
if click[0] == 1:
    self.click0 = True
    buttonsound(self)
    chan1.queue(bg_music)
```
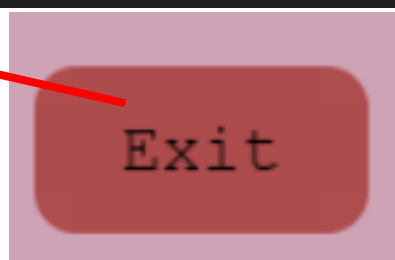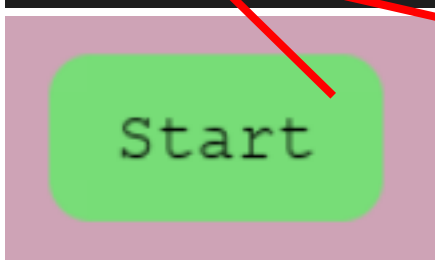
Restart ;)

When the score increases by 1, the "boost" sound plays once.
When the game over function is called, the "nohealth" sound plays and the background music stops.
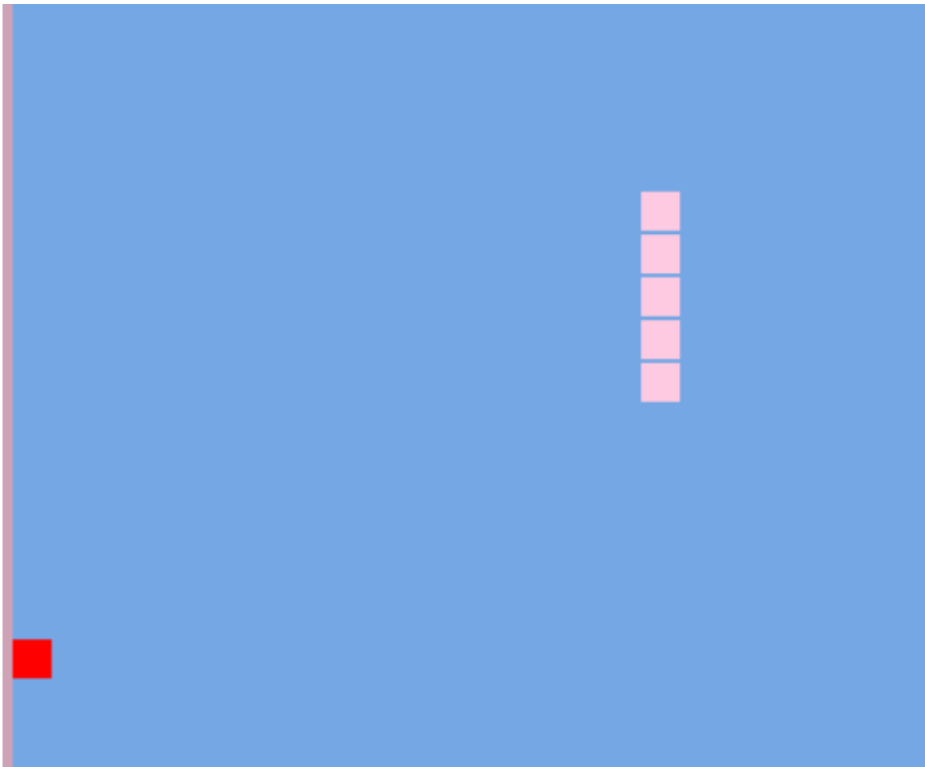The music starts again if you press "Restart"

```python
self.b1 = '(150, 300,100,50),"Start", [(119,221,119), (76,173,76)], action = self.start
self.b2 = '(550, 300,100,50),"Exit", [(173,76,76), (156,65,65)], action = self.exit'
self.buttons = [self.b1, self.b2]
```

Start

Exit

Colors

Easy   Normal   Hard   Expert
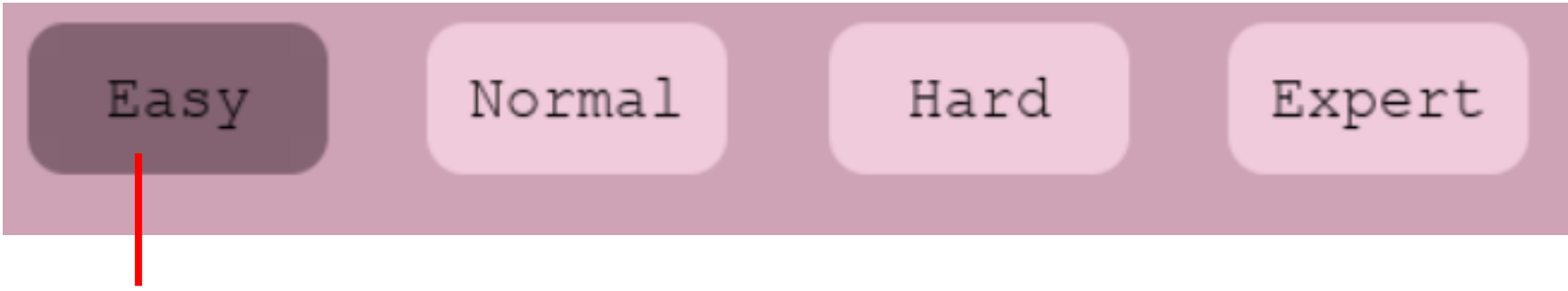
Hover over a button and
the rgb values change

I didn't like the colours of the source
code so I used a pastel colour palette to
match the music and sound effects.
I changed the start screen, game
screen, block colour, button colour, etc.

```python
if event.key == pg.K_RIGHT or event.key == ord('d'):
    if self.left == False:
        self.reset()
        self.snake.right()
        self.right = True
if event.key == pg.K_LEFT or event.key == ord('a'):
    if self.right == False:
        self.reset()
        self.snake.left()
        self.left = True
if event.key == pg.K_UP or event.key == ord('w'):
    if self.down == False:
        self.reset()
        self.snake.up()
        self.up = True
if event.key == pg.K_DOWN or event.key == ord('s'):
    if self.up == False:
        self.reset()
        self.snake.down()
        self.down = True
```

Adding the "or
event.key == ord('d')
lets you use either "d"
or the right arrow key
to move right
Left = a
Up = w
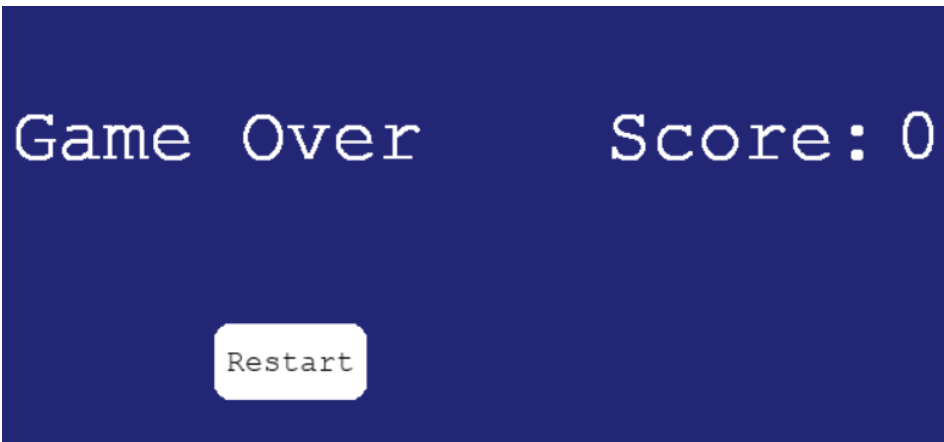Down = s

(ord returns the uni-
code)

Controls
(WASD)

I added this feature because WASD is
more comfortable for some people
and also my laptop arrow keys are
broken

Original

Original

SNAKE GAME

Start   Exit

Game Over   Score:0

Restart

Emma version

snake game :)

Start   Exit

Game Over(•_•)   Score:0

Restart ;)