PyGame Intro

Monday 23rd - Game Jam Lesson
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PyGame Init

```python
import pygame

pygame.init()

win = pygame.display.set_mode( (500, 500) )

pygame.display.set_caption("Ocean Game")
```

Constants

```python
RUN = True

while RUN:
    # ...

pygame.quit()
```

Game Loop

```python
while RUN:
    pygame.time.delay(10)

    for event in pygame.event.get():

        if event.type == pygame.QUIT:
            RUN = False

        keys = pygame.key.get_pressed()

    pygame.display.update()

pygame.quit()
```

Keys

```python
keys = pygame.key.get_pressed()

if keys[pygame.K_UP]:
    print("UP")

if keys[pygame.K_DOWN]:
    print("DOWN")

if keys[pygame.K_LEFT]:
    print("LEFT")

if keys[pygame.K_RIGHT]:
    print("RIGHT")
```
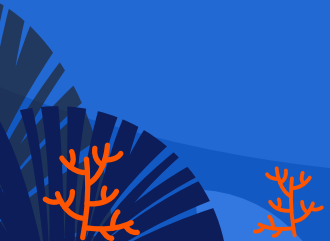
More vars

```
X = 200
Y = 200

VEL = 2

WIDTH = 10
HEIGHT = 10
```
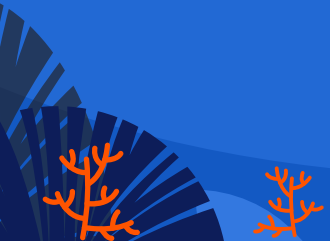
Image

https://www.pixilart.com

```
RIGHT_FISH = pygame.image.load("./fish.png")
RIGHT_FISH = pygame.transform.scale(RIGHT_FISH, (80, 80))
LEFT_FISH = pygame.transform.flip(RIGHT_FISH, True, False)
```

Direction

```
LEFT = 1
RIGHT = 2

DIRECTION = RIGHT
```

Full

```
while RUN:
    # ...

    keys = pygame.key.get_pressed()

    if keys[pygame.K_LEFT] and X > 0:
        X -= VEL
        DIRECTION = LEFT

    if keys[pygame.K_RIGHT] and X < 500 - WIDTH:
        X += VEL
        DIRECTION = RIGHT
```

```python
if keys[pygame.K_UP] and Y > 0:
    Y -= VEL

if keys[pygame.K_DOWN] and Y < 500 - HEIGHT:
    Y += VEL

win.fill((0, 0, 0))
fish = RIGHT_FISH if DIRECTION == RIGHT else LEFT_FISH
win.blit(fish, (X, Y))

pygame.display.update()
```

Ocean Game