ORB-Python Documentation

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Welcome to the documentation of the ${\bf ORB\text{-}Python}$ project.

CHAPTER

ONE

ORB-PYTHON-API

1.1 Devices Module

1.1.1 Sensor Class

The Sensor class represents a sensor device with specific parameters.

```
class devices.sensor(port: int, type: int, mode: int, mem_offset: int)
    Bases: object
    get()
    getDigital()
    getValueExt(channel: int)
    S1 = 0
    S2 = 1
    S3 = 2
    S4 = 3
    Analog = 0
    T2C = 1
    T0F = 2
    Touch = 3
    UART = 4
```

1.1.2 Motor Class

The *Motor* class represents a motor device with specific parameters.

```
class devices.motor(port: int, direction: int, ticks: int, acc: int, kp: int, ki: int)
    Bases: object
    config(direction: int, ticks: int, acc: int, kp: int, ki: int)
```

```
set(mode: int, speed: int, position: int)
get()
M1 = 0
M2 = 1
M3 = 2
M4 = 3
FORWARD = 1
REVERSE = -1
POWER_MODE = 0
BRAKE_MODE = 1
SPEED_MODE = 2
MOVETO_MODE = 3
```

1.1.3 Servo Class

The Servo class represents a servo device with specific parameters.

```
class devices.servo(port: int)
    Bases: object
    set(speed: int, angle: int)
S1 = 0
S2 = 1
```

1.2 Memory Module

```
memory.setMemory(addr: int, data: list)

memory.getMemory(adrr: int, legnth: int) \rightarrow list

memory.clearMemory()
```

1.3 Time Module

```
time.getTime() \rightarrow int
time.wait(ms: int)
```

1.4 Monitor Module

 $\texttt{monitor.getKey()} \rightarrow \mathsf{int}$ monitor.setText(text: str) class monitor.keys Bases: object $NO_KYE = 0$ A1 = 1A2 = 2A3 = 3A4 = 4A5 = 5A6 = 6A7 = 7A8 = 8B1 = 9B2 = 10B3 = 11B4 = 12B5 = 13B6 = 14B7 = 15B8 = 16B9 = 17B10 = 18B11 = 19B12 = 20

C1 = 21