motor.py 1

```
1
     from pybricks import ev3devices
 2
     from pybricks.parameters import Direction, Stop
 3
     import pybricks.tools
 4
 5
 6
     # Wrapper class for motor to allow for run to stop without quiting program
 7
     class Motor():
 8
         def init (self, port, config,
9
                      positive direction=Direction.CLOCKWISE,
10
                       qears=None):
11
             self.config = config
12
             self.m = ev3devices.Motor(port, positive direction=positive direction,
13
                                        gears=gears)
14
             self.control = self.m.control
15
16
         def angle(self):
17
             return self.m.angle()
18
19
         def speed(self):
20
             return self.m.speed()
21
22
         def reset angle(self, angle):
23
             self.m.reset angle(angle)
24
25
         def hold(self):
26
             self.m.hold()
27
28
         def run(self, speed):
29
             self.m.run(speed)
30
31
         def run time(self, speed, time, then=Stop.HOLD, wait=True):
             self.m.run time(speed, time, then, False)
32
33
             while wait and self.control.done() == False and self.config.state.getState() != 3
34
                 pybricks.tools.wait(10)
35
             if then == Stop. HOLD:
36
                 self.m.hold()
37
             elif then == Stop.BRAKE:
38
                 self.m.brake()
39
40
         def run angle(self, speed, rotation angle, then=Stop.HOLD, wait=True):
41
             self.m.run angle (speed, rotation angle, then, False)
             while wait and self.control.done() == False and self.config.state.getState() != 3
42
43
                 pybricks.tools.wait(10)
44
             if then == Stop.HOLD:
45
                 self.m.hold()
46
             elif then == Stop.BRAKE:
47
                 self.m.brake()
48
49
         def run target(self, speed, target angle, then=Stop.HOLD, wait=True):
50
             self.m.run target(speed, target angle, then, False)
51
             while wait and self.control.done() == False and self.config.state.getState() != 3
52
                 pybricks.tools.wait(10)
53
             if then == Stop.HOLD:
54
                 self.m.hold()
55
             elif then == Stop.BRAKE:
56
                 self.m.brake()
57
58
         def run until stalled(self, speed, then=Stop.COAST, duty limit=None):
59
             self.m.run until stalled(speed, then, duty limit)
60
             if then == Stop.HOLD:
61
                  self.m.hold()
             elif then == Stop.BRAKE:
62
63
                 self.m.brake()
```

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```
64
65
         def track_target(self, target_angle):
66
             self.m.track_target(target_angle)
67
68
         def dc(self, duty):
             self.m.dc(duty)
69
70
71
         def stop(self):
72
             self.m.stop()
73
```