

Autonomous Car Robot

1. Goal:

Navigate the environment while avoiding obstacles.



2. Methods (env.)

```
env.get_sensor_forward_value()
env.get_sensor_right_value()
env.get_sensor_left_value()
env.step(action)
```

3. Dictionary

```
sensor_readings = {
    "Forward": forward,
    "Right": right,
    "Left": left
}
```

4. Direction

```
greatest_direction =
max(sensor_readings,
key=sensor_readings.get)
```

Steps

1.) Mimicking real-world autonomous driving, start an infinite while loop using ``while True:``

2.) Initialize movement variable using ``action = [0.00, 0.00]``



3.) Retrieve sensor values for forward, left, and right, and store them each in their own variable

4.) Decide Action -->

- If left has more space, turn left.
- If right has more space, turn right.
- If forward is clear, move forward.

5.) Execute the action using `env.step(action)` to apply the movement

6.) To avoid rapid, unrealistic movement, introduce a small delay after each step using ``time.sleep(0.0001)``