USER MANUAL

Crossroad

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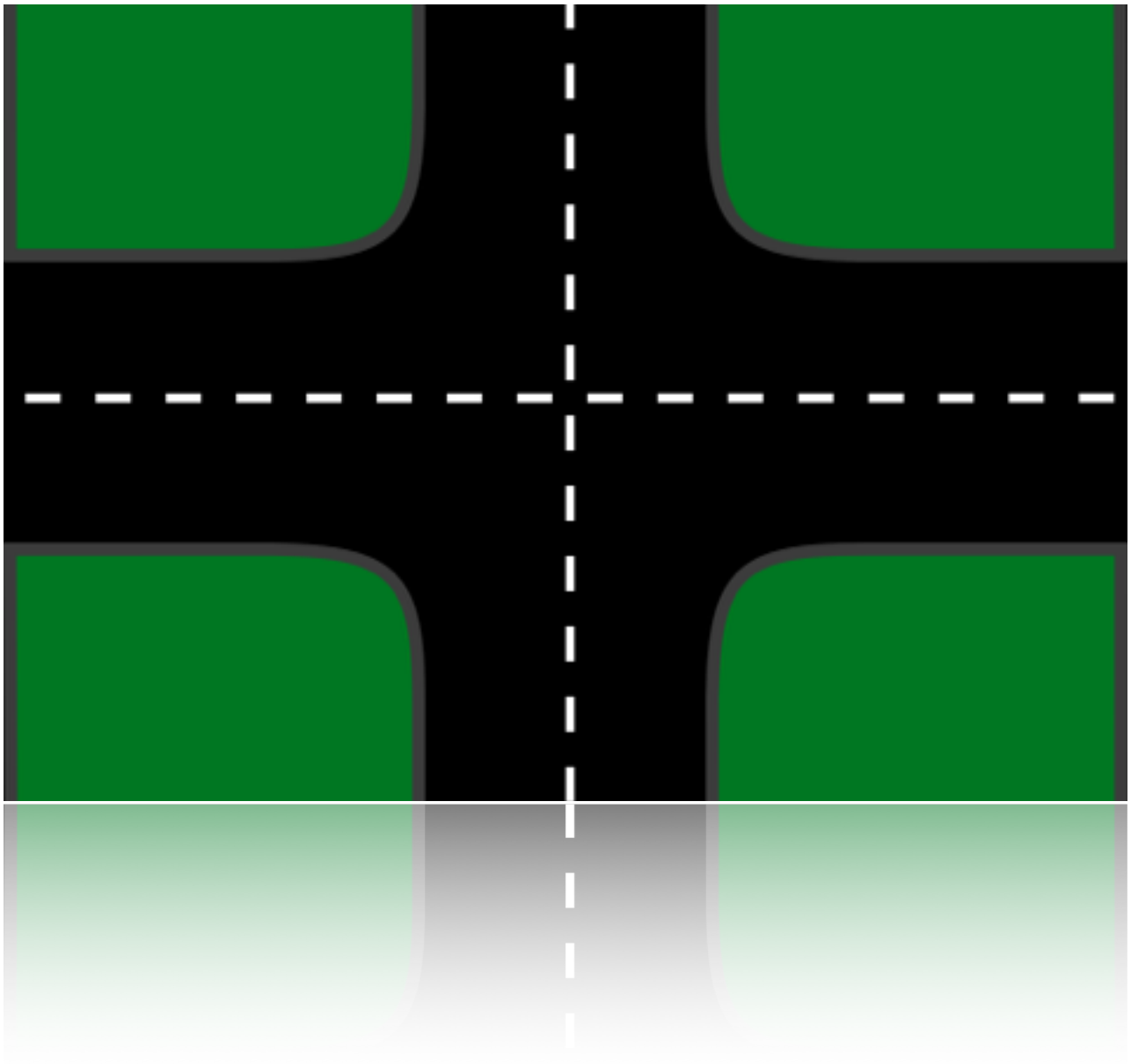
USER MANUAL

1. Installation

1. unzip the folder where you want (but you have to remember the path)
2. go to the terminal
3. write *cd* and the path to the folder that you unzip in part 1, then *OS-Project/*

Example :

cd ./Documents/OS-Project/

if you put the folder in the repertory Documents.

4. write *make* in the terminal

2. Interactif mode

If you choose the interactif mode, you have to write in the terminal :

./crossroad

then, you will see :

```
you choose the interactive mode

press q if you want to exit

press :
 — P if you want to create a car in the primary road
 — S in the secondary one

CROSSROAD : the roadLight on the route 1 is red
CROSSROAD : the roadLight on the route 0 is green
```

As it says, if you want to :

• generate a car in the primary road (road 0) : press the touch p or P

you will see :

```
p
    CARS : new car 1 has just been created on road 0 !
    CARS : the car 1 is on the crossroad
CROSSROAD : 1 car(s) in the crossroad
CROSSROAD : the roadLight on the route 0 is red
    CARS : the car 1 left the crossroad
CROSSROAD : 0 car(s) in the crossroad
```

• generate a car in the secondary road (road 1) : press the touch s or S

you will see :

```
s
```

```
    CARS : new car 1 has just been created on road 1 !
    CARS : the car 1 is waiting the roadLights to turn to green
on the secondary road
    CARS : 1 car(s) are/is waiting in the secondary route
CROSSROAD : the roadLight on the route 0 is red
CROSSROAD : the roadLight on the route 1 is green
CROSSROAD : 1 cars are freed
    CARS : the car 1 is on the crossroad
CROSSROAD : 1 car(s) in the crossroad
    CARS : the car 1 left the crossroad
CROSSROAD : 0 car(s) in the crossroad
```

- exit : press the touch q or Q

```
END CROSSROAD
```

If you press an other touch, this message will appear :

```
Error : you can only press :
 - P if you want to create a car in the first route
 - S in the second one
```

3. Automatic mode

In automatic mode we have 4 options :

- « -a » means that we are in the automatic mode, next to « -a » we can put the time maximum (in milliseconds) to wait before generating a new car, by default we wait 1 second.

- « -n » means number maximum of cars created, you have to put the number maximum of cars that you choose after « -n », by default it's 30.

- « -t » time during which the light is green on the secondary road, it's green 2*time in the primary road, you have to put a value after « -t », by default we wait 1 second.

- « -f » means that you put your parameter in a file, you have to write the path to the file after « -f ». In the file you can put some commentaries, if you want you can also write what the numbers means. But the two only thing that you have to respect are the order of the parameter <u>and</u> you have to put the 3 parameter, not less.

The order of parameter :

1. time maximum to wait before generating a new car (in ms)
2. number maximum of car that we have to create
3. the time to wait before the roadLight turn to red

Some examples of « -f »'s parameters :

- ❖ *-a 400 -n 10 -t 1000 //this is an other one*

- ❖ *I want generate cars after 500 ms in maximum and I want generate 7 cars, the roadLight have to wait 300 ms before turning to red*
- ❖ *600 4 500*
- ❖ *a = 400 n = 12 t = 300*

Some examples of arguments in the automatic mode :

```
./crossroad —f ./test
./crossroad —f ./path/to/my/file
./crossroad —a
./crossroad —a 500
./crossroad —a 500 —n 5
./crossroad —a 500 —n 5 —t 200
./crossroad —n 5 —t 200
./crossroad —t 200
./crossroad —t 200 —a 636
```

You will find a file named « test » in the folder, put this command if you want to see what it's going to do :

```
./crossroad —f ./test
```