

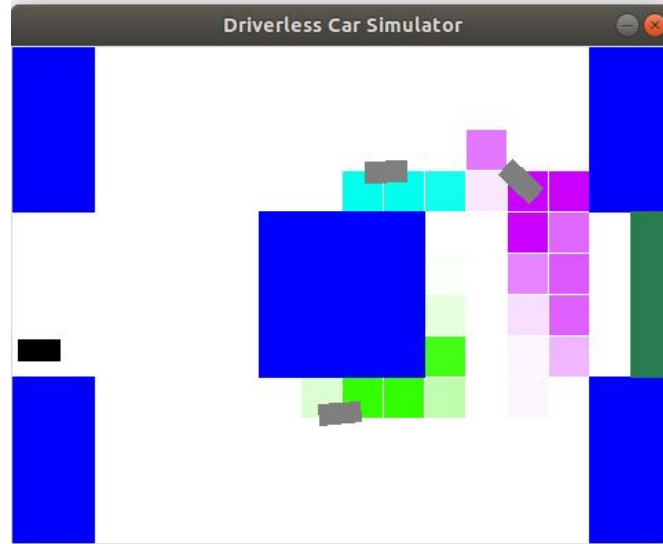
Homework 5: Car Tracking

Due Date: 5/30(23:59)



Introduction

In this assignment, you need to building a car tracking system, which allow us to track other cars based on noisy sensor readings



Implementation (80%)

Please modify the codes in [submission.py](#) between **# Begin your code** and **# End your code**. In addition, do not import other packages.

- Part 1: Emission probabilities (20%)
- Part 2: Transition probabilities (20%)
- Part 3: ParticleFilter (40%)

We will use autograder to grade your implementation, so make sure you code run correctly by running [grader.py](#)

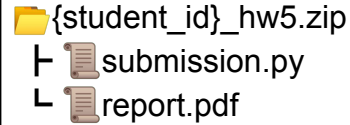
Please see the spec for more detail information!

Report (20%)

- The report should be written in **English**.
- Save the report as a **.pdf** file.
 - font size: 12
- For part 1 ~ 3, please take some screenshots of your code and explain how you implement codes **in detail**.
- Describe problems you meet and how you solve them.

Submission

The file structure should look like:



```
graph TD; A["{student_id}_hw5.zip"] --- B["└─ submission.py"]; A --- C["└─ report.pdf"]
```

The diagram shows a file structure within a rectangular box. At the top is a yellow folder icon followed by the text "{student_id}_hw5.zip". Below this, there are two lines, each starting with a file icon (a document with a folded corner) and a file name. The first line is "└─ submission.py" and the second line is "└─ report.pdf".

Wrong submission format leads to -10 point.

Late Submission policy:

20% off per late day

Please check out the spec
for more details!

