

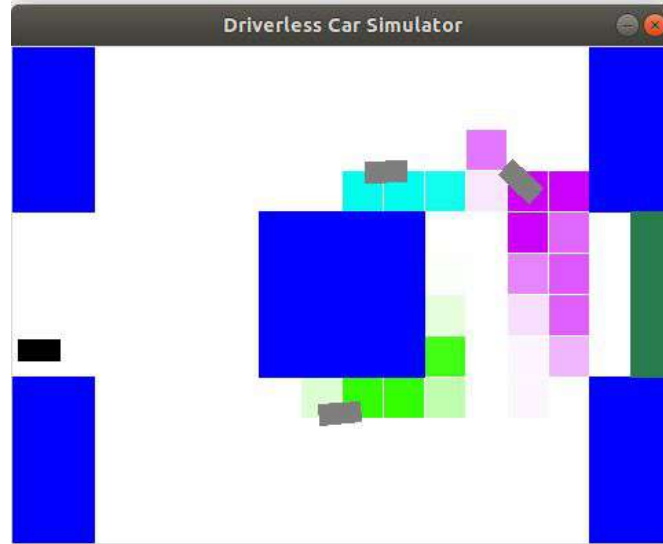
Homework 5: Car Tracking

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`

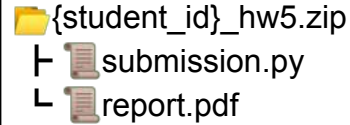
Please see the spec for more detail information!

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 level is a folder icon followed by the text "{student_id}_hw5.zip". Below this folder, there are two file icons, each preceded by a right-pointing curly brace "└─". The first file is labeled "submission.py" and the second is labeled "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!

