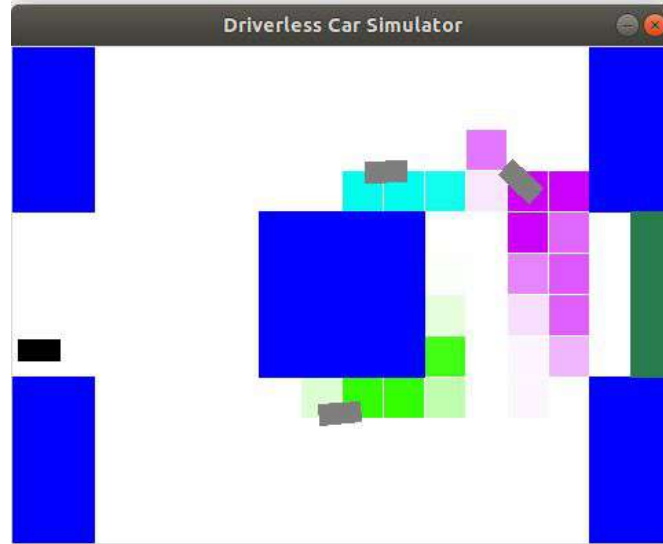# Homework 5: Car Tracking

Due Date: 5/30(23:59)

HCIS Lab

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%)

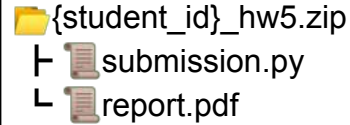We will use autograder to grade your implementation, so make sure you code run correctly by running grader.py

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:

```
📁{student_id}_hw5.zip
├ 📜submission.py
└ 📜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!

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