

# **P4 - TRAIN A SMARTCAB TO DRIVE**

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https://github.com/archelogos/train-smartcab

#### **Overview**

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## Questions

#### Step One: Implement a basic driving agent

In your report, mention what you see in the agent's behavior. Does it eventually make it to the target location?

Yeah, it sometimes makes it. After 83 iterations, 20, etc. It depends on the random initial conditions and of course on the random actions taken by the smartcab.

#### Step Two: Identify and update state

Justify why you picked these set of states, and how they model the agent and its environment.

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#### Step Three: Implement Q-Learning

What changes do you notice in the agent's behavior?

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### Step Four: Enhance the driving agent

Report what changes you made to your basic implementation of Q-Learning to achieve the final version of the agent. How well does it perform?

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Does your agent get close to finding an optimal policy, i.e. reach the destination in the minimum possible time, and not incur any penalties?

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