

Reinforcement Learning (INF11010)

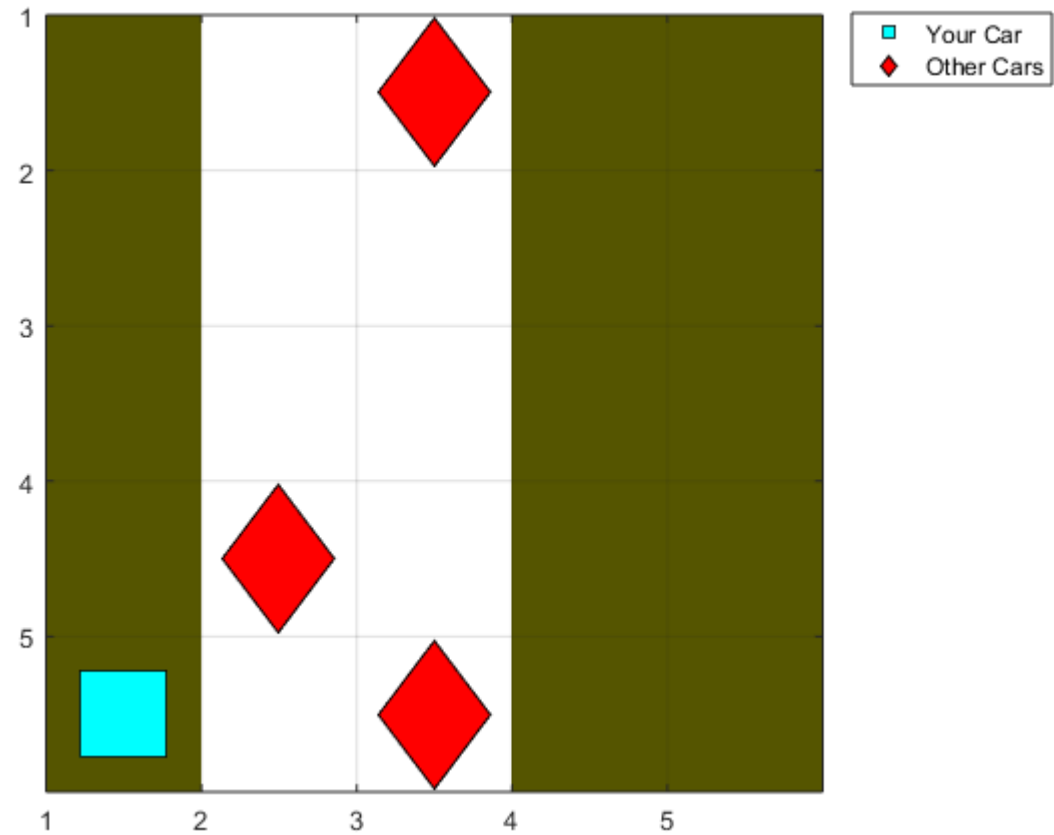
Lecture 4: Matlab Code Overview

Pavlos Andreadis, January 26th 2018

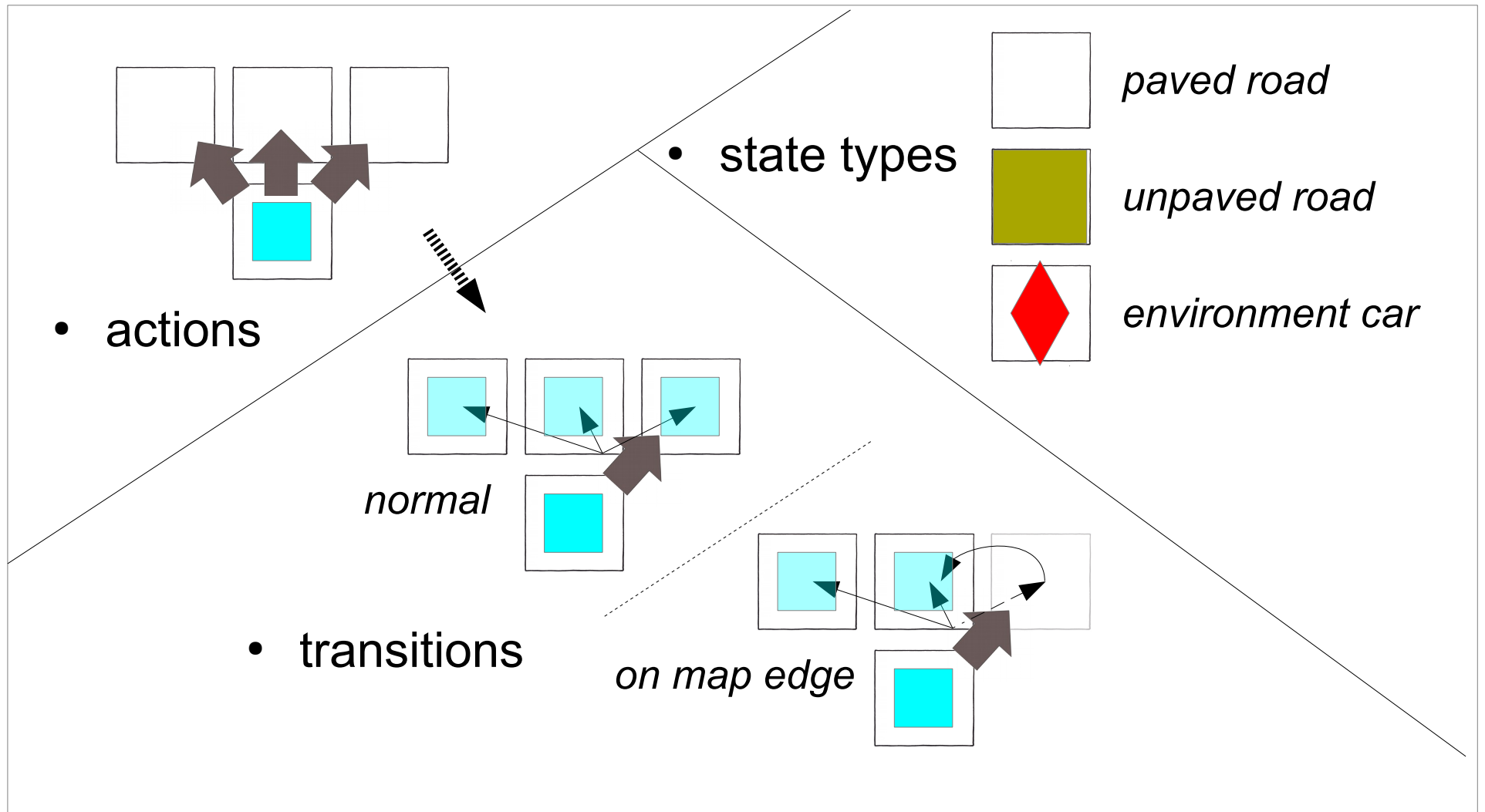
What is the code for?

- To support the coursework programming exercises.
- We will use this to write some of the RL methods that we will learn on the course.
- It models a “Road Fighter” game
- Code repository: https://github.com/cortu01/rl_roadFighter

The Problem



States & Transitions



What does the code do?

- It...
 - helps generate MDPs for our problem.
 - has functions for taking actions on a selected MDP, transitioning to the next state, and receiving a reward signal.
 - has functions for outputting on the screen (visualising the game and printing the maps)
 - + some utilities
- (Some code will be added for generating the transition function.)

Reading +

- Till next week...
 - familiarise yourself with the code and ask questions on Piazza (or meet me at my office later today).
 - revise Chapters 1 & 3 of *Sutton and Barto (1st Edition)*.
- Office hours today will end a little bit earlier:
 - *14:00 – 16:20 (Appleton Tower, Room 3.06)*