Homework Assignment

Course: Deep Reinforcement Learning

Sophie Haas, Johanna Linkemeyer, Tjorven Weber (Group 9)

June 28, 2022

1 Review for Group 16

1.1 Task 1

Generally your code looks nice and is well-documented. You implement all the necessary functions.

We do not really understand why the size of the gridworld has to be odd. Also, we are not sure about your negative rewards. If we understand correctly, you give a negative reward if the agent is supposed to perform an 'out of bounds' movement. So, a negative reward is not given for specific tiles, but for specific actions on some tiles. In general, we don't think this is a problem but maybe not 100% what the task asks for. This is only a minor concern about the task wording - overall your implementation looks neat.

Your visualization is really nice :)

1.2 Task 2

It looks like your solution is not adaptible to different n's for n-step SARSA. Maybe we are wrong here and overlooked something - if so, please disregard this feedback. Apart from this, again, your code is commented nicely and looks neat overall.

2 Review for Group 37

2.1 Task 1

Overall, your code looks neat. It would be nice if you would have included some more comments and docstrings, especially in the part in the Gridworld initialization with the special tiles it is kind of hard to follow whats going on without comments. It looks like you implemented all things mentioned in the task, so, very nice overall :)

2.2 Task 2

Very nice solution. Again, some more comments would be nice but your well-chosen variable names make it relatively easy to follow whats going on (as someone who has worked on the

same task). For someone from outside, it would probably be nice to include some more comments.

On a general note, we like your file structure! :)

3   Review for Group 44

3.1   Task 1

In general, nice implementation, well documented code and an exceptionally nice visualization. As far as we can tell, you managed to fulfil all requirements stated in the problem statement. We have nothing to complain about here, nice solution.

3.2   Task 2

Again, really nice implementation from what we can tell. Your solution is easy to adapt to different n-steps and again, well documented.