Report

Purpose of the project:
To teach a reinforcement learning algorithm how to solve a banana collection game.

Journey:
I started by trying to optimize the solution for the problem without clear direction. I ended up struggling with implementation of prioritized experience replay, dueling DQN, but still not able to optimize the solution.

Therferoe, I clicked the scary button of reset data under the Udacity menu and started from scratch. I reused code from the DQN lesson which implements a Double DQN algorithm with decaying epsilon and random experience replay. I was able to solve with clear and coherent steps the problem in 248 episodes. The model weights are stored under checkpoint.pth.

Conclusion:
KISS, or keep it simple stupid. I had to remove everything and start with a simplistic model to solve a problem.