

Daily Log

Monday February 24

I confirmed the packages needed to run this project (was able to make a fresh conda environment and run it)

Wednesday February 26

The Diayn implementation is combined with a metacontroller so I seperated out the pretraining part which is the part that is done twice in 2 phase DBH. I also made it so I could switch out SAC for SAC-Discrete. Technically this is all for this weeks goal.

Friday February 28

I realized that not everyone has top of the line GPU's so I wanted to make training faster. I looked into what was the bottleneck as I suspected the episode lengths were not fixed so the agent went on and on until it finally managed to beat the game. I episode step limits based on what I found online.

Timeline

Date	Goal	Met
Today minus 2 weeks	Benchmark DIAYN, discrete SAC, and DDQN on juggling	not yet
Today minus 1 week	Benchmark DIAYN, discrete SAC, and DDQN on juggling	not yet
Today	Create phase 1 of DBH	yes
Today plus 1 week	Create 2 phase DBH	
Today plus 2 weeks	Create 2 phase DBH	

Reflection

I'm giving myself three weeks of in-class time to try getting DBH phase 2 to work. After that, I think I should use the rest of the time to work on getting concrete results for what I have already and polish the command line UI, github, and basically wrap up the project.

C: A github repo of Graphs and gifs of various algorithms working on the Triathlon environment along with code to generate these. No CLI

B: A command line user interface where users can test out the various algorithms along with the option to try the environment themselves. The UI lets one compare several algorithms and produces line graphs showing reward over time (other statistics to track to be determined). Organized and helpful github repo (clear instructions, requirements, background info).

A: Everything above with 2phase DBH working (even if it's not significantly better than other algorithms)