Team 3 - Project 2 .gifs

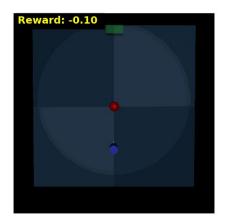
Cole Dombrowski, Franklin Xie, James "Thomas" Seeley

Note:

- GIFS ADDED TO PRESENTATION FOR ORGANIZATION
- GIFS ARE MENTIONED IN REFLECTIONS IN NOTEBOOK

Poor Performance (Initial Poor Player):

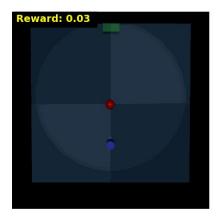






Moderate Performance:







Better Performance:







Best Performance:



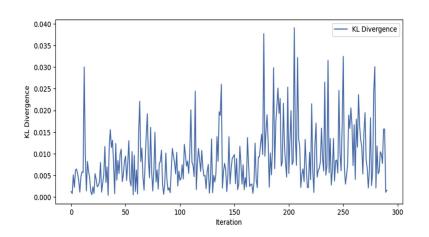
Common Errors 1, 2, 3:

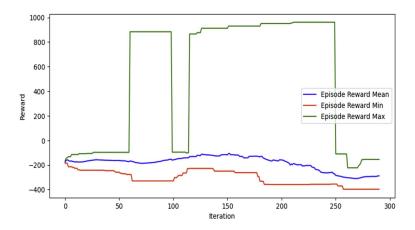






KL Divergence/Reward - Training Progress:





Reflection:

- Improving the reward function and tweaking the observation space made a big difference. Rewarding the agent for getting closer to the puck and goal helped its performance
- Adding details like puck velocity to the observation space made the agent's decisions much better
- If we could do it again, we'd start with a stronger reward system and spend more time tuning hyperparameters earlier
- Trying out better exploration and training techniques sooner would have saved us time and headaches