# **Crafting Jack Black**

### Jake Dreher, Samuel Bersch, Michael Le Drexel University

# **Group Members**

- Jake Dreher (jjd358@drexel.edu, 14423695)
- Samuel Bersch ()
- Michael Le ()

### **Project Statement**

The goal of this project is to analyze various Reinforcement Learning algorithms through the lens of Blackjack. This project aims to determine what is the best algorithm to use for a machine to learn how to play Blackjack. We will be using (INSERT ALGOS HERE) and analyzing their performance during training, comparing various metrics over the epochs. This project will use the Gymnasium library for the Blackjack environment.

## **Project Plan**

Explain what algos we are going to use, how we are going to implement them, and what metrics we are going to use to compare them.

#### **Novelty**

The novelty of this project is that we are going to be using a variety of different algorithms to analyze their performance in a single environment.

#### **Evaluation Approach**

Fill in once we've decided on the algos and metrics.

#### Milestones

Need to fill in the milestones once we have a better idea of the project. We will be using the following milestones:

#### References

Need some citations.

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