



## Project 4: Reinforcement Learning

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**Due Date 1: April 26<sup>th</sup>, in class presentation.**

**Due Date 2: May 3<sup>rd</sup>, 11:59 PM ET for world exploration and scoring.**

**Group Project.**

### Project - GridWorld

#### Objective

In this project P4, you are essentially exploring a gridworld. (Go North, Go East, Go South, Go West. Go wherever you want. Go crazy.) Just try to maximize your rewards.

#### T & R

Yeah, those would be nice to know, but unfortunately, we don't know the T&R values. We will have to learn those along the way.

#### How many grid worlds?

There are many environments. Each environment can be explored up to  $m$  times.

#### What's the score?

Your score is always being averaged.

#### What to Submit

Nothing. Present in class.

Your score is updated via the API.

#### Use of API

We will play and record the games interactively with each other. Details of the API will be shared via Slack and discussed in class.

#### Grading Rubrik

- **5 points:** Based on your in class presentation.
- **5 points:** Based on your average score.