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| Assignment 2 |
| Robots, Agents, and Humans |
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| **Jim Ihrig and Frank Bruno** |
| **3/28/2011** |

# Grid World

Stuff about the Grid World used from her example.

## Q Learning

Stuff about the Q Learning in the Grid World.

### Tests using different parameters

Talk about the tests done using the different parameters. The tests done were

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| --- | --- | --- | --- |
| Episodes | Learning Rate | Discount Factor | Max steps taken per episode |
| 300 | 0.5 | 0.5 | 1000 |
| 150 | 1 | 0.9 | 500 |
| 75 | 0.75 | .7 | 250 |

• the transition and reward functions used in your world

• a description of the exploration policy

• description of the Q-learning rule implementation

• the ﬁnal Q-table (post-learning)

• the learning and training parameters (number of episodes, α, and γ)

• two example action sequences generated using your policy.

## A\* Path Planning

• pseudocode of your planner

• f, g, and h values for one example map

# Conclusion