CS531 Programming Assignment 4: Wumpus Agent

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Abstract

In this assignment we design, implement and evaluate an algorithm that uses first-order logic and A* search for an agent in order to solve Wumpus puzzles.

1 Introduction

The Wumpus world is a 4x4 grid containing pits, one Wumpus and one gold at various locations. The objective of the agent is to retrieve the gold without dying from the Wumpus or falling into a pit. Furthermore the agent can perceive its environment and infer the location of pits and the Wumpus due to the construction rules of the Wumpus world. Therefore it makes sense to implement an algorithm involving logic and search to make intelligent decisions.

We used the existing Wumpus environment simulator for Python provided by Walker Orr.

2 Approaches

Approaches here.

3 Experiments

Experiments here.

4 Discussion

Discussion here.