Ryan, Danny, Jeff School of Mathematical and Natural Sciences New College of Interdisciplinary Arts and Sciences Arizona State University 4701 Thunderbird Road Glendale, AZ 85306

Angelina Baker 522 Rattlesnake Trail Payson, AZ 85541 30 September 2025

Dear Angelina Baker,

Thank you for reaching out to us and we are delighted to solve this given "Wumpus World" problem. There is the implementation of logical rules within the code application. In addition, we were intrigued to ensure the program is visually appealing and fully functions as intended. With this in mind, Our program runs in Python using the Flask Module to provide a functional and appealing web interface.

We ensured that our programs' capabilities meet the requirements. It has the capability of creating the world and populating with 'pits', a 'paradise', and a 'Wumpus' from a ".txt" file that will be provided to allow an easy setup. The agent has the ability to explore the world limited to a 4x4 grid and as of right now is limited to the requested ten moves. Its logic is adhering to the rules provided (i.e., Stench means Wumpus is adjacent, breeze means pit is adjacent).

While you didn't specify one, we created a web interface that allows you to click any chamber to query its status. The system will reply with one of the following: "Safe" (a confirmed safe area, with no pits nor Wumpus), "Unknown" (an unvisited, or not proven safe area), "Dangerous" (Known dangerous tile containing either a pit or Wumpus), and "Percept Information" (The collection of what the agent percieves).

The complete code, along with the "README.txt" and the initial "KB.txt", will be provided in our canvas link, and the day of the in-class demonstration on October 21st. We appreciate the opportunity of solving this problem and look forward to revealing our hard work to you.

Best, Ryan, Danny, and Jeff.