

Will Gaty
CS2040-031
Lab 6/7 Proposal
4/26/2023 (submitted late)

Quick Note

I know that when we discussed this in person a month or so ago, you said you would give me full credit (accounting for late penalty) for lab 6 as long as I submitted lab 7, but I'm still going to submit this just so there is something on Canvas to mark that I'm done, as well as giving a link to the GitHub repo containing all of the code, a .pdf of this writeup, and some demo videos.

GitHub URL

https://github.com/gatyw/cs2040_lab6_7

Rules List

1. 6x6 Map
2. My addition: there will be 4 keys on the map that the player can collect. If they collect all 4 keys, one of the spaces on the edge of the map will be the cave entrance, and the player can escape through there as an alternative to killing the Wumpus.
3. At the beginning of each turn, the player will be told where in the cave they are.
 - a. If they are up against a wall, they will be warned with a message like "You feel the cave wall to your left/right."
 - b. If they are near the Wumpus (1 Wumpus per game):
 - i. If they are within 2 spaces of the Wumpus, they will be warned with a message like "You smell a faint whiff of the Wumpus."
 - ii. If they are within 1 space of the Wumpus, they will be warned with a message like "You smell the overwhelming stench of the Wumpus!"
 - c. If they are within 1 space of bats (2 bats per game), they will be warned with a message like "You hear the flapping of bats."
 - d. If they are within 1 space of a pit (2 pits per game), they will be warned with a message like "You feel a draft at your feet."
 - e. If they are at the cave entrance:
 - i. If they have not collected all 4 keys, then they will be told "You find a door, but it is locked!"
 - ii. If they have collected all 4 keys, they can escape and win the game.
4. They will also be given information about their current status.
 - a. "You have __ arrows remaining."
 - b. "You have collected x/4 keys."
5. Pickups
 - a. Arrows (2-3 per game)
 - b. Keys (4 per game)

6. Win conditions
 - a. The player kills the Wumpus
 - b. The player collects all of the coins and escapes the cave entrance

Division of Work

All me, I'm working alone (and waaaaaaaaaaaaaaaaaaaaay late).

Solution Uniqueness

My unique addition is the inclusion of keys to give the player an alternative victory option to killing the Wumpus. After doing some playtesting, it honestly might be harder to win by collecting the keys and escaping, or at least more tedious.