### **WUMPUS WORLD READ-ME**

# By Abubakar Awumbila

- This program is implemented in the GNU Emacs IDE on the Linux operating system, which can be downloaded <a href="here">here</a>.
- Upon Compilation a wumpus world is initialized and defined as game. The Wumpus world can be viewed anytime by entering 'game' in the interactions window.

#### • FUNCTIONS:

#### 1. **DO-MOVE-RIGHT.**

**INPUTS:** game

OUTPUT: Moves the agent to the right adjacent room and prints out the state of the game.

Ex. (do-move-right game)

### 2. **DO-MOVE-LEFT.**

**INPUTS:** game

OUTPUT: Moves the agent to the left adjacent room and prints out the state of the game.

Ex. (do-move-left game)

## 3. **DO-MOVE-UP.**

INPUTS: game

OUTPUT: Moves the agent to the above adjacent room and prints out the state of the game.

Ex. (do-move-up game)

#### 4. **DO-MOVE-DOWN.**

**INPUTS:** game

OUTPUT: Moves the agent to the lower adjacent room and prints out the state of the game.

Ex. (do-move-down game)

### 5. **ASK**

```
INPUT: game; move (*right*, *left*, *up*, *down*, *none*)
```

OUTPUT: poses a query to the knowledge base and prints out a message about how safe it is to move in the given direction

Ex. (ask game \*right\*)

## 6. **ASK-POS**

```
INPUT: game, x, y
```

OUTPUT: poses a query to the knowledge base and prints out a message about how safe it is to move to Room (x, y)

Ex. (ask game 0 1)

7.

#### 8. TELL

INPUT: game

OUTPUT: Updates the knowledge base with percepts about the current room

Ex. (tell game)

- When the agent dies, falls into a pit or Wins by reaching the exit, the game will
  end and the appropriate end message will be printed out as well as the final
  score.
- Score Rules: Initial Score = 1000

Each Move = -50

Grab Gold = +50

Die = -1000

Exit = +1000