

**MazeGame final.py**

```
1  '''
2  Added dark rooms
3  '''
4
5  import json
6
7  # Load game data from JSON file
8  def load_game_data(filename):
9      with open(filename, "r") as file:
10         return json.load(file)
11
12  game_data = load_game_data("game_data.json")
13  rooms = game_data["rooms"]
14  current_room = game_data["start"]
15  inventory = []
16  constructed_items = {"Magic Staff": ["Crystal Shard", "Wooden Stick", "Enchanted Core"]}
17  enemies = {"Dark Sorcerer": "Magic Staff"} # Enemy that can be defeated with a specific item
18
19  def has_light_source():
20      return "Lantern" in inventory
21
22  def display_room():
23      global current_room
24
25      if rooms[current_room].get("Dark", False) and not has_light_source():
26          print("It is too dark to see anything! You need a light source.")
27          return
28
29      print(f"You appear to be in the {current_room}")
30      print(rooms[current_room].get("Desc", "No description available. "))
31
32      if "Item" in rooms[current_room]:
33          print(f"There is a {rooms[current_room]['Item']} in the room")
34
35      if "Enemy" in rooms[current_room]:
36          print(f"A {rooms[current_room]['Enemy']} is here! Be careful!")
37
38      if inventory:
39          print(f"You have {len(inventory)} items: {' '.join(inventory)}")
40      else:
41          print("You have no items!")
42
43  def handle_movement(direction):
44      global current_room
45      if direction in rooms[current_room]:
46          current_room = rooms[current_room][direction]
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47     print(f"You moved {direction}")
48 else:
49     print("You can't go that way.")
50
51 def handle_item_interaction(action, item):
52     global current_room
53     if action == "Get":
54         if "Item" in rooms[current_room] and rooms[current_room]["Item"].lower() ==
item.lower():
55             if item not in inventory:
56                 inventory.append(item)
57                 del rooms[current_room]["Item"]
58                 print(f"{item} retrieved!")
59             else:
60                 print(f"You already have the {item}.")
61         else:
62             print(f"Can't find {item}.")
63     elif action == "Drop":
64         if item in inventory:
65             inventory.remove(item)
66             rooms[current_room]["Item"] = item
67             print(f"You dropped {item}.")
68         else:
69             print(f"You don't have {item}.")
70     elif action == "Craft":
71         for crafted_item, components in constructed_items.items():
72             if item == crafted_item and all(comp in inventory for comp in components):
73                 for comp in components:
74                     inventory.remove(comp)
75                 inventory.append(crafted_item)
76                 print(f"You have successfully crafted {crafted_item}!")
77                 return
78             print(f"You don't have the necessary components to craft {item}.")
79
80 def handle_combat():
81     global current_room
82     if "Enemy" in rooms[current_room]:
83         enemy = rooms[current_room]["Enemy"]
84         if enemy in enemies and enemies[enemy] in inventory:
85             print(f"You defeated the {enemy} with your {enemies[enemy]}!")
86             del rooms[current_room]["Enemy"]
87         else:
88             print(f"The {enemy} attacks! You need a {enemies.get(enemy, 'proper
weapon')}} to defeat it!")
89
90 def main():
91     global current_room
92     while True:
93         display_room()
94         if "Enemy" in rooms[current_room]:
```

```
95         handle_combat()
96
97     user_input = input("Enter command\n").strip().split(" ")
98
99     if not user_input:
100         continue
101
102     action = user_input[0].title()
103     argument = " ".join(user_input[1:]).title() if len(user_input) > 1 else ""
104
105     if action == "Exit":
106         print("Goodbye!")
107         break
108     elif action == "Go" and argument in ["North", "South", "East", "West", "Up",
109 "Down", "Out", "In"]:
110         handle_movement(argument)
111     elif action in ["Get", "Drop", "Craft"] and argument:
112         handle_item_interaction(action, argument)
113     elif action == "Passcode" and argument == "8915" and current_room == "Library":
114         print("Lock unlocked!")
115     else:
116         print("Invalid command.")
117
118 if __name__ == "__main__":
119     main()
```