

MazeGame step 5.py

```
1  '''
2  Add enemies to the game
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
17  constructed_items = {"Magic Staff": ["Crystal Shard", "Wooden Stick", "Enchanted
18  Core"]}
19  enemies = {"Dark Sorcerer": "Magic Staff"} # Enemy that can be defeated with a
20  specific item
21
22  def display_room():
23      print(f"You appear to be in the {current_room}")
24      print(rooms[current_room].get("Desc", "No description available.))
25
26      if "Item" in rooms[current_room]:
27          print(f"There is a {rooms[current_room]['Item']} in the room")
28      else:
29          print("The room is empty")
30
31      if "Enemy" in rooms[current_room]:
32          print(f"A {rooms[current_room]['Enemy']} is here! Be careful!")
33
34      if inventory:
35          print(f"You have {len(inventory)} items: {' '.join(inventory)}")
36      else:
37          print("You have no items!")
38
39  def handle_movement(direction):
40      global current_room
41      if direction in rooms[current_room]:
42          current_room = rooms[current_room][direction]
43          print(f"You moved {direction}")
44      else:
45          print("You can't go that way.")
46
47  def handle_item_interaction(action, item):
48      global current_room
```

```
47     if action == "Get":
48         if "Item" in rooms[current_room] and rooms[current_room]["Item"].lower() ==
item.lower():
49             if item not in inventory:
50                 inventory.append(item)
51                 del rooms[current_room]["Item"]
52                 print(f"{item} retrieved!")
53             else:
54                 print(f"You already have the {item}.")
55         else:
56             print(f"Can't find {item}.")
57     elif action == "Drop":
58         if item in inventory:
59             inventory.remove(item)
60             rooms[current_room]["Item"] = item
61             print(f"You dropped {item}.")
62         else:
63             print(f"You don't have {item}.")
64     elif action == "Craft":
65         for crafted_item, components in constructed_items.items():
66             if item == crafted_item and all(comp in inventory for comp in components):
67                 for comp in components:
68                     inventory.remove(comp)
69                     inventory.append(crafted_item)
70                     print(f"You have successfully crafted {crafted_item}!")
71                     return
72             print(f"You don't have the necessary components to craft {item}.")
73
74 def handle_combat():
75     global current_room
76     if "Enemy" in rooms[current_room]:
77         enemy = rooms[current_room]["Enemy"]
78         if enemy in enemies and enemies[enemy] in inventory:
79             print(f"You defeated the {enemy} with your {enemies[enemy]}!")
80             del rooms[current_room]["Enemy"]
81         else:
82             print(f"The {enemy} attacks! You need a {enemies.get(enemy, 'proper
weapon')}} to defeat it!")
83
84 def main():
85     global current_room
86     while True:
87         display_room()
88         if "Enemy" in rooms[current_room]:
89             handle_combat()
90
91         user_input = input("Enter command\n").strip().split(" ")
92
93         if not user_input:
94             continue
```

```
95
96     action = user_input[0].title()
97     argument = " ".join(user_input[1:]).title() if len(user_input) > 1 else ""
98
99     if action == "Exit":
100         print("Goodbye!")
101         break
102     elif action == "Go" and argument in ["North", "South", "East", "West", "Up",
103 "Down", "Out", "In"]:
104         handle_movement(argument)
105     elif action in ["Get", "Drop", "Craft"] and argument:
106         handle_item_interaction(action, argument)
107     elif action == "Passcode" and argument == "8915" and current_room == "Library":
108         print("Lock unlocked!")
109     else:
110         print("Invalid command.")
111
112 if __name__ == "__main__":
113     main()
```