# Project Name: Escape The Unknown House

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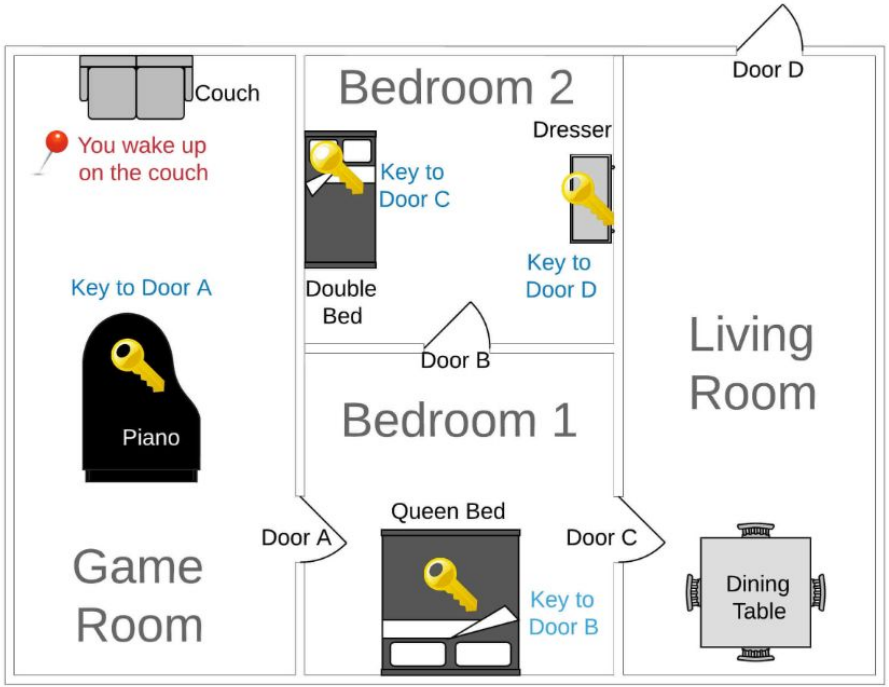
## ESCAPE ROOM



# Project Overview

## 1. How is the game’s structure organized?

*The game's structure is organized around **a series of interconnected rooms** within the unknown house.*

- Each room presents unique challenges and puzzles: the player must solve to progress through the game.
- The player starts in the **game room** ⇨ **Bedroom 1** ⇨ **Bedroom 2** ⇨ **go back to bedroom 1** ⇨ **the Living Room** **reaching the Outside** to win the game.

## 2. Which functions do you have and how are they imported?

built-in/start the game/exploring/examining/finding the key/entering from one room to another/opening the door

# Project Overview

**Which features did you add to the game?**

1. **Data Structure:** Dictionaries

```
# GAME ROOM
# ------------------------------
couch = {
    "name": "couch",
    "type": "furniture",
```

2. **Flow Control:** Conditional While Loop

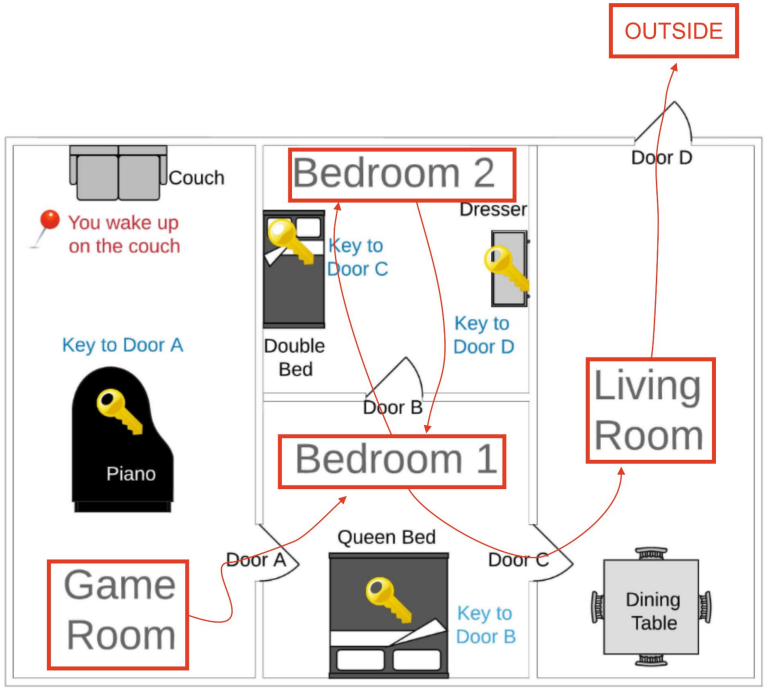
```
if game_state['current_room']['name'] == 'bedroom 1':
    # define which items/rooms are related bedroom 1
    #game_state["current_room"] = bedroom1
    if i == 0:
        game_state["target_room"] = bedroom2
        i +=1
    else:
        game_state["target_room"] = living_room
```

3. **Functions:** Built-in/def

```
def explore_room(room):
    """
```

4. **Object Relations**

```
object_relations = {
    "game room": [couch, piano, door_a],
    "piano": [key_a],
    "outside": [door_a],
    "door a": [game_room, bedroom1]
```



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In [1]:

```
# define rooms and items
# ---------------------------------
# GAME ROOM
# ---------------------------------
couch = {
    "name": "couch",
    "type": "furniture",
}

door_a = {
    "name": "door a",
    "type": "door",
}

key_a = {
    "name": "key for door a",
    "type": "key",
    "target": door_a,
}

piano = {
    "name": "piano",
    "type": "furniture",
}

game_room = {
    "name": "game room",
    "type": "room",
}
```

**1. define**
- ROOMS
- OBJECTS in each ROOM

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```
INIT_GAME_STATE = {
    "current_room": game_room,
    "keys_collected": [],
    "target_room": outside
}
```

In [2]:

```
def linebreak():
    """
    Print a line break
    """
    print("\n\n")

def start_game():
    """
    Start the game
    """
    print("You wake up on a couch and find yourself in a strange house with no windows which you have never been to befor
    play_room(game_state["current_room"])

def play_room(room):
    """
    Play a room. First check if the room being played is the target room.
    If it is, the game will end with success. Otherwise, let player either
    explore (list all items in this room) or examine an item found here.
    """
    game_state["current_room"] = room
    if(game_state["current_room"] == game_state["target_room"]):
        print("Congrats! You escaped the room!")
    else:
```

do? Type 'explore' or 'examine'?").strip()

**2. define**
- FUNCTIONS
  - **start the game**
    Narrative when starting
  - **play the room**
    explore (list of objects)
    examine object
    finding keys
    opening doors
  - **enter a new room**

In [3]:

```
game_state = {
    "current_room": game_room,
    "keys_collected": [],
    "target_room": bedroom1
}
i = 0
```

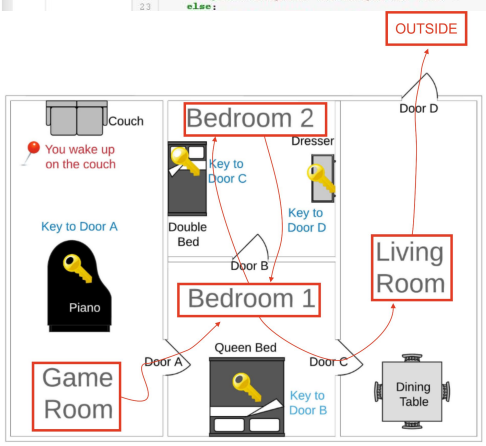
**3. define initial conditions**

In [*]:

```
while game_state["target_room"] != outside:

# for i in range(len(all_rooms)+1):   # NUMBER OF ROOMS
#for i in range (0,2):
#    game_state["current_room"] = all_rooms[i]
#    game_state["target_room"] = all_rooms[i+1]
    print ('CURRENT ROOM: ' + game_state['current_room']['name'])

    if game_state['current_room']['name'] == 'game room':
        # define which items/rooms are related in game room
        #game_state["current_room"] = game_room
        game_state["target_room"] = bedroom1
        object_relations = {
            "game room": [couch, piano, door_a],
            "piano": [key_a],
            "outside": [door_a],
            "door a": [game_room, bedroom1]
        }

        start_game()

    if game_state['current_room']['name'] == 'bedroom 1':
        # define which items/rooms are related bedroom 1
        #game_state["current_room"] = bedroom1
        if i == 0:
            game_state["target_room"] = bedroom2
            i +=1
        else:
            game_state["target_room"] = living_room
```

**4. define flow**
While not outside (target)

flow control when you enter a room




# Technical Challenges and Mistakes

1. **What was the most important technical challenge you faced?**

- **Technical Bugs:** move back to any room
- Simplify the code
- Choose the right tools to tackle the situation
- Understanding the flow/inputs/outputs/multiple variables and functions/bugs/errors

2. **How did you overcome that challenge?**

- Lab practice
- Group Work
- Google Research/ Coding Community/AI Tools
- More practice by using new functions: list comprehension; map; etc


**Thank you!**

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