

ZOMBIATOR

Preliminary Project Software 1

Group 6





Group Members

- 1. Nhi Dinh
- 2. Lihini Hewage
- 3. Jiayue Zheng
- 4. Kamonnun Silarat





CONTENTS

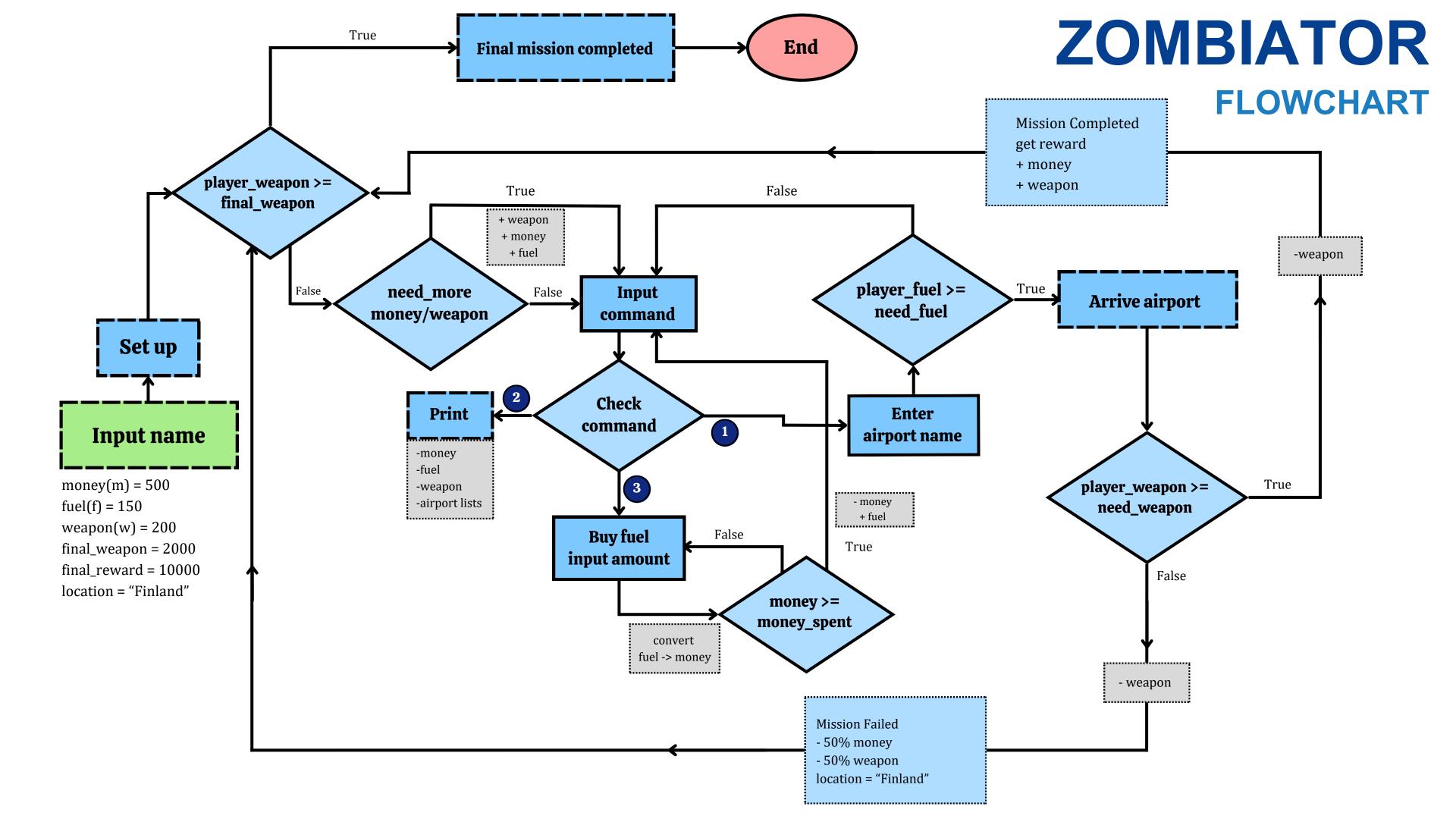
- 1 IDEA AND GOAL OF THE GAME
- DEMO OF THE GAME SHOW GAMEPLAY
- DATABASE AND CODING SOLUTIONS
- FURTHER DEVELOPMENT IDEAS



GAME IDEA

In 2025, Earth's environment is in crisis, causing a strange virus turned people into zombies. The player will play as a hero from Finland to rescue people in other trapped airports.

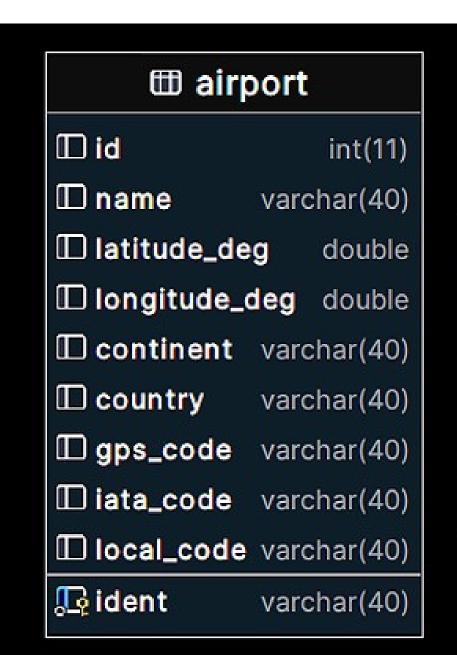
- Rescue the World: Save survivors in different countries.
- Manage Resources: Need money, fuel, and weapons to complete the mission
- Face Challenges: Each city has a different missions with random difficulty levels.
- Earn Rewards: Completing missions gives the player more money and weapons.
- Unlock the Final Challenge: Collect enough weapons to go to Madrid. Completing the mission then gets huge rewards and becomes a hero.

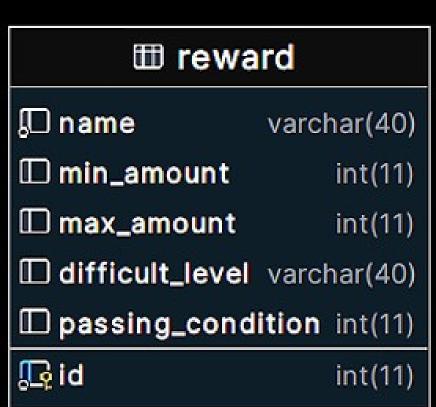


ZOMBIATOR PSEUDOCODE

```
while player weapon < final weapon:
    max distance = def calculate maxdistance(player money, player fuel)
    dict distance = def get dict distance(current location)
    if def need more money or player weapon < 50:
        player money + 500
        player fuel + 100
        player weapon + 200
    command = input()
    if command = 2:
        print player money, player fuel, player weapon
        print def list airport
    if command = 3
        while True
            amount = input()
            spent money = def convert fuel money (amount)
            if player money >= spent money:
                player money -= spent money
                player fuel += amount
                break
```

DATABASE







	∏oid ≎	∭ name		<pre> max_amount</pre>	☐ difficult_level	<pre>□ passing_condition ‡</pre>
1	1	money	300	500	easy	50
2	2	money	500	700	normal	150
3	3	money	700	2000	hard	300
4	4	weapon	50	200	easy	50
5	5	weapon	200	700	normal	150
6	6	weapon	700	2500	hard	300

ZOMBIATOR FUNCTION LIST

- calculate_distance.py
- calculate_maxdistance.py
- convert_fuel_money.py
- dbconnection.py
- fuel_consume.py
- game_story.py
- get_dict_airportcoordinate_by_country.py
- get_dict_distance.py
- list_airport.py
- e main.py
- need_more_money.py
- need_weapon_and_reward.py
- epplayer.py
- ranking.py

get_dict_airportcoordinate_by_country()

```
Belgium': (50.901401519800004, 4.48443984985)
'Germany' : (52.351389, 13.493889)
'Estonia' : (59.41329956049999, 24.832799911499997)
'Finland' : (60.3172, 24.963301)
'Netherlands' : (52.308601, 4.76389)
'Denmark' : (55.7402992249, 9.15178012848)
'Luxembourg' : (49.6233333, 6.2044444)
'Norway' : (60.2934, 5.21814)
'Poland' : (54.377601623535156, 18.46619987487793)
'Sweden' : (57.662799835205, 12.279800415039)
'Latvia' : (56.92359924316406, 23.971099853515625)
'Lithuania' : (54.634102, 25.285801)
'Spain' : (28.4527, -13.8638)
'Albania' : (41.4146995544, 19.7206001282)
'Croatia' : (45.7429008484, 16.0687999725)
'Falkland Islands' : (44.8283, -0.715556)
'Greece' : (37.936401, 23.9445)
'Hungary' : (47.42976, 19.261093)
'Italy' : (37.466801, 15.0664)
'Slovenia' : (46.223701, 14.4576)
'Czech Republic' : (50.1008, 14.26)
'Malta' : (35.857498, 14.4775)
'Austria' : (48.110298, 16.5697)
Portugal' : (37.0144004822, -7.96590995789)
'Switzerland' : (46.23809814453125, 6.108950138092041)
'Slovakia' : (48.17020034790039, 17.21269989013672)
```

get_dict_distance(current_location)

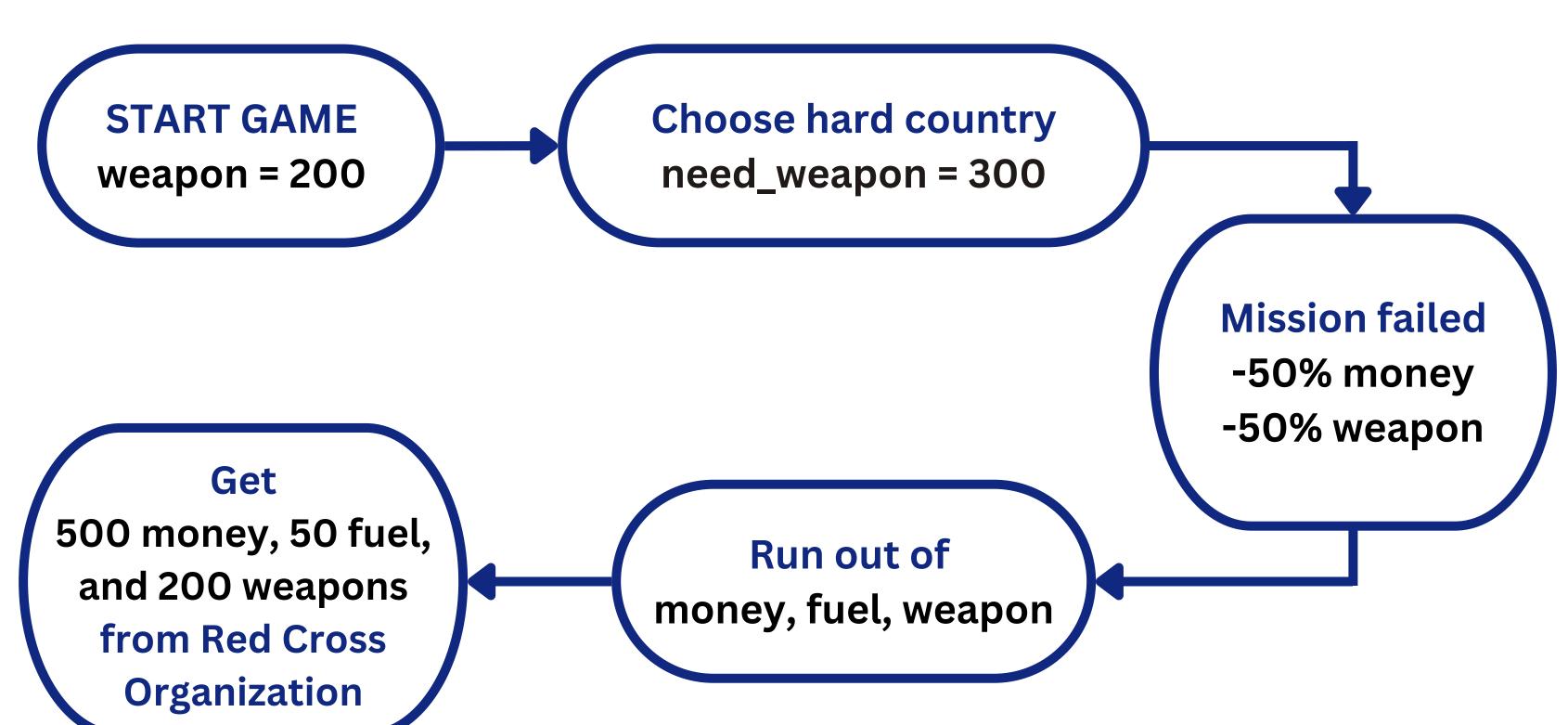
```
'Iceland': 2453.0
'Belgium': 1651.0
'Germany': 1132.0
'Estonia': 101.0
'Netherlands': 1525.0
'Denmark': 1060.0
'Luxembourg': 1680.0
'Norway': 1088.0
'Poland': 768.0
'Sweden': 785.0
'Latvia': 382.0
'Lithuania': 633.0
'Albania': 2133.0
'Croatia': 1725.0
'Falkland Islands': 2420.0
'Greece': 2490.0
'Hungary': 1481.0
'Italy': 2636.0
'Slovenia': 1713.0
'Czech Republic': 1322.0
'Malta': 2822.0
'Austria': 1462.0
'Portugal': 3480.0
'Switzerland': 1994.0
'Slovakia': 1441.0
```

```
'Iceland' : ['normal', 537, 336, 150]
'Belgium' : ['normal', 618, 688, 150]
'Germany' : ['easy', 311, 90, 50]
'Estonia' : ['normal', 626, 356, 150]
Netherlands' : ['hard', 1984, 1463, 300]
'Denmark' : ['hard', 1689, 2020, 300]
'Luxembourg' : ['hard', 780, 1236, 300]
'Norway' : ['hard', 1979, 2046, 300]
'Poland' : ['easy', 307, 152, 50]
'Sweden' : ['normal', 605, 533, 150]
'Latvia' : ['easy', 486, 159, 50]
'Lithuania' : ['easy', 320, 163, 50]
'Albania' : ['normal', 607, 263, 150]
'Croatia' : ['normal', 617, 362, 150]
'Falkland Islands' : ['normal', 528, 683, 150]
'Greece' : ['normal', 563, 584, 150]
'Hungary' : ['normal', 678, 504, 150]
'Italy' : ['easy', 394, 126, 50]
'Slovenia' : ['normal', 637, 313, 150]
'Czech Republic' : ['normal', 559, 547, 150]
'Malta' : ['easy', 376, 132, 50]
'Austria' : ['easy', 360, 153, 50]
'Portugal' : ['easy', 446, 116, 50]
'Switzerland' : ['easy', 366, 124, 50]
'Slovakia' : ['easy', 461, 67, 50]
```

need_weapon_and_reward()

```
def need_weapon_and_reward():
    condition_and_reward = {}
    difficult = ["easy", "normal", "hard"]
   list_country = dis.get_dict_distance("Finland")
    count = 0
    for country in list_country:
        if count == 4 and "hard" in difficult:
            difficult.remove("hard")
        difficult_level = random.choice(difficult)
        if difficult_level == "hard":
            count += 1
```

FIX-GAMEPLAY BALANCE BUG



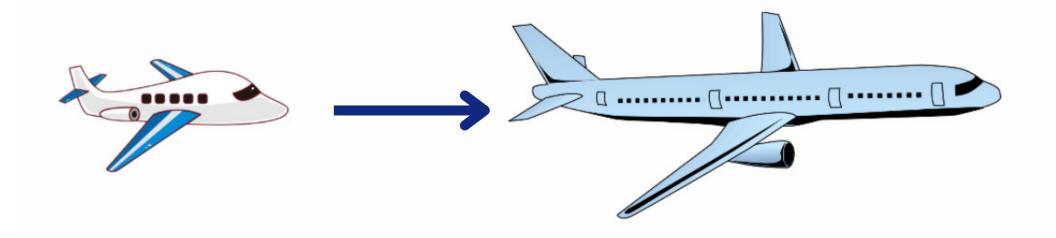
FIX-GAMEPLAY BALANCE BUG

Estonia 101.0 km
Poland 768.0 km
Sweden 785.0 km
Latvia 382.0 km
Lithuania 633.0 km

```
def need_weapon_and_reward():
    condition_and_reward = {}
    difficult = ["easy", "normal", "hard"]
    list_country = dis.get_dict_distance("Finland")
    count = 0
    for country in list_country:
        if count == 4 and "hard" in difficult:
            difficult.remove("hard")
        difficult_level = random.choice(difficult)
        if difficult_level == "hard":
            count += 1
```

FURTHER DEVELOPMENT IDEAS

- 1st: After completing the final mission in Madrid, a guest password game will be added where players must enter a 5-digit password to unlock a green power seed.
- 2nd: Add an option for choosing the electric plane instead of the old plane. The electric plane reduces fuel consumption by half and allows the player to switch from old planes to electric ones.



THANK YOU



TO BE CONTINUED