

README (Bang!)

分為三個 struct :

Game :

```
1  typedef struct _game{
2      uint32_t _total_card_cnt; // = 80
3      uint8_t _total_player_cnt;
4      uint8_t _alive_player_cnt;
5      player **_player;
6      uint8_t _turn;
7      card **_discard;
8      uint32_t _discard_cnt;
9      card **_deck;
10     uint32_t _deck_cnt; // if = 0 shuffle from _discard
11
12 }game;
```

Card :

```
1  typedef struct _special{
2      bool _is_none;
3      bool _is_volcanic;
4      bool _is_jail;
5      bool _is_duello;
6      bool _is_emporio;
7      bool _is_dinamite;
8      bool _is_indianii;
9  } special;
10
11 typedef struct _card{
12     uint8_t _suit; //1 space 2 heart 3 diamond 4 club
13     uint8_t _number;
14     char *_name;
15     char *_skill;
16     /*
17      * bang
18      * throw
19      * draw
20      * missed
21      * specify_palyer_nodis
22      * others_players
23      * plus_hp
24      * specify_palyer_dis
25      * plus_dis
26      * distance
27      * minus_dis
28      */
29
30 } card;
```

Player :

```
1  typedef struct _player{
2      uint8_t _id;
3      uint8_t _position; // 角色位置
4      role *_role;
5      char *_identity; // Sceriffo, Vice, Fuorilegge, Rinnegato
6      int8_t _max_hp; // after checking the role is Sceriffo or not
7      int8_t _hp;
8      uint8_t _hand_cnt; // must not higher than _hp at the end of round
9      card **_hand;
10     card *_gun;
11     card *_horse;
12     card *_jail;
13     card *_dinamite;
14     card *_barrel;
15 }player;
```

Role :

```
1  typedef struct _role{
2      char *_name;        //名稱
3      char *_skill;       //功能
4      uint8_t _lvalue;    //生命值
5  }role
```

特殊(手牌/裝備)的功能：

- **Volcanic** --> 可以使用任意樟樹 **bang**。
- **Prigione** --> 限制任意一位玩家的一回合活動，被關的玩家到他的回合開始前，從牌頂抽取一張進行判定，如果花色是愛心，則玩家越獄成功，棄掉監獄繼續進行回合，若不是愛心，棄掉監獄並暫停一回合。
- **Duello** --> 目標玩家棄掉一張 **bang** 接著元玩家也要出 **bang**，輪流出牌，直到其中一人沒出 **bang**，此人損失一點血量。
- **Emporio** --> 計算目前玩家還在遊戲中的人數，從牌庫中翻開相同數量的牌，每位玩家挑選一張收入自己手牌中。
- **Dinamite** --> 打出此牌後，放在自己的面前，停留一整輪，下次開始回合前，先進行抽牌判定，如果不在黑桃 2~9 的範圍內，則將炸藥傳給左手邊的玩家，即下一家，若在範圍內，則當局玩家立刻損失 3 點血量並棄掉此牌繼續進行回合。
- **Indianii** --> 所有其餘玩家棄掉一張 **bang**，否則損失一點生命值。

(先判定炸藥後判定監獄)

我們出現的 bug：

1. 無限出任意張數 Bang
2. 雜貨舖出現 segmentation fault(已解決)

💣💣函式輸入只能數字(要合法輸入)

↓↓這是我們一進去的畫面，會先告訴我們自己的身份、角色和角色的技能

```
=====
Big Bang Simulator
(う-`')つ~~~~~\('□')/
Created by Team 10
=====

Game log will be stored in log.txt
Player Joker draw a card 🃏 ξ( ☞☞)!
Player Joker draw a card 🃏 ξ( ☞☞)!
Player Joker draw a card 🃏 ξ( ☞☞)!
Player Joker draw a card 🃏 ξ( ☞☞)!
Player Akira draw a card 🃏 ξ( ☞☞)!
Player Akira draw a card 🃏 ξ( ☞☞)!
Player Akira draw a card 🃏 ξ( ☞☞)!
Player Akira draw a card 🃏 ξ( ☞☞)!
Player Akira draw a card 🃏 ξ( ☞☞)!
Player Bob draw a card 🃏 ξ( ☞☞)!
Player Bob draw a card 🃏 ξ( ☞☞)!
Player Bob draw a card 🃏 ξ( ☞☞)!
Player Cloud draw a card 🃏 ξ( ☞☞)!
Player Cloud draw a card 🃏 ξ( ☞☞)!
Player Cloud draw a card 🃏 ξ( ☞☞)!
Player Cloud draw a card 🃏 ξ( ☞☞)!
GAME START

Turn 1:Player Joker draw a card 🃏 ξ( ☞☞)!
Player Joker draw a card 🃏 ξ( ☞☞)!
Health : 4/4
position : 1
identity : Fuorilecce
role name : SlabTheKiller
role skill: Players trying to cancel his "Bang!" cards need to play 2 "Missed!". The "Barrel" effect, if successfully used, only counts as one "Missed!"
-----

Joker(YOU)(4) Akira(5) Bob(3) Cloud(4)
What do you want to do?
0: End turn.
1: BANG
2: BANG
3: MANCATO
4: MUSTANG
5: CATBALOU
6: BIRRA
-----
Your Choice > █
```

↑↑就能選擇想要出的牌了！！

這是我們抽到每張牌時，會長的樣子：

```
-----
Card BANG info:
Action: BANG someone within distance
-----
-2: Return to your handcard.
-1: Move to trash.
1: Use the card to Akira
2: Use the card to Bob
3: Use the card to Cloud
-----
Your Action > 1
Player Joker discard BANG 🃏 ξ( ➡️👤)!
Player Joker used BANG( 🃏👤)👤👤👤 succeeded
Player Akira discard MANCATO 🃏 ξ( ➡️👤)!
Player Akira used MANCATO 🛡️succeeded
-----
```

← ← 當我們選擇 BANG 並決定好對象時，
它就會告訴我們是否有發動成功。

```
-----
Card MUSTANG info:
Equipment: The distance between other players and you is increased by 1(other watch you)
-----
-2: Return to your handcard.
-1: Move to trash.
0: Use/Equip the card to yourself.
-----
Your Action > 0
Player Joker discard MUSTANG 🃏 ξ( ➡️👤)!
Player Joker equiped MUSTANG 🐎succeeded
-----
```

← ← 當我們出 MUSTANG 時，
就可以選擇要放回手牌還是丟掉
或是用在自己身上。

```
-----
Card CATBALOU info:
Action: Force any one player to discard a card
-----
-2: Return to your handcard.
-1: Move to trash.
1: Use the card to Akira
2: Use the card to Bob
3: Use the card to Cloud
-----
Your Action > 1
Player Akira discard VOLCANIC 🃏 ξ( ➡️👤)!
discard success
Player Joker discard CATBALOU 🃏 ξ( ➡️👤)!
Player Joker used CATBALOU 🚫👤succeeded
-----
```

← ← 當我們出 CATBALOU 並決定好對象時，
它就會告訴我們是否有發動成功。

```
-----
Card BIRRA info:
Action (self): Regain your one life point
-----
-2: Return to your handcard.
-1: Move to trash.
0: Use/Equip the card to yourself.
-----
Your Action > 0
Your HP is full.
-----
```

← ← 當我們出 BIRRA 時，就可以選擇要放回手
牌還是丟掉或是用在自己身上。

```
-----
Card MANCATO info:
Action: prevent from BANGed
-----
-2: Return to your handcard.
-1: Move to trash.
1: Use the card to Akira
2: Use the card to Bob
3: Use the card to Cloud
-----
Your Action > 1
Player Joker used MANCATO 🛡️failed
-----
```

← ← 當我們出 MANCATO 並決定好對象時，
它就會告訴我們是否有發動成功。

```
-----
Card VOLCANIC info:
Equipment: 1-distance gun (unlimited BANG)
-----
-2: Return to your handcard.
-1: Move to trash.
0: Use/Equip the card to yourself.
-----
Your Action > 0
Player Joker discard VOLCANIC 🃏 ξ( ➡️👤)!
Player Joker equiped VOLCANIC succeeded
-----
```

← ← 當我們出 BIRRA 時，就可以選擇要放回手
牌還是丟掉或是用在自己身上。

```

Card PANICOI info:
Action: Draw a card from a player at distance 1
-----
-2: Return to your handcard.
-1: Move to trash.
1: Use the card to Akira
2: Use the card to Bob
3: Use the card to Cloud
-----
Your Action > 1
You can draw a card from Player Akira
What do you want to draw?
1: Equipments
2: Hand cards
3: Cancel
Your choice: 2
1
2
3
4
5
Which one do you choose: 3
Draw success!
Player Joker discard PANICOI 🃏 ξ( ♠>♣)!
Player Joker used PANICOI 🃏 (@□@;) succeeded

```

← ← 當我們出 PANICOI 並決定好對象時，
您就可以選擇要換什麼牌的第幾張。

```

Card REV. CARABINE info:
Equipment: 4-distance gun
-----
-2: Return to your handcard.
-1: Move to trash.
0: Use/Equip the card to yourself.
-----
Your Action > 0
Player Joker discard VOLCANIC 🃏 ξ( ♠>♣)!
Player Joker discard REV. CARABINE 🃏 ξ( ♠>♣)!
Player Joker equiped REV. CARABINE succeeded

```

← ← 當我們出 REV.CARABINE 時，就可以
選擇要放回手牌還是丟掉或是用在自己身
上。

```

Card GATLING info:
Action (all): Shoots a BANG! to all the other players
-----
-2: Return to your handcard.
-1: Move to trash.
0: Use/Equip the card to yourself.
-----
Your Action > 0
Player Joker discard GATLING 🃏 ξ( ♠>♣)!
Player Joker used GATLING 🎯 succeeded

```

← ← 當我們出 GATLING 時，就可
以選擇要放回手牌還是丟掉或是用在
自己身上。

```

Card VOLCANIC info:
Equipment: 1-distance gun (unlimited BANG)
-----
-2: Return to your handcard.
-1: Move to trash.
0: Use/Equip the card to yourself.
-----
Your Action > 0
Player Joker discard SCHOFIELD 🃏 ξ( ♠>♣)!
Player Joker discard VOLCANIC 🃏 ξ( ♠>♣)!
Player Joker equiped VOLCANIC succeeded

```

← ← 當我們出 VOLCANIC 時，就可以選擇
要放回手牌還是丟掉或是用在自己身上。

```

Card SCHOFIELD info:
Equipment: 2-distance gun
-----
-2: Return to your handcard.
-1: Move to trash.
0: Use/Equip the card to yourself.
-----
Your Action > 0
Player Joker discard SCHOFIELD 🃏 ξ( ♠>♣)!
Player Joker equiped SCHOFIELD succeeded

```

← ← 當我們出 SCHOFIELD 時，就可以
選擇要放回手牌還是丟掉或是用在自己身
上。

```
Card INDIANI info:
Action (all): who played this card, may discard a BANG, or lose one life point
-----
-2: Return to your handcard.
-1: Move to trash.
0: Use/Equip the card to yourself.
-----
Your Action > 0
Player Akira discard BANG 🎴 ξ( ⚙️>👤)!
Player Bob discard BANG 🎴 ξ( ⚙️>👤)!
Player Joker discard INDIANI 🎴 ξ( ⚙️>👤)!
Player Joker used INDIANI(👤>👤) succeeded
```

← ← 當我們出 INDIANI 時，
就可以選擇要放回手牌還是丟
掉或是用在自己身上。

組員：

邱可菡

洪軾凱

劉庭瑄