

User Manual

Introduction

The Monopoly Game is a command-line interface (CLI) board game. The game is played with a board divided into 20 squares, and a pair of four-sided (tetrahedral) dice and it can accommodate two to six players. Besides playing the game, Players should also be able to save and load a game.

How to start

1. Run the "run.bat" file in the root directory
 2. Enjoy the game.
-

How to play

Number of player: 2-6 players

Players could have money and can own properties during the game. Each player would start with HKD 1500 and no property.

All players start from the first square ("Go").

1. When the game starts, enter "start" to start a new game or "load" to load a saved game.

```
Welcome to Monopoly
Please enter "start" to start a new game or "load" to load a saved game: start_
```

2. The game would ask the user to enter the number of players and their names to start the game.

(Here we take 3 player as an example)

```
Please enter "start" to start a new game or "load" to load a saved game: start
Please enter the number of players (2-6) to start the game: 3
Player 1 please enter your name: Andy
Player 2 please enter your name: Billy
Player 3 please enter your name: Cindy
```

Player's name cannot be repeated

```
Please enter the number of players (2-6) to start the game: 3
Player 1 please enter your name: Andy
Player 2 please enter your name: Billy
Player 3 please enter your name: Billy
Repeated name, please enter again
Player 3 please enter your name:
```

3. The game is turn-based. It would first start with player 1's turn.
At the start of each turn, the turn player could enter "yes" to roll the dice and start the turn, or enter "save" or "load" to save, load the game.

Free Parking 11	Shatin \$700 12	? Chance 13	Tuen Mun \$400 14	Tai po \$500 15	Go to jail 16
Tsing Yi \$400 10					Sai Kung \$400 17
? Chance 9					Yuen Long \$400 18
Mong Kok \$500 8					? Chance 19
Shek O \$400 7					Tai O \$600 20
In jail Just visiting 6	Stanley \$600 5	Income Tax Pay 10% 4	Wan Chai \$700 3	Central \$800 2	GO ----- 1

Round 1, Andy's turn
You are on square 1-"Go" and have \$1500
Please enter "yes" to start your turn or enter "save"/"load" to save/load the game
Andy >

4. After "yes" is typed, the game would roll the dice and the player would step forward according to the result of the dice.
Players take turns in rolling the dice and advancing their respective tokens clockwise on the board.

```
Please enter "yes" to start your turn or enter "save"/"load" to save/load the game
Andy > yes
First die:
You roll a 3
Second die:
You roll a 1
Therefore, you move forward by 4 steps to square 5
```

Certain squares take effect on a player when her token passes or lands on the square:

- a. Property squares

They contain the name and the price of the property and can be owned by players. If a player lands on an unowned property, she can choose to buy it for the written price by typing "yes" or "no" to do nothing.

```
You step on property - "Shek O"
Shek O is not owned, you can choose to buy it, the price is $400, you now have $1500
Please enter "yes" to choose to buy or enter "no" to choose to not buy
```

```
Please enter "yes" to choose to buy or enter "no" to choose to not buy
yes
Billy lose $-400, and you now have $1100
Billy now own Shek O
```

If a player lands on a property owned by another player, she has to pay rent (rent amounts are listed below).

```
You step on property - "Tai Po"
Tai Po is owned by Billy and you need to pay $25 rent to Billy
Cindy lose $-25, and you now have $1475
Billy gain $25, and you now have $2125
```

Pos	Name	Price	Rent
2	Central	800	90
3	Wan Chai	700	65
5	Stanley	600	60
7	Shek O	400	10
8	Mong Kok	500	40
10	Tsing Yi	400	15
12	Shatin	700	75
14	Tuen Mun	400	20
15	Tai Po	500	25
17	Sai Kung	400	10
18	Yuen Long	400	25
20	Tai O	600	25

b. Go

Every time a player passes through (not necessarily lands on) this square, she gets a HKD 1500 salary.

```
You across "Go" so you get $1500 salary
Billy gain $1500, and you now have $2100
You step on "Go", nothing happen here
```

c. Chance

If a player lands on one of these squares, she either gains a random amount (multiple of 10) up to HKD 200 or loses a random amount (multiple of 10) up to HKD 300.

```
You step on "Chance", you either gain up to $200 or lose up to $300
Cindy lose $-170, and you now have $630
```

d. Income tax

If a player lands on this square, she pays 10% of her money (rounded down to a multiple of 10) as tax.

```
You step on "Income Tax", you need to pay 10% of your money as tax
Billy lose $-150, and you now have $1350
```

- e. Free parking
This square has no effect.

```
You step on "Free Parking", nothing happen here
```

- f. Go to Jail
If a player lands on this square, she immediately goes to the "In Jail" part of the "In Jail/Just Visiting" square.

```
You step on "GoToJail", you need to go to jail now  
Cindy is now in jail
```

- g. In Jail/Just Visiting
If a player lands on this square, she is "Just Visiting": the square has no effect.

```
You step on "Just visiting", nothing happen here
```

However, if the player got here by landing on "Go to Jail", she is in jail and cannot make a move. A player gets out of jail by either throwing doubles (i.e., both dice coming out the same face up) on any of her next three turns (if she succeeds in doing this, she immediately moves forward by the number of spaces shown by her doubles throw) or paying a fine of HKD 150 before she rolls the dice on either of her next two turns.

```
Cindy, you are in jail now, and you are in jail for 1 turn  
You now have $2545, you can choose to pay $150 to get out of jail, otherwise you need to throw a double to get out of jail  
Enter "yes" to choose to pay the fee or enter "no" to choose not to pay
```

```
You have to throw a double to get out of jail  
First, You roll a 1  
Second, You roll a 1  
You successfully throw a double, you now can get out of jail  
Cindy get out of jail now  
You step on property - "Mong Kok"
```

If the player does not throw doubles by her third turn, she must pay the HKD 150 fine. She then gets out of jail and immediately moves forward the number of spaces shown by her throw.

```
Billy lose $-150, and you now have $3610  
Billy get out of jail now
```

4. After all the players end their turns, 1 round is over and a new round will start.
Repeat step 2 to 4 until the end condition is fulfilled.

```
Round 1 is over, round 2 starts now
```

Retired

If after taking a turn a player has a negative amount of money, she retires from the game. All her properties become unowned.

```
Anson lose $-1600, and you now have $-100
Anson, you are now broke and retired from the game
```

End condition

The game ends either if there is only one player left or after 100 rounds. The winner is the player with the most money at the end of the game. Ties (multiple winners) are possible.

How to save and load game

At the start of each player turn, the player can choose the save or load game. There would be 6 slots for saving.

```
Now is Andy's turn
Please enter "yes" to start your turn or enter "save"/"load" to save/load the game
save
Which save slot do you want to save this game? (1-6): 1
Please enter "yes" to start your turn or enter "save"/"load" to save/load the game
load
Which slot do you want to load? (1-6): 1
```

Quitting game

Pressing Ctrl + c or command prompt at any time can exit from the game