COMP3211: SOFTWARE ENGINEERING (2021-2022)

Group Project – Monopoly

User Manual

Cheung Sui Wing (21027547D)
Lau Man Chun (21027257D)
Kwong Chun Him (21028468D)
Cheng Chi Kit (21028079D)

Table of Contents

1. Start the game

1. Download and install the python 3.9.6 from the python website https://www.python.org/downloads/release/python-396/
2. Download the source code zip file and extract the .zip file.
3. Navigate to the folder.
4. Type

```
py -m venv venv
venv/Scripts/activate
```

in Command Prompt to create the environment and activate the environment.
5. Install the required library using Command Prompt

```
pip install whaaaaat
pip install 'prompt_toolkit==1.0.14'
```

6. Double click the main.py to execute the program.

2. Game Rule

MOVING AROUND THE BOARD

A maximum of 6, minimum of 2 players are required to play The Monopoly Game.

On your turn, you roll the dice and move your token forward (clockwise around the edge of the board) the same number of spaces as the sum of the dice you rolled

You must then follow the instructions of whatever space your token lands on.

Rule 1: If you land on GO or pass over it while moving your token, you collect $1500.

Rule 2: If you land on Free Parking, nothing bad (or good) happens to you - it's just a "free" resting space, you can save your game here.

Rule 3: If you land on Income Tax, you must calculate 10% of the value of everything you own and pay that much money to the Bank.

Rule 4: If you land on Chance, you may earn money or lose money

Rule 5: If you land on a property that no player owns, you may buy it from the Bank at the price printed on the board. Or you may also pass or save the game.

Rule 6: If you land on a property another player owns, you must pay them the rent that is printed on the board.

Rule 7: If you land on a Go to Jail, you must go to In Jail

IN JAIL

You can Roll dice twice or Pay the fine.

If you roll a double for your turn, you get to leave Jail and move your token as normal. However, even though you rolled doubles, you don\'t get another turn.

Pay a fine of $150 to the Bank to leave Jail and move forward according to your roll. If you don\'t roll doubles for three turns in a row, you must pay $150 to bank.

END OF THE GAME

If your money is less than 0, you are bankrupt!

If the turn is less than 100:

After all but one of the players have been eliminated, the last remaining player wins.

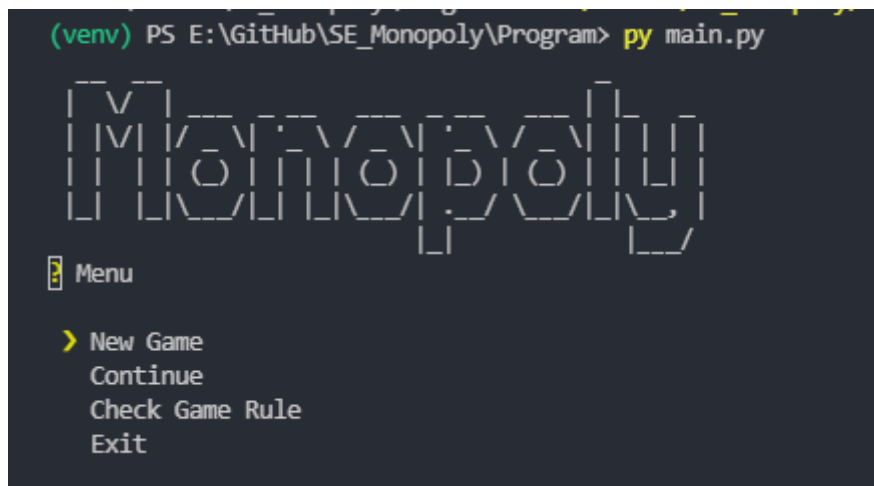If the turn is 100: The players who have the most money will win.

3. Menu

Figure 1 Game Menu Sceen

Figure 1 shows the game menu. There are four options and the player can use **Up and Down Arrow key** to select the option:

- New Game   (start new game)
- Continue   (Load the saved game if any)
- Check Game Rule   (Print the game rule)
- Exit   (close the program)
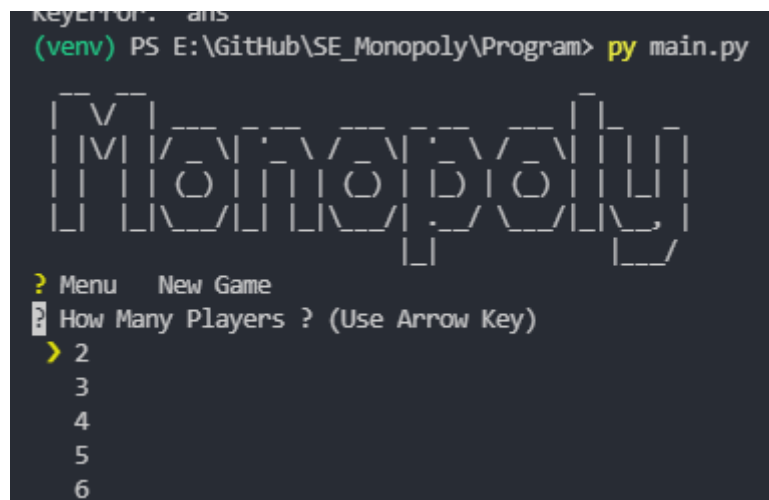
If select the new game option:

Figure 2 Choose how many player would play this game
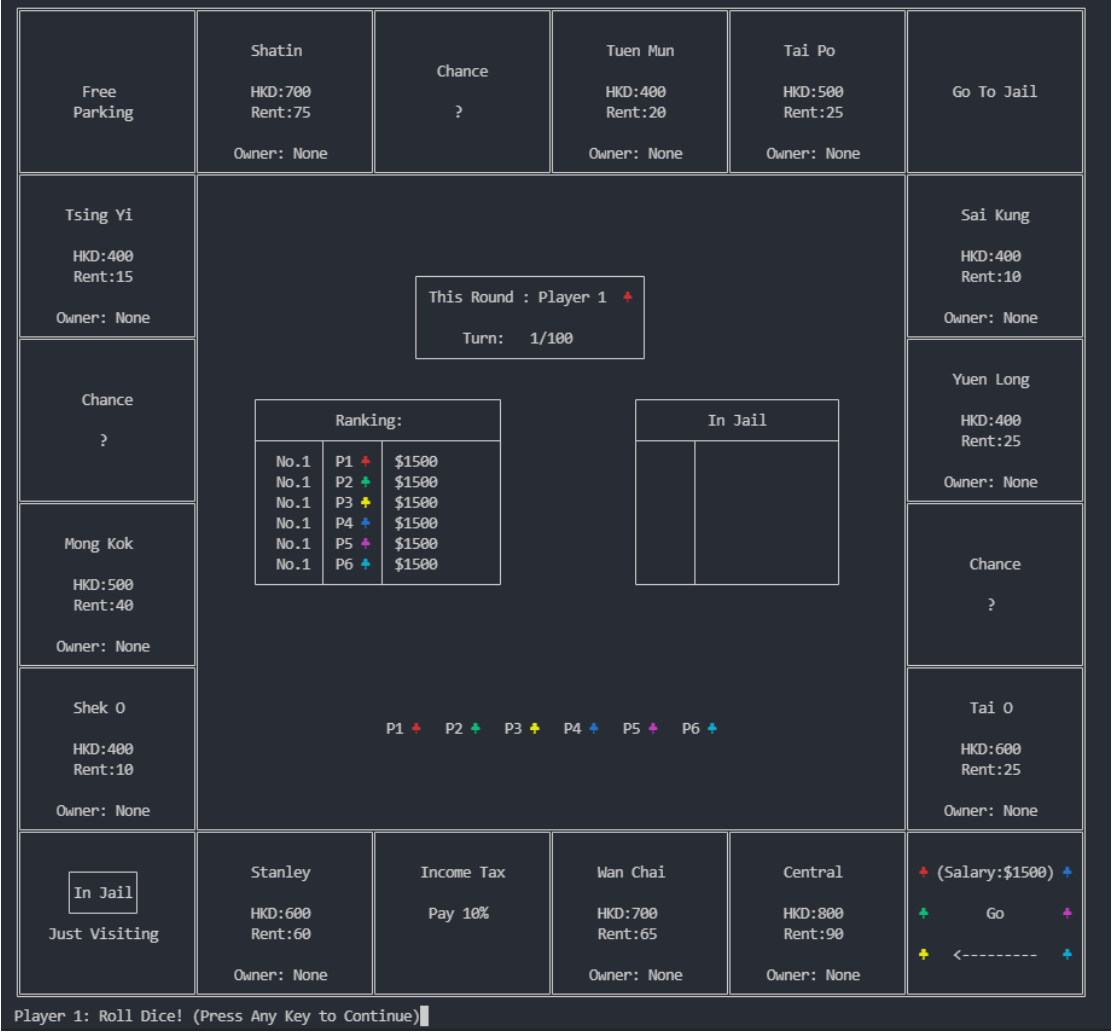
The system would ask how many players would play this game(2 - 6 players)

4. Game Board Sceen

Figure 3 Game board Screen

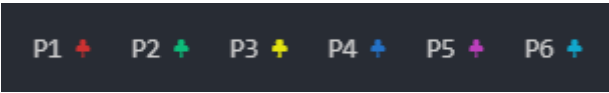Figure 3 is the game sceen of a new game with 6 player.

Figure 4 Player chess color

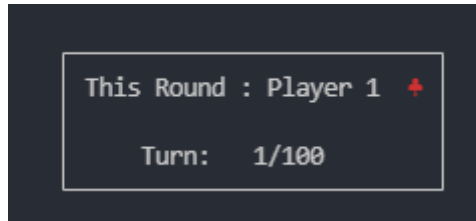Figure 4 show the chess color that the player belong to. (e.g. Red chess is P1)

Figure 5 Game stats (current player and turn)

Figure 5 show the current game stats. The current player and the current game turn.

Figure 6 show the ranking of all the players

Figure 6's table show the ranking ranked by money. If the money are the same, it will rank the player in same position.

Figure 7 Jail information table

Figure 7 shows the Jail table. It will show the player who are in jail and display how many turns he/she need to stay.
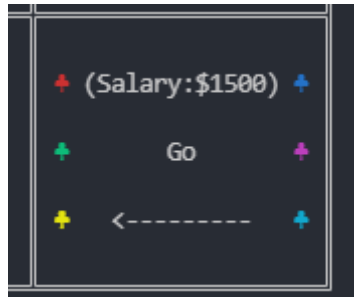
Figure 8 Player chess positon of the block

All the player chess would show inside of the block according to the player position.

5. How to play

First the system would ask the current to press **Enter** to roll the dice

Then the system would show the dice result. Player need to Press **Enter** to continue

For example, player 1 (red chess) go forward with 2 steps to Wan Chai.

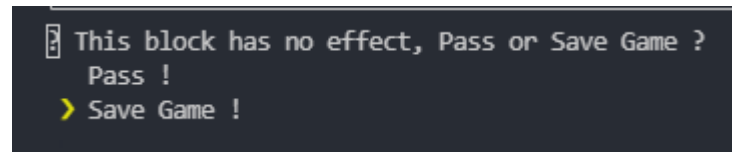
Then the system to choose (Buy/Pass/Save Game). Using **Up and Down Arrow key** to select and **Enter** to choose.

If the player select "Buy", the property would belong to P1, the block data would change.

All other blocks are perform the same control logic.

6. Save Game

```
▐ This block has no effect, Pass or Save Game ?
    Pass !
  › Save Game !
```

Every time the player stop. He/she have the choose to choose the "Save game" option to save the game.

If the player need to continue the previous game. He/She can go to game menu to select "Continue".