COMP3211 Software Engineering ProjectGroup 1

User Manual

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Contents

1 Introduction

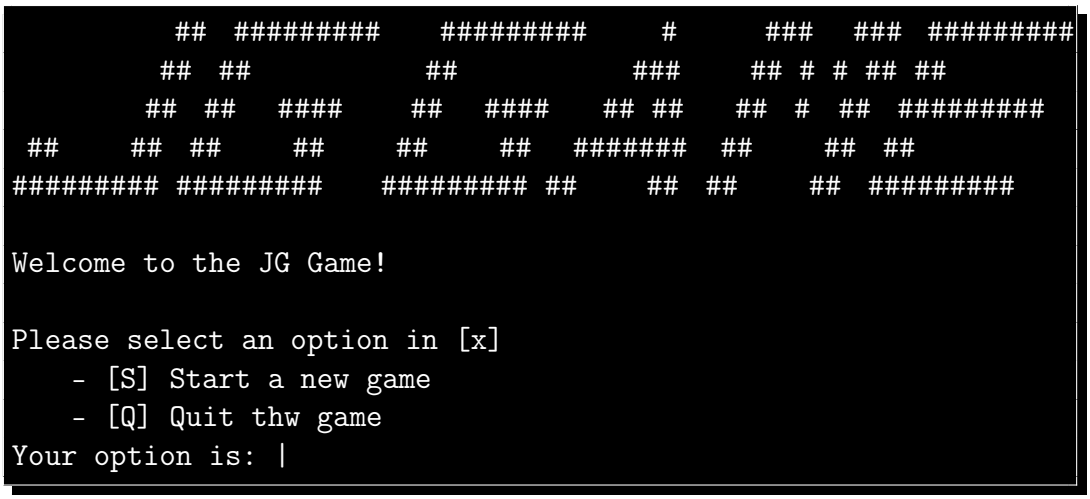
This user manual is designed for jungle games. The manual includes a detailed rule and operation guide, which enables users to understand how specific operations will affect the operation and what kind of operations are in line with the rules, so as to guide users to correctly play the game. The manual also contains some wrong operations that may be caused by users, as well as our solutions and tips. Through this manual, users can better understand the operation of the game and quickly understand the operation of the game when they contact the game for the first time.

2 Game Rules and Operation Guide

This section will guide the user through the correct rules and the correct input format, as well as the error operating system prompts.

2.1 Game Home Menu

- **Initialization Interface**



User Interface 1: Main menu

- **Input format**

```
s/S/q/Q
```

- **Operation Details**

  The user enters `s` to start the game, or `q` to quit the game, both upper case and lower case are acceptable.

```
Please select an option in [x]
    - [S] Start a new game
    - [Q] Quit thw game
Your option is: s
Please input Player A name:|
```

User Interface 2: Start the game

```
Please select an option [x]:
    - [S] Start a new game
    - [Q] Quit thw game
Your option is:
q

Process finished with exit code 0
```

User Interface 3: Quit the game

- **Wrong Input**

  You can't type any other command other than s or q, if you type any other command the system won't run the next step and will ask you to type it again.

```
Please select an option [x]:
    - [S] Start a new game
    - [Q] Quit thw game
Your option is:
c
Wrong Option!
Please input the option in bracket as [x]:
```

User Interface 4: Wrong input

2.2 Create Game Players

- **Create Player interface**

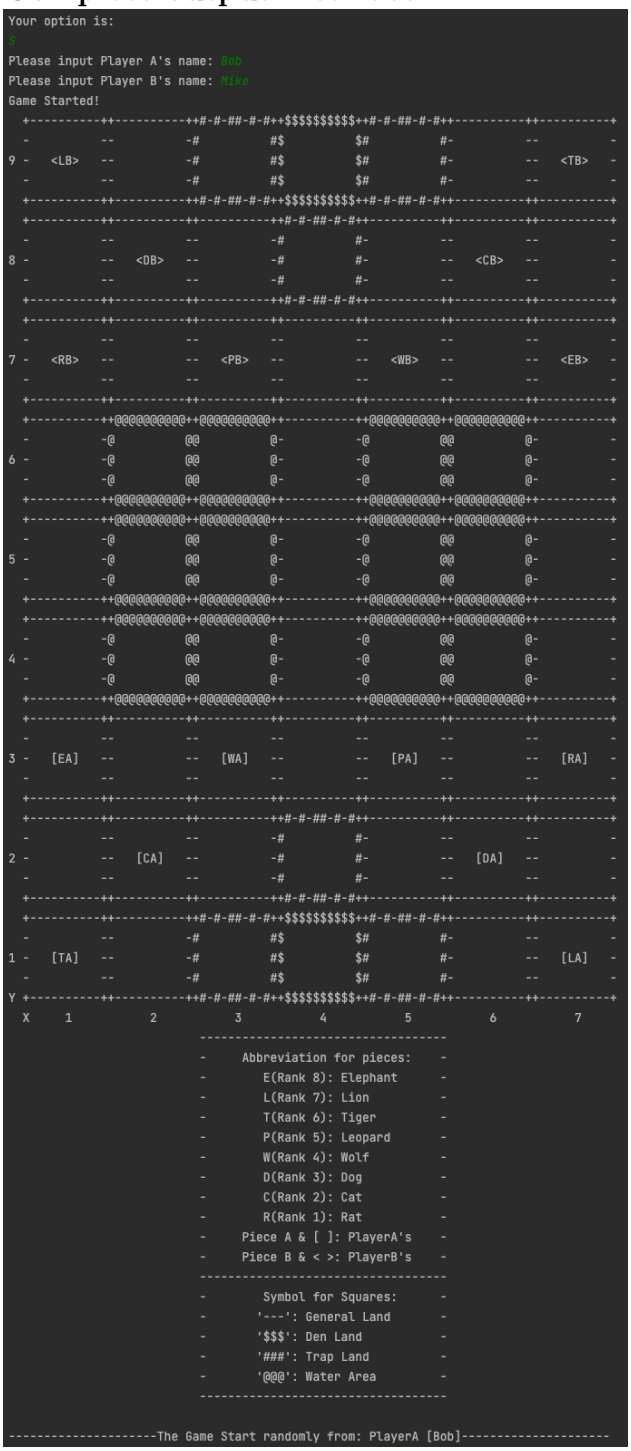
```
Please input the option in bracket as [x]: S
Please input Player A's name:|
Please input Player B's name:|
Game Started!
```

User Interface 5: Wrong input

- **Input format**

  > Any string of characters consisting of digits, letters, and underscores.

- **Complete output interface**



2.3 Game Process (Start)

- **Round initialization**

  The game starts by randomly deciding who will play Jungle gamefirst.

```
----The Game Start randomly from: PlayerA [Mike]----
```

User Interface 6: Game start interface

2.4 Game Process (Inside Round)

- **Information Display**

  After each round, the user is shown the current number of pieces left for each user and who will be playing in the next round.

```
Next round is the turn of PlayerB <Bob>
Remaining pieces of A is : 8
Remaining pieces of B is : 8
```

User Interface 7: Game start interface

2.5 Moving or Eating Piece

- **Input Rules**

  User input corresponding piece coordinates and movement direction can move. Similarly, if you want to eat a piece, you can choose the corresponding direction. The system will automatically judge the priority of pieces. Please note that if your piece is lower than the opponent's piece, you will die if you eat the opponent's piece.

```
<x> and <y>: the COORDINATES of a piece
<d>: the DIRECTION to move (u:up, d:down, l:left, r:
   right)
Please pick and move a piece with input {x y d}:|
```

User Interface 8: Game start interface

- **Input format**

  `x y Direction`
  `x`: the X-axis coordinate of the piece that need to move
  `y`: the y-axis coordinate of the piece that need to move
  `Direction`: need to move the direction (`u`:up, `d`:down, `l`:left, `r`:right)

- **Detailed Operation**

Note that since our board size is 7×9

The number of values you enter for x should range from $1 \leq y \leq 7$

The number of values you enter for y should range from $1 \leq y \leq 9$

The direction input should be selected from `U`, `D`, `L`, and `R`. *(Ignore case)*

```
<x> and <y>: the COORDINATES of a piece
<d>: the DIRECTION to move (u:up, d:down, l:left, r:
   right)
Please pick and move a piece with input {x y d}:
1 1 R
```

User Interface 9: Command to move or eat correctly

- **Example demonstration(Moving Part)**

  When the distribution of the game board is such that player A wants to move his elephant up.

```
  +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  -          -@          @@          @-          -
4 -          -@          @@          @-          -
  -          -@          @@          @-          -
  +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  +----------++----------++----------++----------+
  -          --          --          --          -
3 -   [EA]   --          --   [WA]   --          -
  -          --          --          --          -
  +----------++----------++----------++----------+
  +----------++----------++----------++----------+
  -          --          --          --          -
2 -          --   [CA]   --   [WA]   --          -
  -          --          --          --          -
Y +----------++----------++----------++----------+
  X     1          2          3          4
```

User Interface 10: Operation demonstration

The correct input is as follows

```
Please pick and move a piece with input {x y d}:
1 3 U
```

User Interface 11: Correct input

- **Example demonstration(Special Moving Part)**

  When the peice is in the river, our movement is unusual, because only mouse can walk in the river, and its movement in the river is the same as on land. We won't do a demonstration here.

```
  +----------++----------++----------++----------+
  -          --          --          --          -
7 -          --   <WB>   --   <TB>   --          -
  -          --          --          --          -
  +----------++----------++----------++----------+
  +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  -          -@          @@          @-          -
6 -          -@          @@          @-          -
  -          -@          @@          @-          -
  +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  -          -@          @@          @-          -
5 -          -@          @@          @-          -
  -          -@          @@          @-          -
  +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  -          -@          @@          @-          -
4 -          -@          @@          @-          -
  -          -@          @@          @-          -
  +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  +----------++----------++----------++----------+
  -          --          --          --          -
3 -          --   [PA]   --   [RA]   --          -
  -          --          --          --          -
Y +----------++----------++----------++----------+
  X     4           5           6           7
```

User Interface 12: Operation demonstration

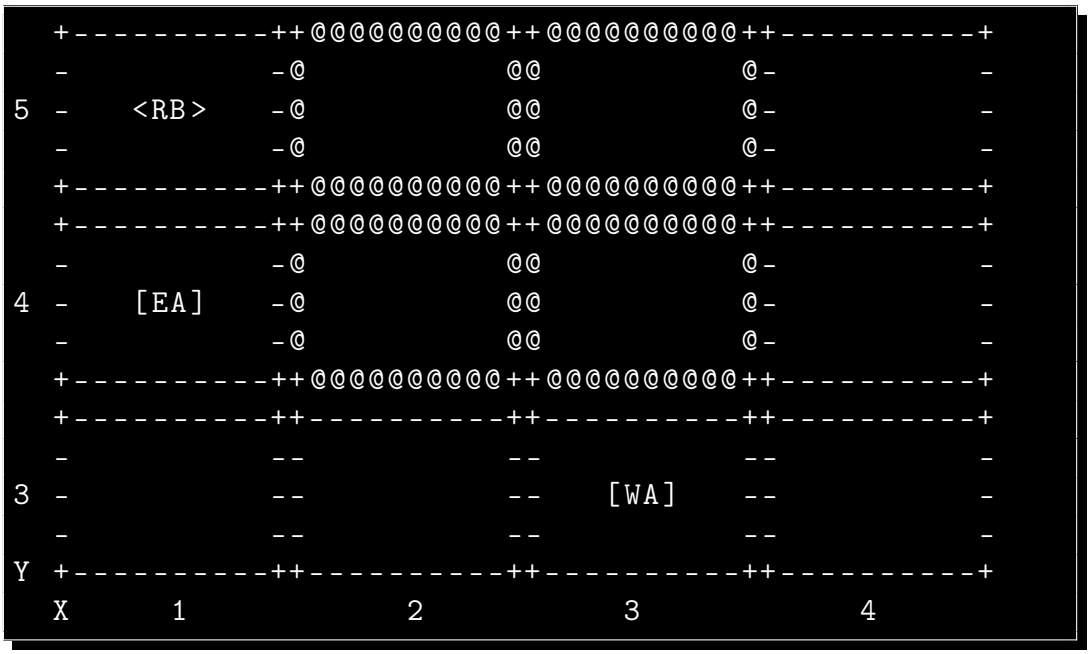
When the game board is distributed in such a way that player B wants his tiger eat opponent's mouse, according to the rules, the tiger can leap directly at the river and the correct input is as follows

```
Please pick and move a piece with input {x y d}:
6 7 D
```

User Interface 13: Correct input

- **Example demonstration(Eating Part)**

  When the distribution of the game board is such that player B wants to eat his elephant into the opponent's mouse.



User Interface 14: Operation demonstration

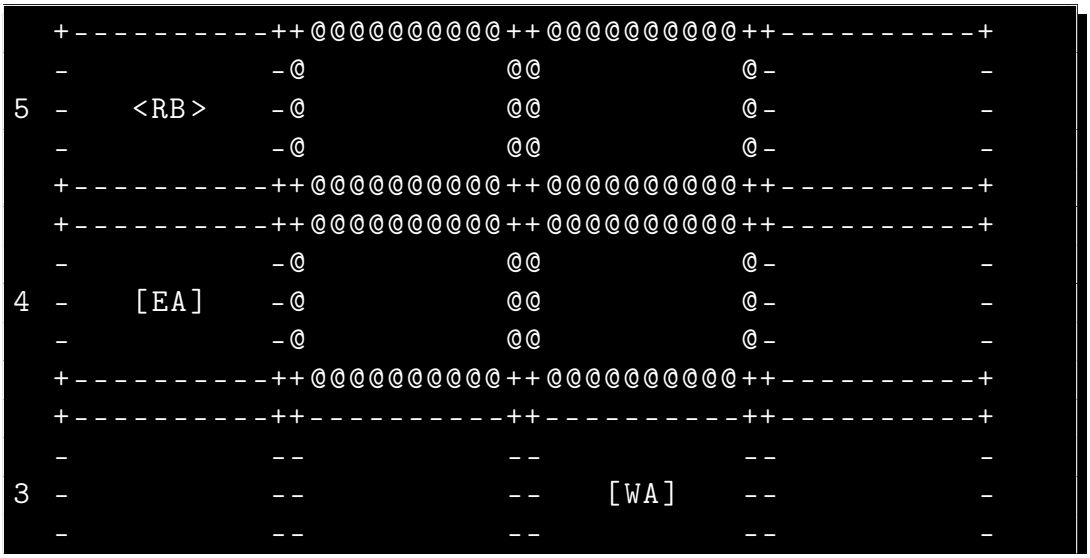
The correct input is as follows

```
Please pick and move a piece with input {x y d}:
1 4 U
```

User Interface 15: Correct input

- Wrong Input

  You need to follow the input rules to enter commands, you can only enter 3 characters at a time and separated by spaces, extra characters or characters not in the list are unacceptable, once you make an input error, you will be prompted to re-enter, please check against the input paradigm we provide.



```
Y +----------++----------++----------++----------+
  X      1           2           3           4
```

User Interface 16: Operation demonstration

```
Please pick and move a piece with input {x y d}:
1,4,U
```

User Interface 17: Wrong input(Separated by commas)

Except for the mouse which can enter the river and the lion and tiger which can cross the river all other pieces cannot cross the river and enter the river.

```
Please pick and move a piece with input {x y d}:
1 4 R
```

User Interface 18: Wrong input(Elephant across the river)

Although rats can eat elephants, rats in the river are not able to eat elephants on land.

```
  +----------++----------++----------++----------+
  -          --          --          --          -
7 -          --   <WB>   --   <EB>   --          -
  -          --          --          --          -
  +----------++----------++----------++----------+
  +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  -          -@          @@          @-          -
6 -          -@          @@   [RA]   @-          -
  -          -@          @@          @-          -
  +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  -          -@          @@          @-          -
5 -          -@          @@          @-          -
  -          -@          @@          @-          -
Y +----------++@@@@@@@@@@++@@@@@@@@@@++----------+
  X      4           5           6           7
```

User Interface 19: Operation demonstration

```
Please pick and move a piece with input {x y d}:
6 6 U
```

User Interface 20: Wrong input(Rat in river eat Elephant)

2.6 Winning

There are two ways to win, one is to enter the opponent's den, the other is to eat up all the pieces of the opponent.

The following situation is that B will capture all of A's pieces and win.

```
  +----------++----------++----------++----------+
  -          --          --          --          -
3 -          --          --          --   <EB>   -
  -          --          --          --          -
  +----------++----------++----------++----------+
  +----------++----------++----------++#-#-##-#-#+
  -          --          --          -#          #
2 -          --          --          -#   [LA]   #
  -          --          --          -#          #
  +----------++----------++----------++#-#-##-#-#+
  +----------++----------++#-#-##-#-#++#-#-##-#-#+
  -          --          -#          #          #
1 -          --          -#          #          #
  -          --          -#          #          #
Y +----------++----------++#-#-##-#-#++#-#-##-#-#+
  X    1           2           3           4


Next round is the turn of PlayerB [Jerry]
Remaining pieces of A is : 1
Remaining pieces of B is : 6
For <x> and <y> are COORDINATOR of piece and <d> is
   the DIRECTION you prefer to move
Please pick and move a piece with input {x y d}:
4 3 D
```

User Interface 21: Win demonstration

3 Important rules and aditional information

1. The mouse has the smallest rank, but it can eat elephants.
2. The initial pieces for each player are 8.
3. Rats are the only piece that can move in the water, and tigers and lions are piece that can span or crisscross the water.
4. You can't move the pieces off the game board.
5. All errors in entering commands will not cause the game to crash, and the game will let you re-enter the commands until they are correct before they are executed.