Monopoly Group 3 User Manual Milestone1:

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Game Initialization:

• The game will begin by prompting the user to enter the number of players and assigning a name and icon to each player

Playing Monopoly:

- To play the game with the text-based interface, the user will be given a list of possible commands that are available given the current state of the game
- The commands are listed and explained below
- If the user enters an incorrect command, no worries, the user will be informed of an invalid input and be prompted again to enter a valid command

Status:

- The **status** command will always be available to the user to display the information about the current players turn
- The information provided is: bankrupt, name, icon, cash, position and properties

```
Choose one of the following commands: roll, status, board status, cell status, forfeit
Enter your command: status

Displaying the status of player: BOOT

bankrupt=false

name='Kyra'

icon='boot'

cash='1360'

position='8'

properties= {

States Avenue
}
```

Board Status:

- The board status command will always be available to the user to display the icon and cash for all players
- The players are categorized under bankrupt and non bankrupt players

```
Choose one of the following commands: buy, pass, status, board status, cell status, forfeit
Enter your command: board status

Displaying the status of the board:

Bankrupt Players:
    Player BOOT, $0

Non Bankrupt Players:
    Player IRON, $1500
    Player SCOTTIE DOG, $1500
    Player BATTLESHIP, $1500
```

Cell Status:

• The **cell status** command will always be available to the user to display information about the current cell the current player is on

```
Player SCOTTIE DOG is currently at: St. Charles Place
Choose one of the following commands: buy, pass, status, board status, cell status, forfeit
Enter your command: cell status

Displaying the status of the current cell: St. Charles Place

name='St. Charles Place'
price='140'
rent='10'
property owner='no owner'
```

Pass:

- Once the player would like to end their turn they may use the pass command to end their turn and begin the turn of the next player
- The pass command is not available if the player has other commands that must be run before moving on to the next player.
- Some examples are to pay rent and pay tax which are needed to be completed before ending their turn

```
Choose one of the following commands: buy, pass, status, board status, cell status, forfeit Enter your command: pass

++++++++Passing Dice To Next Player++++++

Rolling dice for: BATTLESHIP
---> You rolled a 6 and a 1
---> Total: 7

Player BATTLESHIP is currently at: St. Charles Place
Choose one of the following commands: buy, pass, status, board status, cell status, forfeit Enter your command:
```

Buy:

- If the player lands on an unowned property the user can use the **buy** command to purchase the property
- After using the **buy** command, the cost of the property is subtracted from the users
 cash, the property is added to the list of properties owned by the user and the
 property owner is set as the current player

```
Player BATTLESHIP is currently at: St. Charles Place
Choose one of the following commands: buy, pass, status, board status, cell status, forfeit
Enter your command: buy
Player BATTLESHIP bought St. Charles Place
```

Roll:

- When the turn is passed to the next player the dice are automatically rolled, but in the
 case that the player rolls a double, the may use other commands available to them
 and the roll command become available so the player can roll again during their turn
 due to the previous doubles rolled
- The **roll** command will roll the dice for the player again and move the player the new location on the board and allow the player to continue their turn as normal

```
++++++++Passing Dice To Next Player+++++++

Player scottie dog rolled a double

Rolling dice for: SCOTTIE DOG
---> You rolled a 1 and a 1
---> Total: 2

Player SCOTTIE DOG is currently at: GO
Choose one of the following commands: sell, roll, status, board status, cell status, forfeit
Enter your command: roll

Rolling dice for: SCOTTIE DOG
---> You rolled a 4 and a 3
---> Total: 7

Player SCOTTIE DOG is currently at: St. Charles Place
```

Forfeit:

- The **forfeit** command will always be available to the user to remove the player from the game.
- If the user must pay rent or tax and does not have sufficient funds the user must use the **forfeit** command to leave the game
- The players cash is sent to 0 and will be added to the bankrupt players and the turn is moved to the next player

```
Choose one of the following commands: roll, status, board status, cell status, forfeit
Enter your command: forfeit
Player BOOT has forfeited the game!

++++++++Passing Dice To Next Player++++++

Rolling dice for: IRON
---> You rolled a 4 and a 1
---> Total: 5
```

Pay Rent:

- If a player lands on a property owned by another user, the player must pay rent to the owner of the property.
- In this case the pay rent command is shown to the user and the pass command is not available to the user unless they pay rent. If the player cannot pay the rent they must user the forfeit command to forfeit from the game

```
Player SCOTTIE DOG is currently at: Marvin Garden
Choose one of the following commands: pay rent, sell, status, board status, cell status, forfeit
Enter your command: pay rent
You have successfully paid 24$ to iron
```

Pay Tax:

- If a player lands on a tax location the **pay tax** command is shown to the user and the **pass** command is not available to the user unless they pay the tax
- If the player cannot pay the tax they must use the forfeit command to forfeit from the game

```
Player SCOTTIE DOG is currently at: Luxury Tax
Choose one of the following commands: pay tax, sell, status, board status, cell status, forfeit
Enter your command: pay tax
You have successfully paid 100$ to Bank
```

Sell:

- Players may use the sell command to sell properties they own
- The player cannot sell a property they bought in the same turn
- Once the command sell has been inputted, the user must select the property they
 would like to sell

```
Choose one of the following commands: sell, pass, status, board status, cell status, forfeit
Enter your command: sell
Here are the list of the properties that you can sell:
St. Charles Place, cancel
Enter the name of the property: St. Charles Place

Player BATTLESHIP sold St. Charles Place
```

Ending the Game:

• Once all but one player has used the **forfeit** command, the game is over and the remaining player is the winner!

The game is over
Player SCOTTIE DOG won the game!
Player IRON has the rank 2
Player BATTLESHIP has the rank 3
Player BOOT has the rank 4