

With the current situation we're facing, people are bored at home with not much that they can do. People are turning to social media and netflix for fun, which isn't necessarily the healthiest solution. In addition, people are taking, for granted, the family time that could be used for bonding. After quarantine ends, people are going to go their own ways and life will be normal again. Normal, meaning less family time and more busy time with work, school, friends, etc. Therefore, to encourage people to live in the present and spend more time with family, not just making Tik Toks, we will create a game of Monopoly that can be played at home, on the computer. This way, people won't have to dig through thousands of board games in their basement, or worse, go to Walmart to get a game of Monopoly. So, in this online version of Monopoly, the player and their family will be able to play the game together, while sitting in front of a computer. This will help spend more bonding time with family, while also curing the boredom of quarantine. On the bad side of things, all the players will need to be together in order to play this. Therefore, it's hard to play with friends there in their own homes, but not impossible. A simple solution for this is that all the friends will need to join zoom. With that, one can share their screen and volunteer to enter information for the other friends too. Although this might be a more complicated solution, people are willing to do anything to reduce their boredom in quarantine.

To make things even better, the player wouldn't even need to memorize hundreds of rules that come with Monopoly, not to mention, the other rules that are made up by other people. This version of the game will take care of that for the player. As the player encounters a problem, for example, the player lands on an unowned property, this version of Monopoly will show the player the price for the property and will ask the player whether they want to buy it. All the

player will need to do is say yes or no and it will automatically deduct the price from the player's total amount. So, there's no hassle with calculating money, being the banker, arguments saying that one person didn't give enough money to the banker. It will be a civilized play with lots of fun and no bickering.

There are lots of player perspectives to take into account while creating this game. Some of these include a visual player who wants the board to look like the real monopoly board for a better user experience, wants to roll two dice, wants a token to see where they are in the game. The player starting the game would want to see a random player picked to start the game and an order of which the group should follow. The bank should also give the starting players \$1,500 to start the same. The player whose turn it is would want to move the number of spaces that the player rolled. As they pass go, they would like to earn \$200 as income. If they land on a community chest or chance, they would like to perform its action. The player would like to pay tax to the banker, if landed on the tax space. The player would like to sell what they own. The player who is a real estate owner would like to buy houses and ensure that there is a maximum of 4 houses or one hotel on each property. In addition, the player would want each property to have a set cost for the property, know how many houses are on the property, and rent based on the number of houses and hotels in the property. Those that land on an owned property would like to pay rent, and those that land in an unowned property would like to have the option to either buy the property or not buy the property. As the player that doesn't have enough money, they would like to sell property or houses, if possible, to pay rent. If the player also doesn't have properties, they would like to be kicked out of the game. As the player in jail, they would like to leave jail when rolling doubles or pay \$50. Lastly, some of the more advanced players are hoping to be

able to trade with other players. They want to play with less than 4 people. Also, they want to be able to get free parking from the money that has been collected from the community pot. They want to be able to play against the computer for practice. If landed on GO, they want to be able to get \$400 from the bank. They would like a richer experience with more complex chances and community cards. They would like to mortgage properties. They would also like to have monopoly tokens that represent players. If they roll three doubles in a row, they would like to go to jail. They would also like to pay \$50 to get out of jail after not rolling doubles for the 3rd time.

In the beginning, we hoped to create an interactive system, either on the board or on a pop-up window that asks for names and any information that might be needed throughout the game. For example, if the person lands on an unowned property, they are asked whether they want to buy the property. This makes it easier for the game to gain any information needed from the players to make a move. It also keeps the players engaged. This also will be used to give players any kinds of warnings, such as “low fund” or the information about how much money they have remaining. We will also have a button that they need to click in order to roll the dice. The computer will not roll it automatically for every turn. This will keep the players in check and paying attention to the game.

```
/Library/Java/JavaVirtualMachines/jdk-13.0.2.jdk/Contents/Home/bin/java ...
Welcome to the wonderful game of Monopoly!

How many players would you like to have? [2, 3, or 4]
4
Game will start with 4 players.

*** Enter player number 1's information ***
What would you like your player name to be?
Amisha
Welcome Amisha!
Which token would you like to use?
Those still available: [CANNON, CAR, DOG, HAT, HORSE, MONEYBAG, PENGUIN, PURSE, SHOE, WHEELBARROW]
Car

*** Enter player number 2's information ***
What would you like your player name to be?
Zeke
Welcome Zeke!
Which token would you like to use?
Those still available: [CANNON, DOG, HAT, HORSE, MONEYBAG, PENGUIN, PURSE, SHOE, WHEELBARROW]
Hat

*** Enter player number 3's information ***
What would you like your player name to be?
Elizabeth
Welcome Elizabeth!
Which token would you like to use?
Those still available: [CANNON, DOG, HORSE, MONEYBAG, PENGUIN, PURSE, SHOE, WHEELBARROW]
Horse
```

```
*** Enter player number 4's information ***
What would you like your player name to be?
Michelle
Welcome Michelle!
Which token would you like to use?
Those still available: [CANNON, DOG, MONEYBAG, PENGUIN, PURSE, SHOE, WHEELBARROW]
Moneybag
[Player information: {name = Amisha, token = CAR, money available $=1500, Position (#) = 0, properties = []}, Player information: {name = Zeke, token = HAT, money available $=1500, Position
Process finished with exit code 0
```

FREE PARKING	KENTUCKY AVENUE 220	CHANCE	INDIANA AVENUE 220	ILLINOIS AVENUE 220	B. & O. RAILROAD 200	ATLANTIC AVENUE 260	VETNOR AVENUE 260	WATER WORKS 150	MARVIN GARDENS 260	GO TO JAIL	DIE
NEW YORK AVENUE 200	<div>MONOPOLY</div>									PACIFIC AVENUE 300	
TENNESSEE 180										NORTH CAROLINA 300	
COMMUNITY CHEST										COMMUNITY CHEST	
ST. JAMES 180										PENNSYLVANIA 320	CONTROLS
PENNSYLVANIA RAILROAD 200										SHORT LINE 200	
VIRGINIA AVENUE 160										CHANCE	
STATES AVENUE 140										PARK PLACE 350	
ELECTRIC COMPANY 150										LUXURY TAX, PAY 100	
ST. CHARLES 140										BOARDWALK 400	
JAIL	CONNECTICUT AVENUE 120	VERMONT AVENUE 100	CHANCE	ORIENTAL AVENUE 100	READING RAILROAD	INCOME TAX, PAY 200	BALTIC AVENUE 60	COMMUNITY CHEST	MEDITERRANEAN AVENUE 60	GO	

FREE PARKING

KENTUCKY AVENUE 220

CHANCE

INDIANA AVENUE 220

ILLINOIS AVENUE 220

B. & O. RAILROAD 200

ATLANTIC AVENUE 260

VETNOR AVENUE 260

WATER WORKS 150

MARVIN GARDENS 260

GO TO JAIL

NEW YORK AVENUE 200

TENNESSEE 180

COMMUNITY CHEST

ST. JAMES 180

PENNSYLVANIA RAILROAD 200

VIRGINIA AVENUE 160

STATES AVENUE 140

ELECTRIC COMPANY 150

ST. CHARLES PLACE 140

JAIL VISITING

MONOPOLY

PACIFIC AVENUE 300

NORTH CAROLINA AVE. 300

COMMUNITY CHEST

PENNSYLVANIA AVENUE 320

SHORT LINE 200

CHANCE

PARK PLACE 350

LUXURY TAX, PAY 100

BOARDWALK 400

GO

Click to roll

Name: PlayerOne Current money: \$1500

Properties Owned:

- Mediterranean Avenue
- New York Avenue

Input Player Info

Start Console Game