VİSİON

- We want to make a monopoly game project. The reason we do this project is to develop a game simulator which based on willingness in object oriented programming. As we develop this project , we will submit Monopoly Game software development process models. In this project we will act according to the requests of the customers and apply then at different time intervals and make new additions.

PROBLEM STATEMENT

- Although there is a lot of monopoly playing in real life , there are some troubles about this game .
- At first we should talk about the cost. It is sold as expensive in the game market. So people can not play. In addition , manufacturers implament some sales strategies. For example , adding small innovations to the game , forcing customers to buy a new Monopoly game. Another problem is making the game playable. This process can cause energy and time loss.

SCOPE

- This Monopoly game project will provide the following functionality:
- The cost of production is low because it is virtual.
- Whenever a new plugin is added to the game , the software can be changed so then we can add it to the games software.
- For developers who are going to make new additions to the game , the software should be simple and readable.
- Programmers can add specialities for users' requirements.

SYSTEM CONSTRAİNTS

- Instead of having it in the game user interface , the player will be notified of the instant information of the players through the console turn by turn .
- User must run the simulation until a predefined (input parameter to your program) number of game iterations.
- A game iteration completes when all players takes their turns. At each turn of a player, user must print its name (e.g. player 1).
-A simulated player decide to buy a property randomly. When a player lands on a property square (lot,railroad and utility square), first checks if the square is owned. If not, rolls a dice. If the dice value is larger than 4 and if the player has enough cash it buys the square.

STAKE HOLDERS

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GLOSSARY OF TERMS

- Board - The surface on which you play a board game. Also referred to as the game board.
- Dice - A polyhedron with numbered sides that generates random result in a game. The six sided die is he most commonly used , but roleplaying games popularized the use of different sided dice. The plural is "dice" , and singular is "die".
- Piece - Usually in the game representatives of the players in a board game , but sometimes game pieces represent equipment or other items like money . Also referred to in various as bits , counters , meeple , moves , pawns or tokens.
- Player - Someone who plays game.
- Square - A square is a unit or a game board , usually with distinct border. Some squares have special features.

-Go Square: Start square for players.At the beginning of the game, every player starts on this square and they start with $200 cash.
-Jail Square: If in Jail, a player's turn is suspended until either the player rolls a double or pays to get out.
-Free Parking Square: When a player lands here nothing happens and they move off the space on their next turn.
-Income Tax Square: When a player has the misfortune to land on the Income Tax space, he or she must pay 10% of their total assets which means total cash on hand.
-Luxury Tax Square: Players who land on it must pay $75 to the Bank
-Lots Square: If player land here , you buy it.If it already buyed, you must pay its owner rent. Each of them have a specific price and rent.
-Railroads Square: The price for railroad square is 200. A player who lands on these squares will pay the owner 5 times the roll of a dice plus 25.
-Utility Square: The price for a utility square is 150. If a player who lands on these squares will pay the owner 10 times the roll of a dice.

USE CASE

1-) The user enters the number of players.
2-) The user also enters player names.
3-) The user starts the game and the game continues for a set of number of rounds and the players information is communicated through the console to the user.
4-) When game starts, players start with a starting money.
5-) Players use their dice and move their piece
6-) During the game different squares are encountered and different moves are made.
7-) If in Jail, a player's turn is suspended until either the player rolls a double or pays to get out. Paying a $50 fine to the Bank BEFORE throwing the dice for either the first turn or the second turn in Jail
8-)If you land to the Lots,Railroads or Utility squares , player may buy them. If the square is owned by the player that landed on it. If the square is owned by a player other than the one that landed on it , the player that landed on the square must pay its owner rent. All of these squares have a specific price and rent.

9-) A player go bankruptcy and removed from the game if her cash is reduced to 0 or below because of tax squares. If all players go bankruptcy before the predefined number of game iterations your game must halt.
10-) A game iteration completes when all players takes their turns.
11-)A player go to bankrupt if it can not pay a rent or tax. A player go bankrupt retires from the game. The game ends when when a single player left.