

Requirement Specification Vision

We envision simulation of Monopoly Game. System will include observer. Observer wants to observe the outputs of the game simulation. Observer will give the number of players and start the game simulation. Game will produce outputs on console.

Problem Statement

Monopoly has a lot of different squares. Every square has different attributes and operations for players and board. Lots' places, prices and rents must draw from an text file. Players make a random decision for buying lots. If a lot owned by a player, other players must pay rent when their pieces landed on the lot. Simulation has to end when only one player is left. Every output must be writed to an text file.

Scope

Squares created by board and squares may have different attributes and an operation method. Players can buy different lots, other players have to pay rent to owner when their pieces landed on the lot. If a player go bankrupt, ownings automatically deleted from player. When only one player is left in the game, simulation ends.

System constraints

Game is a simulation.
Number of Rounds is determined by system.
Rolling dice is be controlled by system.

Stakeholders

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Glossary of Terms (Alphabetically listed)

Railroads: There are four different railroad square. Every railroad can be bought by players. If railroad has a owner, other players must pay the rent.

Utilities: There are two different utility square. Every utility can be bought by players. If railroad has a owner, other players must pay the rent.

Lots: There are twenty two different lot square. Every utility can be bought by players. If railroad has a owner, other players must pay the rent.

Winner: If only one player is left, the winner is the player and game ends.

Use Cases

Actors: System

1. Every special square has a unique location index and operation method
2. Lots' places, prices and rents must be draw from an text file
3. Railroad Squares have 200 money price, and players have to pay the owner 5 times the roll of a dice plus 25.
4. Utility Squares have 150 money price, and players have to pay the owner 10 times the roll of a dice.
5. Lots can be bought by a player, other players have to pay rent the owner.
6. When only one player is left in the game, simulation ends.