Project Report For

Monopoly Board Game

TEAM MEMBERS

Furkan Nakıp (github/furkannkp)

Furkan Kerem Eyisoy (github/keremeyisoy)

Egemen Doğuş Aktürk (github/egemenakturk)

Step 2

ABOUT THE MONOPOLY BOARD GAME

Monopoly is a board game where players roll two six-sided dice to move around the game-board buying and trading properties, and develop them with houses and hotels. Players collect rent from their opponents, with the goal being to drive them into bankruptcy. Money can also be gained or lost through Chance and Community Chest cards, and tax squares; players can end up in jail, which they cannot move from until they have met one of several conditions. The game has numerous house rules and hundreds of different editions exist, in addition to many spin-offs and related media; Monopoly has become a part of international popular culture, having been locally licensed in more than 103 countries and printed in more than thirty-seven language

ABOUT THE PROJECT

Requirement Specification Vision and Scope

The goal of this project is to create a Java based object oriented implementation of the Monopoly Board Game. The game will be played by very simple AI. The game will run as a simulation but some paramaters are going to taken from the user.

Developer team of this project contain three members.

Furkan Nakıp - 150115032

Furkan Kerem Eyisoy - 150116035

Egemen Doğuş Aktürk – 150116060

The project contain 3 step. It will change and developed in each iteration.

System Constraints

Project will run on any Java based platform.

Project will run as a simulation on any device which Java Runtime Enviroment installed.

Stakeholders

Murat Can Ganiz (Customer)

Berna Altınel (Customer)

Glossary Of Terms

Board – Playground contain 40 different type squares

Cash – Game money for a players

Die – Creates random number between 1-6 in each turn for players

Monopoly Game – A board game can be played between 2-6 players with a dice

Piece – An object which defines every player icon and location

Player - A user which plays the game

Square – A spot has a unique type which contains in board

      -Chance square

      -Chest square

      -Go to jail square

      -Income tax square

      -Jail square

      -Start square

      -Property square

            -Lot square

            -Station square

            -Public Corporation square

Core System Functionalities

Step 1

- Iteration and player numbers are getting from a user

- Observers are getting informed in console at each turn

-The simulation will stop after given iteration number.

Step 2

-Several type of squares added

-If player land on start square player gains 200 dolar

-If player pass directly from start square still gains 200 dolar

-If player land on GO TO JAIL square player directly goes to jail square and gains 200 dolar. Because when going to jail square from GO TO JAIL square , player has to pass start square.

-If the player is in jail his turn is suspended until either the player rolls a double or pays to get out

- If player is go directly jail square, player still count in jail.

-If player roll double, player will move forward. Game does not ask again to roll. Player wont take a another turn. If player decide to pay a 50 dolar to the bank before throwing the dice for either the first turno r the second turn in jail.

 -If player lands on the income tax square player will pay 200 dolar

-The free parking square is a square where nothing will happen

-A player will go backruptcy and will be removed from the game if player cash is reduced to 0 or below.

-Chance square has 3 option. First one is gaining 100 dolar. Second one is loosing 50 dolar. Third one is paying tax for the number of properties * 25

-Chest square has 3 option. First one is gaining 150 dolar. Second one is loosing 120 dolar. Third one is going to starting point when this card is choosed player will gain 200 dolar cause of Starts square.

-Lot square if square has no owner and if player has enough money, player can buy. If square has a owner and if player has own that square. Owner can build a house if player has enough money. If square has a owner and if player has not own that square. Player should pay his rent. If player has not enough money. Player starts to sell his province to effort rent. If player can not effort rent after selling province. Player will go bankrupt.

-Public Corporation square if square has no owner and if player has enough money, player can buy. If square has a owner and if player has own that square, nothings happen. If square has a owner and if player has not own that square. Player roll dice again and should pay his rent(10*dice value. If player has not enough money. Player starts to sell his province to effort rent. If player can not effort rent after selling province. Player will go bankrupt.

-Station square has 4 square if square has no owner and if player has enough money, player can buy. If square has a owner and if player has own that square, nothings happen. If square has a owner and if player has not own that square. Player should pay his rent(50*owner other station square number). If player has not enough money. Player starts to sell his province to effort rent. If player can not effort rent after selling province. Player will go bankrupt.

-The simulation will end if there is only one player left in the game(the winner).

-If a player goes bankruptcy, player owned squares will be purchasable again.

Technologies And Control Mechanisms

-IntellijIDEA

-Github

-Trello

Resources

www.wikipedia.org/wiki/Monopoly