Requirement Analysis Document

Monopoly Game Project

Berre Ergün – 150117507

Gülce Şirvancı – 150116047

Melisa Dönmez – 150116030

Mustafa Furkan Aras – 150116019

Requirement Specification

Vision

The purpose of this Project is to create a Monopoly Board Game with Java in accordance with object-oriented programming rules. Game can contain up to 8 players. The amount of money that players should initially have is determined by the users. Also, total number of tax squares and tax amounts will be entered by the user. The game will start after the required information is received by the user. The player who runs out of Money will be losed. The last player on the board will be the winner.

Scope

Monopoly game includes

40 square with properties; taxes, visit, park, transportation, chances ect.

At the beginin of game every player gets same amount of Money.

To decide players turn every player rolls diece, from the biggest to smallest face value of diece, players take their turn. Every player macthes with specific pieces.

Players roll diece according to their turns and then moves up to the sum of the diece.

They can make some special movement according to the square which they have came. They may loose some Money if they came tax squares or if they take chance cards.

Players have to pay rent of the square to the square owner if they come to that squares.

The players that ran out of Money loses the game and The last player on the board will be the winner.

System Constraints

Runs on Java based platforms.

Will run as a simulation on the console with any device that has Java Runtime Environment installed, will run without GUI part.

Stakeholders

Murat Can Ganiz(Customer)

Berre Ergün (Programmer, Manager, Analyst)

Gülce Şirvancı (Programmer, Manager, Analyst)

Melisa Dönmez (Programmer, Manager, Analyst)

Mustafa Furkan Aras (Programmer, Manager, Analyst)

Glossary of Terms(Alphabetically Listed)

Board: Playground with 40 squares.

Die: Items that provides random number between 1-6.

Money: Cash that players own.

Piece: Object that matches with one player.

Player: Who plays the game.

Square: Areas which has unique features

- Go Square
- Tax Square
- Jail Square
- City Square
- Free Parking Square
- Take Card Square
- Transportation Square

Use Case

User runs the application

1. At the begining user supposed to enter player number, name for every player, number of tax squares and amount of tax for every tax square, the amount of initial Money.

2. Simulation begins and without user's effect game continues automaticly.

3. Each user rolls die,player with the biggest number begins first from go square.

4. Every player rolls diece to move and updates it's location.

5. When they come to Tax Squares they loose certain amount of Money according to the square.

6. When a player run out of Money it loses the game. Last player who is on board wins.

7. In every iteration game prints informations :

   Before Rolling diece:
   Players turn, current location and type of it, amount of Money

   After Rolling diece:
   Diece numbers and sum
   Players new location and type of it, if they lose Money amount of that, total Money
   If player ran out of Money, information that it losed

   Each cycle number at the begining of the each iteraion

   Finally the name of the winner.

Technologies
- IntellijIDEA
- Gitlab
- Draw.io