CSE3063 Object Oriented Analysis and Design MONOPOLY GAME REPORT FOR the 1st ITERATION

Group Members:

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VISION

In our project we are going to design a Monopoly Game for our customer. As our customer's requirements for the monopoly game, we arranged a requirement analysis first. Then according to this we designed our project and then wrote our code and tested it lastly, for the 1st iteration of our project. Our project group consists of 3 members and we did all steps of the project with a group working. While one is drawing, the others are watching and warning if there is a fault in the project and give some advice and do a brainstorming.

PROBLEM STATEMENT

The project simulates a monopoly game simply according to the values which given by the user at the beginning of the game. Of course we prefer to use mechanic ways rather than manual ways but without a plan and without a design it is not possible to achieve the job actually. In our designing stage, we draw our domain model which determine the constraints of the monopoly game simply and we defined our attributes and methods in our UML Class Diagram. Then we defined the ways which simulation follows step by step in our Sequence Diagram.

SCOPE

Our project can be scored from documents ingredients which I referred above in problem statement. We are going to keep all criticism which our customer made and we will give it to the committee and faculty. At the end of our each iteration we are going to have our initial ratings for a given applicant.

SYSTEM CONSTRAINTS

Our system constraints are

- 2 to 8 players,
- A board which contains 40 squares,
- Pieces for each player,
- 2 dice for moving our player to another location,

- At most 6 + 6= 12 squares a player can move for each playDice,
- Monopoly game lasts for the rounds count which is given at the beginning of the game.

STAKEHOLDERS

Murat Can Ganiz (Customer)
MehmetHan GÜR and Yasin TOY(Project Manager, Analyst/Programmer)
Necmettin ILGIN (Librarian, Analyst/Programmer)

GLOSSARY OF TERMS

Board: is a part which monopoly game is played on and contains 40 squares in it.

Die: has 6 faces and numbers from 1 to 6 in each face. Two dice gives the total number of moving step on the board.

Monopoly Game: is a game which players sell and buy estate until their money finish.

Piece: is an object which is a shape of good or a shape of an animal. Each piece refers to a player in the game.

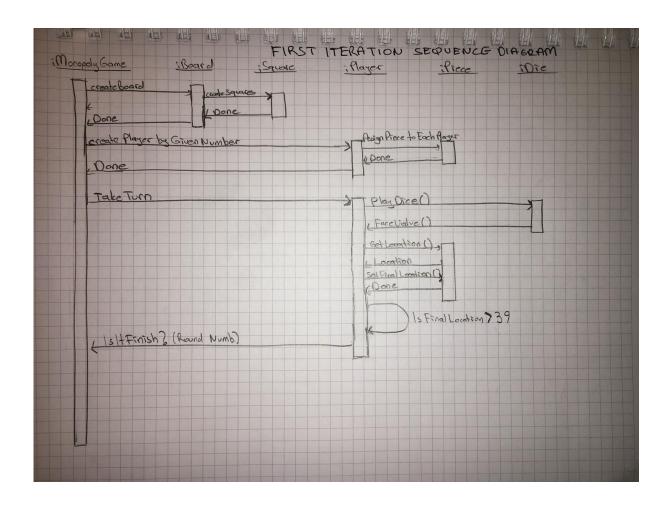
Player: plays the monopoly game and tries not to bankrupt along the game.

Square: is a part of the board which gives directions to the player what to do.

USE CASES

First enter the number of players and their names. Second, enter the number of rounds that you want to play. Then first player playDice according to the total value and the index of piece moves to a square on the board. Then second player does the same step and the remains do too. At the end of each playDice method our final location is hold by piece. If a player moves more than 40 squares he or she finishes the first round and passes to the second round, and if a player reaches to the final round, monopoly game finishes!

DOMAIN MODEL



UML CLASS DIAGRAM

UML Class Dragram	* Const = Constructor
Monopoly Game	Player
+ board i Board	+ name: String
toutput: String	+ locations lint
+ keyboardi Scanner	tounds int
+ player County Int	+piece ilice
+ plagers 7 Arraghist	- board Moard
+ player rPlayer	
+rounds i Int	1. 01 - of a chara boat Board NG
+cont; boolean	+ Player (namer String, board ; Board) (6) + Take Turn (): vord
+ iter; Iterator	+ which Rounds (): Int
	+ increase Round () i Voice
	+ player Name (): String
Piece	1113011
+ location; Square	Square
+ piece (locations Square) (Const	4 Fordex 5 Int
+ Set Lacation (Partion: Square) Weid	
+ get Location (); Square	1 to -2 - 16 1 2 2
	+ Square (number: Int) (Const
	+ Jet Index () ilnt
Board	
	Die
tend Index: Int	+ faces int
+ squares : Array List	rtace. III
Same 2 of late 1 of 1 of 1 of 1	tselface (face ilm) ivoid tplayance () ilnt tgefface () ilnt
+ get Square (start : Square polistance this is square	+ Blax Orce () slot
+ aet Start square (),	tgefface Oslat
+ create Square (); Vord	

UML SEQUENCE DIAGRAM

