# GLÖM EJ DAGBOK! The Ludo Game

# <u>Classes</u>

#### Menu

**Properties** 

#### **Methods**

Logo()
MenuNumberOfPlayers()
MenuGetUserName()
UserTurn()
StartGame()
GetSavedGame()

### User

## **Properties**

Name\_string List<Pawn> Pawns / Pawn[] Pawns

## **Methods**

ICreatePlayer(Name,Pawns[4])

Som en användare ska jag kunna välja en färg, för att kunna ta del av spelet och flytta fram min pawn.

#### Pawn

## **Properties**

int Position string Color int SquareID int UserID

#### **Methods**

Pawn(Position,Color,SquareID) ?MovePawn(int moves)

En pawn ska kunna flytta sig fram på brädet för att kunna ta sig vidare i spelet.

#### **Dice**

## **Properties**

int Roll (1, 2, 3, 4, 5, 6)

### **Methods**

Math.randomINT(1-6)

#### Move

## **Properties**

int Moves int PawnID

## **Methods**

?MovePawn(int moves)

# **Square**

# **Properties**

int SquareID int BoardID int PawnID

### **Methods**

Om det står två stycken Pawns på samma SquareID så ska en Pawn knuffas bort på den ruta som de delar och flyttas tillbaka till sin startposition.

### **GameBoard**

## **Properties**

int TotalSquares (57?)

**Methods** 

## Game

# **Properties**

Name User[] pawn-color ID

**Board** 

# **UserTurn**: IUserTurn

## **Properties**

Turn=PlayerRoleDice(Muränan).PlayerMovePawn(PawnRed,intStepToMove)

Turn=PlayerRoleDice(Fredrika\_Awsome).PlayerMovePawn(PawnRed,in tStepToMove)

# **MOCKUP**

PlayerRoleDice(User Muränan){

```
Roll Dice with Math.Random
Return this;
}

PlayerMovePawn(PawnRed[1])
{
Vi får ett intresultat av RoleDice (antal steg pawn ska flyttas fram), ex 4.
Move pawn forwards on the board. (If pawn is currently in SquareID 4 move to 8)
}
```

# Scenarios:

#### Push:

Turn=PlayerRoleDice(Fredrika\_Awsome).PlayerMovePawn(PawnRed,intStepToMove).PlayerPushPawnInSquare(currentPawn)

### Between square 51-56:

Turn=PlayerRoleDice(Fredrika\_Awsome).PlayerMovePawn(PawnRed,intStepToMove)

#### Pawn.Position > 57

If(User.PawnPosition>= 51&& User.PawnPosition < 57)

Movetowards center

TotalSquares- PawnPosition

#### Last Pawn.Position > 57

else if(User.PawnPosition.Last>= 57)
ConsoleWriteLine(Congrats you won)
Break game;

# Dagbok

# 2020-03-30- Måndag [@Group]

Vi har fått uppgiften introducerad för oss. Och skissar upp följande:

- Klasser
- Properties
- Metoder
- Scenarios

#### @Adgnascor

Added basic functionality in following classes User, Pawn, Menu, Dice

#### Class User:

Private Constructor that sets Name and gets Pawn.GetSetOfPawn(). Wich we uses in the method GetPlayersAndName(int numberOfPlayers).

This Method ask every user of their name and create users for each player and return this in a List of users.

#### Class Pawn:

Following Methods- Pawn(its propertieValues), ShowPawnColorMenu(), SetColorOnPawn(userChoice), GetSetOfPawn()

ShowPawnColorMenu only return a void that shows the color to choose between.

SetColorOnPawn returns the color choice in form of a string.

GetSetOfPawns uses above methods to create 4 pawns with choosen color and return this as a List of Pawns that User gets when we create every player.

#### Clas Menu:

Has method HowManyPlayers() wich ask how many players and returns an int of how many players. This means that when we call for

User.GetPlayersAndName(menu.HowManyPlayers()) we get an endresult of all players with their name and choosen pawn color.

#### Class Dice:

Has Constructor with default Roll value.

And a method for RollDice() wich returns a random int between 1 and 6.

# 2020-03-31- Tisdag [@Group]

#### Current state of the game:

- amount of players can be chosen
- player can enter name and choose pawn color
- a player has **one** pawn
- we have a list of 57 squares the game board
- a pawn starts on square 1
- a pawn can go from square 1 to 57 by a dice being rolled random method used
- a pawn needs to roll the exact amount to be able to go to sqaure 57 (cannot roll more than 57)