**La Petit Project Team CMPE211 Course Project Presentation Papers**

**SUDE**

*\*\*\*Opening Speech\*\*\**

**GÜNSU**

The game have a board, information panel which will show the wealth of the current student and also transactions panel. There will be 7 buttons which are Buy, Pass, Pay, Build, Next Turn and sell. Both student will have a color pawn that will show them where they are. When a player came to a boughtable square, in a panel it will show the costs of square. If player came to a square which is owned by another player, a panel will show the owner of the place and rent of it. If player came to its own square, a label will show building and sell options with their costs. After he built, it will show the updated rent.

Firstly, there will be a dice throw to specify the play order. (Higher dice will play first.)

After that, game will start according to that order. First student will throw the dice.

All students will start the game with $300.000 money.

The student will be able to buy the place if it is not owned by another student and if he/she has enough money to buy but he/she can also choose not to buy. If another player has that place, he/she had to pay rent. If he/she doesn’t have money to pay, the game will open a frame to select what will she/he sell until he/she has enough money to pay the rent. If he/she still doesn’t have enough money, student will de-registrate and lose the game.

There will be some special squares called “Registration Freeze”, “Erasmus”, “Summer School” and “Surprise”. “Registration Freeze” square will make student freeze the next turn. He/she will still be able to get money if another student came to his/her place but he/she can not move. “Erasmus” square will cost student $25.000 money but will increase his/her GPA. “Summer School” square will cost student $5.000 money but will increase his/her GPA slightly. “Surprise” square will give student a surprise card. That surprise card will be randomly selected and can be anything.

Every dice of the student will be recorded as his/her grade. 1= 1.0 , 2= 2.0 , 3= 2.5 , 4= 3.0 , 5= 3.5 , 6= 4.0 and student will have an active GPA. This GPA will affect their scholarship. Every student will get scholarship (money) proportional to his/her GPA (higher GPA means higher scholarship, lower GPA means lower scholarship). Students will get their scholarship every time when they passed the START square.

The aim of the game is to finish the game as the richest and successful student or eliminate other student and be the last one standing.

**YUNUS**

In our project, we have 9 classes. We will introduce all classes but generally, the game starts with our Giriş class. Then, with our WhichPlayerStart class, we roll a dice and select the player that will start. Our dice class lets us to throw a dice and get random results. In our code, we are creating 2 player and 20 square. All players starts with same money and have full control on their money. Squares have different properties like prices, rent costs, build costs. With the Board class, we created our game board and added some photos we selected for squares and for our logo. In the main class, we created our buttons and fill their methods. When a player went bankrupt, Finish class works and announces the winner.

Giriş Class is the main class of our code. In the class, we expect from user to push the add player button and write names of the players. Then we take these names as Player1’s name and Player2’s name. Also, user can remove a player and add another player if he wants. When the adding player names is done, we expect from the user to push the next button to work WhichPlayerStart class.

WhichPlayerStart class lets two player to roll a dice. The purpose of this class is to compare two dice results and determine the higher one, so the player who throw the higher will start the game. In this class, we expect from the user to push roll dice button two times so we can run our dice class to get 2 dice value. If two player gets the same value, the class will not let user to start the game, he had to throw dices again. After rolling dice is done, the class determines who will start the game and starts the TEDUpoly Main class.

**GÜNSU**

In our Square class, we are creating Square objects with X and Y coordinates, rotation degrees, place number, name, price, rent, build cost, is it bought, is it special, is it buyable, house count, hotel count and owner. Our X Y coordinates and rotation degrees are required to create the squares on our game board. Our other variables are defining the specifications of the squares. Also, we have 3 methods in this class. Satın alındı, Satıldı and İnşaat yapıldı methods. Satın alındı method changes the square’s owner and changes the SatınAlindiMı Boolean to the true which shows us that, this square now has an owner. Satıldı methods does the exact opposite of the Satın alındı method. This method deletes all the modifications did on the square and returns that square back to its starting condition which means that that square now does not have an owner. İnşaat yapıldı method adds a house to the square and doubles its rent cost. Also if the square already have 3 houses, it builds hotels instead which makes rent costs multiplied by 5.

**FUAT**

In our player class, we have player number, name, first letter, money, gpa, wealth, location number, location square, grade total, player turn count and is it freezed values. We have thirteen methods. İlerle method increases the player’s location number as dice result and then search and finds the square he is on. Then it updates the location of the player on the board. Also, gives start pass money to the player if he passed. Our artı işlem method, increases the money of the player. Our eksi işlem method decreases the money of the player. If player does not have enough money to pay, our EvSatimi class runs and lets the player sell some of his wealth. If player sold all his wealth and still does not have enough money, the game ends with Finish class. Yer satin alma method is for letting the player to buy the square. Yer sat method is for selling the square of a player. Kira ödeme method works when a player came to other player’s square. He pays square’s rent cost to the other player. İnşaat yapma method is for building house or hotels to the square if the player owns here and has enough money. Mal varlığı ekle and çıkar methods is for adding or deleting squares from the wealth of the player. Konum bul finds the square that player is currently on it by the location number of the player. Bilgilendirme method is for printing the player’s wealth and gpa. Değer hesaplama method only works when the game ends. It calculates the winning player’s total wealth value. Special gpa method is for our summer school and Erasmus square. This methods adds x times four point to the player’s grade total and update his gpa.

**SUDE**

Our board class is for creating our squares and also for adding pictures to our board. In this class we have 2 methods which are paint and initialize squares method. In paint method we adjust the pictures we selected for some places of our game. In initialize squares method, we are creating the squares with the constructor of the square.

Dice class is for rolling dice, updating dice shape on the board and updating the gpa of the player with looking at the dice value he get. We have 3 methods in this class which are update gpa, paint component and zar at method. Update gpa adds a grade to the player’s grade total and then updates the gpa of him. Paint component is for creating dice shape on the game. Zar at method is giving us the rolling result.

Finish class works when a player bankrupted and has no way out. This class disables all the buttons on main class and opens a frame with winning picture and announce.

**YUNUS**

Ev satımı class is for saving the players from the bankrupt with selling their wealth. This class works only when eksi işlem is called and player hasn’t got enough money. It lets user to select the squares he want to sell and when he pushed the sell button, he gets his money and will be able to pay. If the player has no wealth, this class calls the Finish class.

**FUAT**

Our main class has all the buttons we needed while playing the game. We have 7 buttons in the game which are NextTurn, RollDice, PayRent, Buy, Special, Build and Sell. Our game starts with roll dice button. This button rolls a dice from dice class and moves the current player. Then it locates which square this player came. After that, if he is on the special square, it opens special square button. If he is on a classic square and that square does not have an owner, it opens next turn button and also opens buy button if he has enough money. If the player is on his own square, it opens sell, next turn button and also opens build button if he has enough money. If the player is on another player’s square, pay rent button opens and player pays rent.

Next turn button disables all button when pressed expect roll dice button. New turn starts with roll dice button. Also, this button also checks the freezen players and if the player is freezed, it passes that player.

Special button only opens in special squares and does the specified jobs of these squares. After pressed, the next turn button opens.

Buy button makes the player buy the square he is on it. After pressed, next turn button opens.

Pay rent button makes the player pay the required rent. After pressed, next turn button opens.

Build button makes the player build a house or a hotel to the square he is on it.

Sell button makes the player sell the square he is on it.

We have 3 important methods on this class which are updatePanelPlayer1TextArea, updatePanelPlayer2TextArea and KazananiBul methods. Updatepanel methods updates the wealth panel of the player with bilgilendirme method in player class. Kazananibul method is called when the game has ended. It finds the winning player and runs the finish class.

We also have some special panels. A panel is opened when the player came to the other player’s square. This panel shows the amount he will pay. A panel is opened when the player came to the unbought square. This panel shows the information of that square. We also have player assets panel. That panel shows the wealth of the current player.

*\*\*\*Now we will present a demo show of our game “TEDUpolly”.\*\*\**