



ASSIGNMENT-2

Inft2012 Application Programming

Six of One

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Date: 3/3/2020 Tuesday Time: 1:00 PM

I read description 2 times to understand the concept of the game. After that I played it several times with pen-Paper & was getting different outcome all the time. This is how I got to understand the game (six of one) completely. After that, I started to think about how to make a perfect Dice game that I drew in paper first. I tried several times, could not get it idea. I made first form in visual studio to give a try. still wasn't perfect at all. I was confused about making a dice and roll it & I had several questions about making game.

After that, I created a form in the Project called SiddhiNandaniyaAssgt to start my assignment. First added six picture boxes. I tried to find 6 face dice Images on online Websites. then after doing some research I found dice images to put it on form.

Time: 2:28 PM

Date: 3/3/2020 Tuesday

How Long: 2-3 Hours

Questions that arise

How do I make six dices that generate random numbers and rolled at the same time?
should I make Images of dice?

Difficulties

first, I thought to create dices in a form using Graphics class, then I realized I can add Images of Dice as it's mentioned in journal. I didn't know how to use outside images in a form. then I googled it about dice Images, but I couldn't find it anywhere!

How I Overcame

I did a bit researched and find out dice Images & get some useful link so I could use that dice Images & eventually I found one website that has dice Images, so I downloaded it and used it for my game. with the help of these Images of dice & using picture boxes I created a 6 Dice Images on a form and gave informative variable name to each picture box that contains dice in it. such as picbxDice_1 & so on. After that according to game condition I created roll button so dice can roll after clicking on that button. & also, gave informative name to that roll dice button. after that I started to write a code so each dice can get random value on it & using for loop. getting random value was easy to do as I already taught to used (Random r = new Random ();) in the lecture.

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```
// Reference P1: Externally Dice Images
// Purpose: Dice Images to show Dice to roll in a form
// Date: 3 March 2020
// Source: Online Website /
```

<http://indiedevelopmentblog.blogspot.com/p/c-dice-game-tutorial-series.html>

```
// Assistance: from online website, this help to get pictures of dice to use in the game.
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// End reference p1
```

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Lessons that I learnt

I got to know that how to use images in a c# & the way to put images using properties & make it usable for various purposes. such as Dice Game that I recently created.

Time: 9:00 pm

Date: 5/3/2020 Thursday

How Long: 45 Minutes approximately

Questions

how should set up the all controls in a form so it would be convenient for the player to play the game? should I put image so the form can look better to players?

Difficulties

I started to create a perfect form so, I can only think about set it game based on form. I thought how many controls it takes includes player's name text boxes, label, dice picture boxes, score label, instruction & etc... I couldn't manage it properly as I was so confused to set all controls at proper place & making it more convenient.

How I Overcame

I tried & removed and again set it up to different place. That's how I got to know how it would be perfect. I haven't started to write code yet so I couldn't play it, but I could imagine while looking at my set-up controls in a form that how it would be when player

will play the game. I also created one picture box and set dice Image In it, so form looks better.

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// Reference P2: Externally Dice Image
// Purpose: one red colour dice Image so, form looks better
// Date: 5 March 2020
// Source: Online Website /

https://www.kindpng.com/imgv/Tmwmbb_about-how-to-choose-a-good-board-game/

// Assistance: from online website, this help to get picture of dice that I was looking for the form



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// End reference p2

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Lessons that I learnt

I learned to set it up controls and learned to think more productive to set it up controls for the game by my own.

Time: 10:00 pm

Date: 9/3/2020 Monday

How Long: 2-3 Hours

Questions

How will I set player to take alternate turn & manage to take turn after one player rolls the dice? should I set radio button or disable the one player's side so when player 1 is playing player 2 side will be disabled and nothing will be displayed for the player 2 & after that it would be clear that who's playing the game!

Difficulties

I Used Radio button for player 1 & Player 2 and gave name rbtnPlayer1 and rbtnPlayer2 respectively. I tried to write some condition so check can change automatically when player clicks on roll dice button. but it wasn't working after trying a lot.

How I Overcame

After making a lot trial error, I initialized check change (Boolean) to a false and used that to alternate player's turn alternatively & it works when player click on roll dice button to roll the dice.

Lessons that I learnt

I learned to make alternated turn for the player & got to know that how to make check change automatically while clicking just simple button

Time: 11:00 pm, 5:00 pm

Date: 11/3/2020 Wednesday, 12/3/2020 Thursday

How Long: 2-3 Hours a day (2 Days approximately)

Questions that arise

How to add scores to the player's score who's playing the game & sum of all numbers? If I will get scores? how about the conditions? & score should be added to their final score.

Difficulties

First, I tried to get sum(score) of all numbers that are printed on dice but, I couldn't get it in one try. I was facing difficulties for mostly all conditions that are mentioned in assignment (1, No score, Snake's eye (score back to 0) & snaffle (the number that rolled more than thrice)) I tried different strategies to get score but, couldn't make it after trying different method for it.

How I Overcame

As this was most difficult for me because I could get sum of simple addition, but I was quite hard to get with the condition such as snaffle, Snake's eye & it was more hard cause for two different players. score should be added to their final scores.

I created radio button for 2 players and set it to alternate so, when player 1 & player2 plays the game, dice score added to the final score accordingly. I used If condition for

player1 & Player 2 with different variable score name (score 1 & score 2). So, score will set it up to their final score.

Lessons that I learnt

I learned to make sum of score with conditions that players are getting during the game, addition of all score, reset it to 0 when it's snake's eye, twice the score when it's snaffle & how score added to player's final score who's playing the game.

Time: 11:30 pm

Date: 15/3/2020 Sunday

How Long: 1 Hour approximately

Questions

how will I let player choose the dice number how many he/she want to roll during their turn? it should be button for dice number 1, 2, 3 &...6 or it should be text box so player can input number itself from 1 to 6 and input value will have condition with dice roll so I can manage that way?

Difficulties

First, I tried text box for input value of dice number (how many dice player wants to roll) just simply write that number to text box and then program takes that value and roll the dice but I couldn't find that convenient so later I changed it to separate radio button for number 1 to 6

How I Overcame

I set it radio button for different numbers and each radio button has (number_of_dice) variable with (number of dice 1,2, 3 & ...6) respectively.

Lessons that I learnt

I learned to set easy and convenient way so player easy chose the number and then click roll dice button to roll the dice.

Time: 7:00 pm

Date: 20/3/2020 Friday

How Long: 20 minutes approximately

Questions

How will set winner score of separate players? & label that will show who's win

Difficulties

That was quite easy to do as it just takes count win number for separate player, but I was facing difficulty in doing showing up label for who's won the game. I was confused where should I shown up who's winning the game? instruction label where I am showing instructions for the player?

How I Overcame

I set it count when player's score is greater than or equal to goal score than player wins the game & I set count there. so, it will count the number of wins of player. I decided to show player wins in instruction label as it would be more convenient.

Lessons that I learnt

I learned to set winner count for the player in game that was quite new for me & learned to make decisions for gaming concept.

Time: 7:30 pm

Date: 20/3/2020 Friday

How Long: 10 Minutes approximately

Questions

should I set player names so player can have their own name while playing game instead of player1 & player2?

Difficulties

It was quite easy for me as it's just taken input string name from text box and set it to the label

How I Overcame

I used 2 different text boxes for the player1 & player 2 then wrote code that can take input string from text boxes and print it to the label which showing the names of the player1 & Player2 or player & program. program name that automatically just be there in the player 2 textbox, so player don't have to do anything with player 2 text box name.

Lessons that I learnt

I learned to show player names for the player and program name that's more convenient to show who's playing this game.

Time: 9:00 pm

Date: 26/3/2020 Thursday

How Long: 3-4 Hours

Questions

How can single player play with program? what will be the strategy? Is the same strategy that I used for player1 and player2 or should I create different method for that & later call it? How will I set program to take turn automatic?

Difficulties

I thought a lot about program's turn and dice roll immediately as player finishes its turn. I used same method as I used for player 1 & player2 (used different radio buttons) but, I wasn't getting score correct as I was facing some issue related with radio buttons when I say I want to play with program somehow it connected with two players & was rolling dice without selecting number of how many dice I want to roll.

How I Overcame

After getting this problem, I thought about to separate this program radio button and players radio button & when program is playing the game with single user Players group box will be disabled for a while so it doesn't cause any issue while program and single player is playing the game. & I disabled program group box when 2 players are playing the game (players radio button checked). I used check change method to take program's turn automatically with some break.

Lessons that I learnt

I managed to keep players & program radio button set it to separately and I got it working properly now. So, there will be no problem cause during their own playing time.

Time: 9:00 pm

Date: 27/3/2020 Friday

How Long: 1-2 Hours approximately

Questions

How will I set program's turn instruction that program is taking turn? & make the dice roll automatically?

Difficulties

I tried a lot. first, I tried to set it up to program radio button, but it wasn't working somehow. then I set it up to roll dice button, but it didn't work too.

How I Overcame

I was facing for the program's turn instruction as program taking turn so fast so by using `System.Threading.Thread.Sleep(iMillisecs)`; slower down the program's turn and made a 1 second gap between program's turn and player's turn. after that I set it to player check button using if condition. if player is playing and taking turn then player's turn instruction will be shown up else program's turn instruction will be shown up using label.

Lessons that I learnt

I learned to set it any label using another check radio button while program plays it's turn.

Time: 11:00 pm

Date: 27/3/2020 Friday

How Long: 45-50 Minutes approximately

Questions

what should I do for new game? it should be new Game button so players can click that button to start new game instead of after player wins the game it automatically reset to new game & all scores goes back to zero?

Difficulties

I was confused that what to do for new game. then I just created new game button so player can simply click on it. after that I was getting problem to score back to 0.

How I Overcame

I created new game start button & new method in that method I initialized all scores, comments, goal score to 0 and blank so form will be reset for the new game. that was quite easy to do so.

Lessons that I learnt

I learned to set it all values to back to 0 and prepare it for new game. so, form will look new to the players who plays the game again.

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