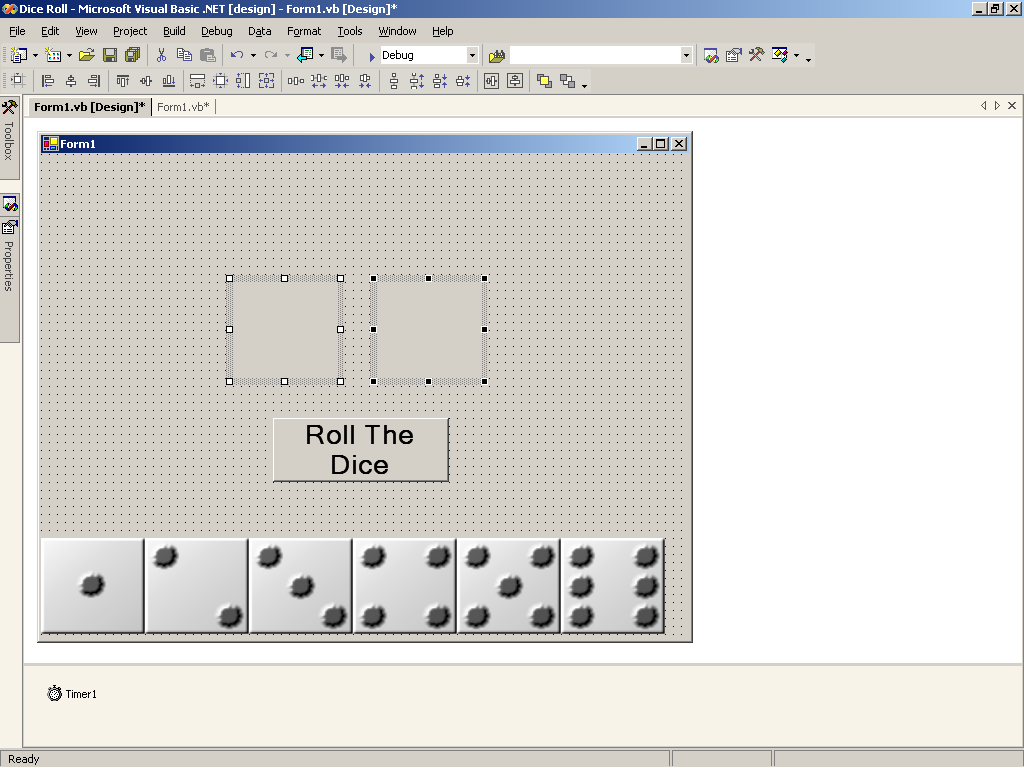
**Name: Session:**

**Programming II**

**Lab Exercise 3/20/2020 Stardate: 73215.85**

**Call Me the Tumbling Dice**

Start by creating the following Form. Your Form should contain 2 picture boxes that are visible and 6 picture boxes that are not visible. You will also need a button to initiate the roll. You also require a timer (Timer1) with Enabled set to false and Interval set to 50.



You will also need to store the 6 bitmapped images (Die1.bmp, Die2.bmp, Die3.bmp, Die4.bmp, Die5.bmp, and Die6.bmp) in your Project folder.

The two visible PictureBoxes should be named pb1 and pb2. The invisible Pictureboxes should be arranged along the bottom of the form and labeled Die1, Die2, Die3, Die4, Die5, and Die6.

Declare the following variables global to your Form.

int roll1, roll2, rolls, point;

bool firstRoll = true;

Random r = new Random();

Add the following code to your Form1\_Load subprogram.

pb1.Image = die6.Image;

pb2.Image = die6.Image;

Add the following code to your btnRoll\_Click event.

timer1.Enabled = true;

Add the following code to the Timer1\_Tick event.

RollDie1();

RollDie2();

rolls++;

if (Rollover())

{

Rolls = 0;

timer1.Enabled = false;

//Uncomment PlayGame function call to implement the game

//PlayGame();

}

Add the following Function to your Form code

private bool Rollover()

{

if (Rolls > 30)

return true;

else

return false;

}

Add the following 2 functions to your Form code.

private void RollDie1()

{

roll1 = r.Next(1, 6);

switch (roll1)

{

case 1:

pb1.Image = die1.Image;

break;

case 2:

pb1.Image = die2.Image;

break;

case 3:

pb1.Image = die3.Image;

break;

case 4:

pb1.Image = die4.Image;

break;

case 5:

pb1.Image = die5.Image;

break;

case 6:

pb1.Image = die6.Image;

break;

}

}

private void RollDie2()

{

roll2 = r.Next(1, 6);

switch (roll2)

{

case 1:

pb2.Image = die1.Image;

break;

case 2:

pb2.Image = die2.Image;

break;

case 3:

pb2.Image = die3.Image;

break;

case 4:

pb2.Image = die4.Image;

break;

case 5:

pb2.Image = die5.Image;

break;

case 6:

pb2.Image = die6.Image;

break;

}

}

Now test your program to see if it works. You should see your dice roll for 3 seconds and then come top rest. Try experimenting with different timer settings.

Now that you have your program working, design a craps game.

The rules for Craps are:

1. If you roll a 7 or 11 on the first roll (called the “come-out” roll), you win.
2. If you roll a 2, 3, or 12 (called “craps”) on the “come-out” roll, you lose.
3. If you do not roll a 7, 11 or “craps” on your first roll, the amount you roll is stored as “your point”.
4. On successive rolls, if you roll “your point”, you win.
5. If you roll a 7 on a roll after the first roll, you lose.

Here is some code for that:

1. You will require a PlayGame function

private void PlayGame()

{

if (firstRoll)

{

if (CheckWin())

{

lblResult.Text = "You win";

btnRoll.Enabled = false;

}

if (CheckLose())

{

lblResult.Text = "You lose";

btnRoll.Enabled = false;

}

if (!CheckWin() && !CheckLose())

{

point = roll1 + roll2;

lblResult.Text = "Your point is " + point;

}

firstRoll = false;

}

else

{

if (CheckWin2())

{

lblResult.Text = "You win";

btnRoll.Enabled = false;

}

if (CheckLose2())

{

lblResult.Text = "You lose";

btnRoll.Enabled = false;

}

}

}//end of PlayGame

1. Next you will require a CheckWin function to check for win on first roll

private bool CheckWin()

{

int total;

total = roll1 + roll2;

if (total == 7 || total == 11)

return true;

else

return false;

}

1. Next you will require a CheckLose function to check for loss on first roll

private bool CheckLose()

{

int total;

total = roll1 + roll2;

if (total == 2 || total == 12)

return true;

else

return false;

}

1. Next you will need a CheckWin2 function to check for win on subsequent roll

private bool CheckWin2()

{

int total;

total = roll1 + roll2;

if (total == point)

return true;

else

return false;

}

1. Next you will require a CheckLose2 function to check for loss on subsequent roll.

private bool CheckLose2()

{

int total;

total = roll1 + roll2;

if (total == 7)

return true;

else

return false;

}

**When you get your game working print a screenshot of your running game, attach it to this sheet and turn in.**