

Visual basic Number Guessing Game

Before we can start to get the coding of our game done we need to understand the logic behind it.

Here is what we want our game to do

- 1) Have a secret number
- 2) Ask for user to input a number
- 3) Check if user number is higher or lower than the secret number
- 4) Keep asking until the user gets their guess equals to the secret number
- 5) End the game when user guessed it

Each of the line in this program will be explained in detail in the table below.

<code>Dim secretNumber AsInteger = 30</code>	Declaring a secret number variable as an integer and giving it a number 30
<code>Console.WriteLine("Hello User, Welcome to Visual Basic Number Guessing Game")</code>	Greeting to the user with console write line function. Everything between the quotations will be show on the screen.
<code>Console.WriteLine("Please enter your first guess = ")</code>	Asking the user to enter their first number for the guess
<code>Dim userGuess = Console.ReadLine()</code>	Declaring the user guess variable as an integer and we are giving the value which the user will input. When we see the line console read line its waiting for the user to input a value so that can be stored inside that user guess variable.
<code>While userGuess <> secretNumber</code>	This is a loop. We are using a while loop in the main function. This loop will run while user guess and the secret number is not equal. See the less and then and greater than sign we are using <> that means if the number the user enters in less or greater meaning not equal to the secret number this loop will run continuously.
<code>If userGuess < secretNumber Then</code>	Here we are using a if statement to give feedback to the user if our number is less than the secret number. Hence the less than sign <
<code>Console.WriteLine("Your Guess is too low")</code>	Showing the line guess is too low
<code>Console.WriteLine("Please enter your guess = ")</code>	Asking the user enter the number again
<code>userGuess = Console.ReadLine()</code>	Capturing user input
<code>EndIf</code>	Ending the If statement
<code>If userGuess > secretNumber Then</code>	In this if statement we are checking whether the user guess is larger than the secret number. Hence the > sign
<code>Console.WriteLine("Your Guess is too high")</code>	Giving feedback to the user about their input stating its too high
<code>Console.WriteLine("Please enter your guess = ")</code>	Asking the user to enter their guess again
<code>userGuess = Console.ReadLine()</code>	Capturing the user guess in the variable
<code>EndIf</code>	Ending the larger than check IF
<code>If userGuess = secretNumber Then</code>	This is out final if statement. In this one we are

	checking if the user guess and the secret number are equals.
<code>Console.WriteLine("you win the game")</code>	We are telling them you win the game
<code>Console.ReadLine()</code>	This line stops the application from closing straight away
<code>EndIf</code>	End the final if statement
<code>EndWhile</code>	Ending the while loop.

To create this game got easier when we put our objective before us. Don't start a project to end up somewhere else. Always have a clear goal in front of you.

```

Sub Main()
Dim secretNumber As Integer = 30
Console.WriteLine("Hello User, Welcome to Visual Basic Number Guessing Game")
Console.WriteLine("Please enter your first guess = ")
Dim userGuess As Integer = Console.ReadLine()
While userGuess <> secretNumber
If userGuess < secretNumber Then
Console.WriteLine("Your Guess is too low")
Console.WriteLine("Please enter your guess = ")
userGuess = Console.ReadLine()

EndIf
If userGuess > secretNumber Then
Console.WriteLine("Your Guess is too high")
Console.WriteLine("Please enter your guess = ")
userGuess = Console.ReadLine()

EndIf
If userGuess = secretNumber Then
Console.WriteLine("you win the game")
Console.ReadLine()

EndIf
EndWhile

EndSub

```



```
Hello User, Welcome to Visual Basic Number Guessing Game
Please enter your first guess =
2
Your Guess is too low
Please enter your guess =
60
Your Guess is too high
Please enter your guess =
90
Your Guess is too high
Please enter your guess =
23
Your Guess is too low
Please enter your guess =
29
Your Guess is too low
Please enter your guess =
30_
```