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**NUMBER GUESSING GAME USING JAVA**

**PROJECT**

NUMBER GUESSING GAME USING JAVA  
  
Introduction:  
  
A number guessing game is a simple and fun way to learn about programming and the Java programming language. In this article, we will walk through the process of creating a number guessing game using Java.

**Explanation:**The first step in creating a number guessing game is to generate a random number for the player to guess. In Java, this can be done using the Random class. The nextInt() method of this class generates a random integer between 0 and the specified maximum value. For our game, we want the number to be between 1 and 100, so we will use the following code to generate our random number:

Random rand = **new** Random();

int numberToGuess = rand.nextInt(100) + 1;

Next, we need to prompt the player to enter their guess. We will use the Scanner class to read the player’s input. The following code initializes the Scanner object and prompts the player to enter their guess:

Scanner scanner = **new** Scanner(System.in);

System.out.println("Guess a number between 1 and 100:");

int guess = scanner.nextInt();

Now that we have the player’s guess, we can compare it to the randomly generated   
number. If the player’s guess is too high, we will tell them to try again. If the player’s guess is too low, we will tell them to try again. If the player’s guess is correct, we will congratulate them and end the game.  
  
Finally, we need to close the Scanner object to release any resources it is using. This can be done using the close() method:   
  
source code:

import java.util.Random;  
import java.util.Scanner;

public class NumberGuessingGame {

public static void main(String[] args) {

Random rand = new Random();

int numberToGuess = rand.nextInt(100) + 1;

Scanner scanner = new Scanner(System.in);

int guess;  
 System.out.println("Welcome to the number guessing game!");

System.out.println("Guess a number between 1 and 100:");

while (true) {

guess = scanner.nextInt();  
 if (guess == numberToGuess) {

System.out.println("Congratulations, you guessed the number!");

break;

} else if (guess < numberToGuess) {

System.out.println("Your guess is too low. Try again:");

} else {

System.out.println("Your guess is too high. Try again:");

}

}

scanner.close();

}

}

# output : Welcome to number guessing game!guess a between 1 to 100: 4 your guess is to low.try again 70 your guess is to low.try again 80 your guess is to high.tryagain 75 your guess is to high.try again 74 your guess is to high.try again 73 Congratulation, you guessed the number