

The Gambling Game

(Assignment 1)



Class: IN2203

Group: 2

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**The Gambling Game**

import java.util.\*;

public class GameApp

{

public static void main(String args[])

{

Casino c = new Casino();

c.startNewGame();

}

}

class Casino

{

//A player walks into a casino and wants to play a game

//Here we create a Game object

Game g;

String playerResponse;

Scanner sc;

Casino()

{

g = new Game();

sc = new Scanner(System.in);

}

public void startNewGame()

{

//User Response is taken, if he wants to play or not.

//If user responds y/Y, game play starts through playGame() method. If the response is n/N, program exits.

System.out.println("Welcome to our Casino");

System.out.println("Press y/Y to play a game or n/N to quit!");

playerResponse = sc.nextLine();

if(playerResponse.equalsIgnoreCase("y"))

{

System.out.println("Lets Play");

g.playGame();

}

else

{

System.out.println("Good bye! Hope to play with you soon!");

System.exit(0);

}

}

}

class Game

{

//Random class object is created, which will be used to generate computer's guess

//Player object is created to play Game

Random r;

private int computerGuess, userGuess;

Player p;

Game()

{

r = new Random();

p = new Player();

computerGuess = -1;

userGuess = -999;

}

public void playGame()

{

//Game Rules are displayed here

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

System.out.println("And I will also guess a number");

System.out.println("If your guess is within 20 of my guess, you win, else I will win!");

//User Response is obtained by calling userResponse() method

userGuess = p.userResponse();

//Computer Guess is generated here

computerGuess = generateGuess();

System.out.println("My guess is " + computerGuess);

System.out.println("Your guess is " + userGuess);

//User & Computer's guesses are compared and result is announced here

if(userGuess == computerGuess)

{

System.out.println("BINGO! PERFECT MATCH! YOU HAVE WON!");

}

else if(Math.abs(userGuess - computerGuess) <= 20)

{

System.out.println("CONGRATULATIONS! YOU HAVE WON!");

}

else

{

System.out.println("Oops! Better Luck Next Time!");

}

}

//This method is to generate computer guess using nextInt() method of Random class

public int generateGuess()

{

int programGuess = r.nextInt(100);

return programGuess;

}

}

class Player

{

int response;

Scanner sc;

Player()

{

sc = new Scanner(System.in);

}

public int userResponse()

{

System.out.println("Enter your guess between 1 and 100");

//User response is obtained using nextInt() method of Scanner class

response = sc.nextInt();

//User response is checked if it is in specified range, if not response is obtained again

while (response < 1 || response > 100)

{

System.out.println("Invalid Response!");

System.out.println("Your guess should be between 1 and 100!");

System.out.println("Enter your guess again:");

response = sc.nextInt();

}

return response;

}

}

**OUTPUT:**





