import java.util.\*;

public class NumberGuessingGame {

    static ArrayList<Integer> scoreBoard = new ArrayList<Integer>();

    public static void main(String[] args) {

        NumberGuessingGame methodChange = new NumberGuessingGame();

        methodChange.menu(scoreBoard);

    }

    public void menu(ArrayList<Integer> scoreBoard) {

        NumberGuessingGame methodChange = new NumberGuessingGame();

        Scanner input = new Scanner(System.in);

        System.out.println("--------------------");

        System.out.println("Welcome to the number game");

        System.out.println("1) Play the Game");

        System.out.println("2) Score Board");

        System.out.println("3) Exit the game");

        System.out.println("--------------------");

        try {

            System.out.print("What action would you like to do from the above actions? ");

            int menuOption = input.nextInt();

            switch (menuOption) {

                case 1:

                    System.out.print("\n" + "What would you like the range of the numbers to be? ");

                    int numberRange = input.nextInt();

                    int randomNumber = methodChange.randomNumber(numberRange);

                    methodChange.guessNumber(randomNumber);

                    break;

                case 2:

                    methodChange.displayScoreBoard();

                    break;

                case 3:

                    System.out.println("\n" + "Thanks for playing the game!");

                    System.exit(1);

                    break;

                default:

                    throw new InputMismatchException("Invalid number entry.Could you please Try again later");

            }

        } catch (InputMismatchException e) {

            System.err.println("\n" + e.getMessage() + "\n");

            menu(scoreBoard);

        }

    }

    public int randomNumber(int numberRange) {

        Random random = new Random();

        int randomNumber = random.nextInt(numberRange) + 1;

        return randomNumber;

    }

    public void guessNumber(int randomNumber) {

        Scanner input = new Scanner(System.in);

        int userGuess;

        int guess = 0;

        do {

            System.out.print("Enter your guess number: ");

            userGuess = input.nextInt();

            guess++;

            if (userGuess > randomNumber) {

                System.out.println("Lower");

            } else if (userGuess < randomNumber) {

                System.out.println("Higher");

            }

        } while (randomNumber != userGuess);

        System.out.println(" ");

        if (guess == 1) {

            System.out.println("You answered number is right in " + guess + " try!");

        } else {

            System.out.println("You answered number is right in " + guess + " tries!");

        }

        scoreBoard.add(guess);

        System.out.println(" ");

        menu(scoreBoard);

    }

    public void displayScoreBoard() {

        System.out.println("--------------------");

        System.out.println("Score Board");

        System.out.println("--------------------");

        System.out.println("Your fastest games today out of all tries is: " + "\n");

        Collections.sort(scoreBoard);

        for (Integer scores : scoreBoard) {

            System.out.println("Finished the number game in " + scores + " tries");

        }

        System.out.println(" ");

        menu(scoreBoard);

    }

}

**# NUMBER-GUESSING-GAME**

Oasis Infobyte Java Task

YouTube:https://youtu.be/-EI3irH11-0

The fun and easy project “Guess the Number” is a short Java project that allows the user to guess the number generated by the computer & involves the following steps:

The system generates a random number from a given range, say 1 to 100.

The user is prompted to enter their given number in a displayed dialogue box.

The computer then tells if the entered number matches the guesses number or it is higher/lower than the generated number.

The game continues under the user guessing the number.

You can also incorporate further details as:

Limiting the number of attempts.

Adding more rounds.

Displaying score.

Giving points based on the number of attempts.