PRACTICE SECTION-3

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Java Foundations

Practices - Section 3

Creating a JavaLibs Game

Overview

Section 3 has shown you everything you'll need to recreate a JavaLibs program, similar to the one you played at the beginning of the section. It may take a bit of thinking, but it's a challenge you're definitely ready for. Your program requirements are described below. Good luck, and have fun!

Tasks

Your goal is to create a program similar to JavaLibs. Write a story where certain parts of the resulting story text are modified by the user's input. Prompt the user for various inputs.

You may accept user any number of ways, including a JOptionPane, or Scanner input from the console. However, choose only one method. Don't use multiple methods of accepting input. Similarly, if you use JOptionPane to get input, use JOptionPane to show the resulting story.

When you output your story, make sure your all your text is visible at the same time. It's not ok for text to be too long for your computer screen or output window. Your story will need to be spread across several lines instead of being printed in one giant line of output.

This helps keep your output clean and your program more user friendly.

It's ok for your program to crash if the user inputs inappropriate data. In other words, It's ok if your program crashes because you've expected the user to input a number, when they've instead input a String. We'll cover exception handling later in the course.

Your program must also do the following:

• Accept at least 1 input, to be parsed as a String

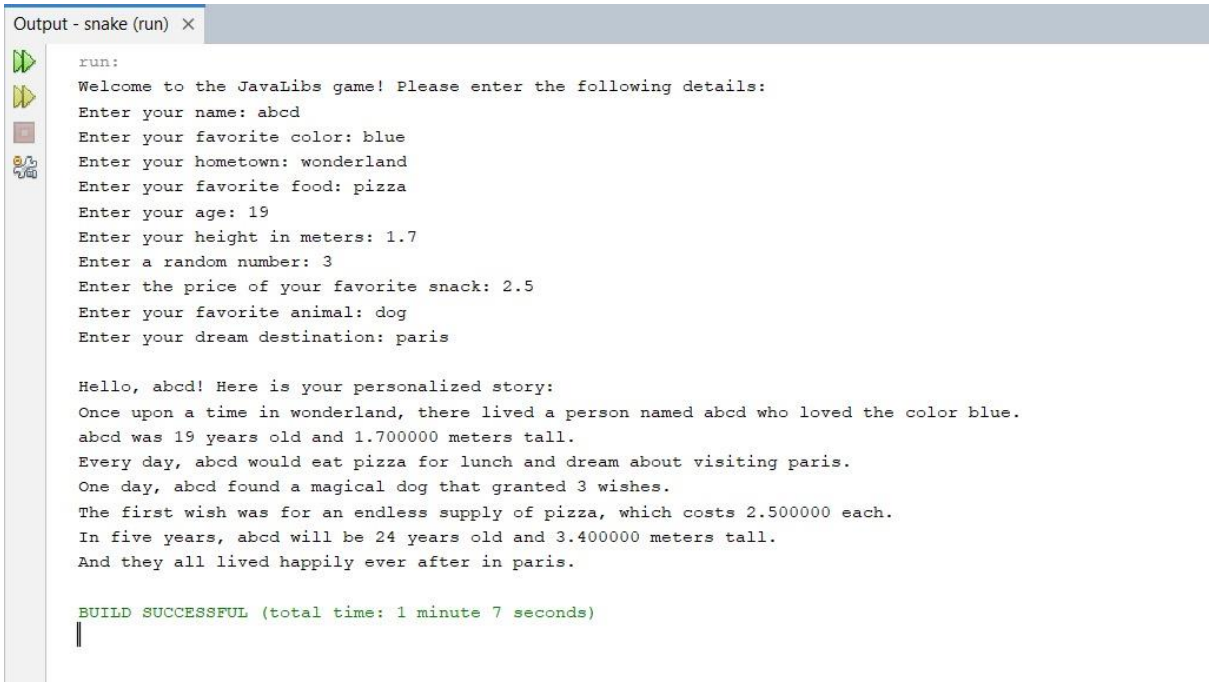
• Accept at least 1 input, to be parsed as an int
• Accept at least 1 input, to be parsed as a double
• Use at least 1 input in a question for the user
• Do math with at least 1 int input
• Do math with at least 1 double input
• Accept at least 10 total inputs
It’s ok for this problem set to write your entire program within the main method.
The JavaLibsPractice.java file is available to help you get started.

Code: package snakebox;

```
// Snake.java

import java.util.Scanner;


public class JavaLibsPractice {

    public static void main(String[] args) {

        // Accepting at least 10 inputs

        try (Scanner scanner = new Scanner(System.in)) {

            // Accepting at least 10 inputs

            System.out.println("Welcome to the JavaLibs game! Please enter the following details:");

            // Accepting String inputs

            System.out.print("Enter your name: ");

            String name = scanner.nextLine();

            System.out.print("Enter your favorite color: ");

            String color = scanner.nextLine();

            System.out.print("Enter your hometown: ");

            String hometown = scanner.nextLine();

            System.out.print("Enter your favorite food: ");

            String food = scanner.nextLine();

            // Accepting int input

            System.out.print("Enter your age: ");

            int age = scanner.nextInt();

            // Accepting double input

            System.out.print("Enter your height in meters: ");
```

```
        double height = scanner.nextDouble();
        System.out.print("Enter a random number: ");
        int randomNumber = scanner.nextInt();
        System.out.print("Enter the price of your favorite snack: ");
        double snackPrice = scanner.nextDouble();
        // Additional inputs to meet the 10 input requirement
        System.out.print("Enter your favorite animal: ");
        String animal = scanner.next();
        System.out.print("Enter your dream destination: ");
        String destination = scanner.next();
        // Performing calculations
        int futureAge = age + 5;
        double doubleHeight = height * 2;
        // Creating the story
        String story = String.format("Hello, %s! Here is your personalized story:\n", name);
        story += String.format("Once upon a time in %s, there lived a person named %s who loved the color %s.\n", hometown, name, color);
        story += String.format("%s was %d years old and %f meters tall.\n", name, age, height);
        story += String.format("Every day, %s would eat %s for lunch and dream about visiting %s.\n", name, food, destination);
        story += String.format("One day, %s found a magical %s that granted %d wishes.\n", name, animal, randomNumber);
        story += String.format("The first wish was for an endless supply of %s, which costs %f each.\n", food, snackPrice);
        story += String.format("In five years, %s will be %d years old and %f meters tall.\n", name, futureAge, doubleHeight);
        story += String.format("And they all lived happily ever after in %s.\n", destination);
        // Displaying the story
        System.out.println("\n" + story);
        // Closing the scanner
    }
  }
}
```

Output:


Output - snake (run)
run:
Welcome to the JavaLibs game! Please enter the following details:
Enter your name: abcd
Enter your favorite color: blue
Enter your hometown: wonderland
Enter your favorite food: pizza
Enter your age: 19
Enter your height in meters: 1.7
Enter a random number: 3
Enter the price of your favorite snack: 2.5
Enter your favorite animal: dog
Enter your dream destination: paris
Hello, abcd! Here is your personalized story:
Once upon a time in wonderland, there lived a person named abcd who loved the color blue.
abcd was 19 years old and 1.700000 meters tall.
Every day, abcd would eat pizza for lunch and dream about visiting paris.
One day, abcd found a magical dog that granted 3 wishes.
The first wish was for an endless supply of pizza, which costs 2.500000 each.
In five years, abcd will be 24 years old and 3.400000 meters tall.
And they all lived happily ever after in paris.
BUILD SUCCESSFUL (total time: 1 minute 7 seconds)