

Guided Lab 303.3.2 - Reading a String From the Console

Lab Objective:

In this lab, you will demonstrate how to prompt the user to input a string and then read the string from console input.

Instructions

When you are developing console applications using Java, you must read input from users through the console. To read a string from the console as input in Java applications, you can use the Scanner class along with *System.in*.

Example 1 – Read String from Console Input

In this example, we shall define a scanner with the input stream, **System.in**.

System.in creates a standard input stream that is already open and ready to supply input data.

The scanner is a simple text scanner that can parse primitive types and strings using regular expressions.

So, passing **System.in** to Scanner allows us to parse or read strings from the standard input stream, which is the console.

```
public class ReadingStringFromConsole {
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);
        System.out.print("Enter three words separated by spaces: ");
        String s1 = input.next();
        String s2 = input.next();
        String s3 = input.next();
        System.out.println("s1 is " + s1);
        System.out.println("s2 is " + s2);
        System.out.println("s3 is " + s3);
    }
}
```

When the program is run, the execution waits after printing **“Enter three words separated by spaces:,”** where the user would enter a string similar to “hello world” as shown in the following console window.

The program prints the string read from the console input in the next step. The whole output in the console would be as shown in the following.

```
Enter three words separated by spaces: Hello Java Learners
s1 is Hello
s2 is Java
s3 is Learners
```

Example 2: Reading a String From the Console

```
public class ReadingStringFromConsole {
    public static void main(String[] args) {

        Scanner input = new Scanner(System.in);
        System.out.print("Enter a character: ");
        String s = input.nextLine();
        char ch = s.charAt(0);
        System.out.println("The character entered is " + ch);
    }
}
```

Output

```
Enter a character: Perscholas
The character entered is P
```

Reference:

<https://docs.oracle.com/javase/7/docs/api/java/util/Scanner.html>

<https://docs.oracle.com/javase/8/docs/api/java/lang/System.html>

<https://docs.oracle.com/javase/8/docs/api/java/lang/System.html#in>

Submission Instructions:

Include the following deliverables in your submission -

- Submit your source code using the Start Assignment button in the top-right corner of the assignment page in Canvas.

CANVAS STAFF USE ONLY: Canvas Submission Guideline:

Instructions for Canvas Assignment Creation
<p>Assignment Name: GLAB - 303.3.2 -Reading a String From the Console</p> <p>Points: 100</p> <p>Assignment Group: Module 303: Java SE Review (Not Graded)</p> <p>Display Grade As: Complete/Incomplete</p> <p>Do not count this assignment towards the final grade: Checked</p> <p>Submission Types: File Uploads</p> <p>Allowed Attempts: Unlimited</p> <p>Everything else is the default.</p>