

LEC 11

CSE 121

User Input (Scanner)

Questions during Class?

Raise hand or send here

sli.do **#cse121**



BEFORE WE START

Talk to your neighbors:

If you had to compete in one Olympic sport, what would it be?

Instructor: Hayden Feeney

TAs: Anisha Savannah William
Cayden Tamsyn

Announcements, Reminders

- P2 due **Thursday, August 6th**
- R3 out yesterday and due **Thursday, August 6th**
 - **P0**, C1, P1, C2 eligible
 - last opportunity to resubmit P0
- Quiz 1 done!
 - Grades to release before quiz 2

Lecture feedback survey

Please offer feedback at
<https://forms.gle/Rf8cStpVpma6w1RK9>



PCM Review: Scanner

An **object** that we can use to *read in input*
In the `java.util` “package”!

`Scanner` `console` = `new Scanner(System.in);`
type name Scanner construction code

Methods	Description
<code>nextInt()</code>	Reads the next token from the user as an <code>int</code> and returns it.
<code>nextDouble()</code>	Reads the next token from the user as a <code>double</code> and returns it.
<code>next()</code>	Reads the next token from the user as a <code>String</code> and returns it.
<code>nextLine()</code>	Reads an <i>entire line</i> from the user as a <code>String</code> and returns it.

PCM Review: Tokens

A unit of user input, as read by the Scanner

Tokens are separated by *whitespace* (spaces, tabs, new lines)



PCM Review: InputMismatchException

Exceptions are errors that occur *while a program is running* that stops the program from running.

There are different types of exceptions that can occur, and the **name of the exception** can help you understand what caused the error!

An **InputMismatchException** occurs when the Scanner tries to read input in as a specific type, but the input cannot be interpreted as that type.

(e.g., trying to read in "hello" as an `int`)



Practice: Think

sli.do

#cse121

When calling the following method, which of these user inputs would not cause an error? (choose multiple)

```
public static void cornbear() {  
    Scanner console = new Scanner(System.in);  
    int amt = console.nextInt();  
    String firstName = console.next();  
    String secondName = console.next();  
    double price = console.nextDouble();  
}
```

- A. 6 Gumball's Treats \$12.48
- B. 3 Sesame Latte 16.47
- C. 2 The Hunger Games 21.98
- D. 4 Gumballs 900.24
- E. 2 Grammy Awards 90095



Practice: Pair

sli.do

#cse121

When calling the following method, which of these user inputs would not cause an error? (choose multiple)

```
public static void cornbear() {  
    Scanner console = new Scanner(System.in);  
    int amt = console.nextInt();  
    String firstName = console.next();  
    String secondName = console.next();  
    double price = console.nextDouble();  
}
```

A. 6 Gumball's Treats \$12.48

B. 3 Sesame Latte 16.47

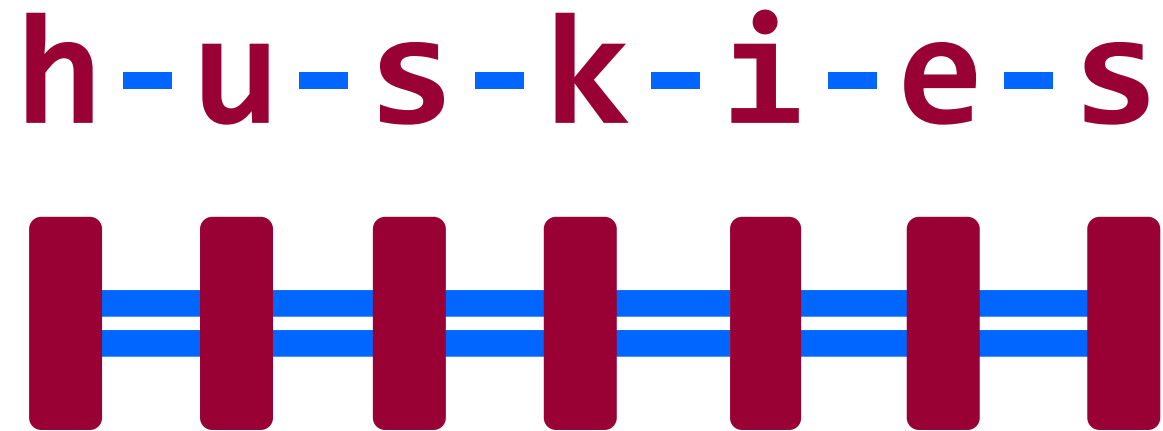
C. 2 The Hunger Games 21.98

D. 4 Gumballs 900.24

E. 2 Grammy Awards 90095

Reminder: Fencepost Pattern

Some task where one piece is repeated n times, and another piece is repeated $n-1$ times and they alternate



Fencepost Pattern ... for User Input?

Some task where one piece is repeated n times, and another piece is repeated $n-1$ times and they alternate

