

# SWEN20003

Workshop 4, Week 5

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# Input in Java

# Reading input in Java

- Preferred: the Scanner class

```
import java.util.Scanner;

class Program {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        while (scanner.hasNext()) {
            System.out.println("Next: " + scanner.next());
        }
    }
}
```

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- **Token:** a single “word” surrounded by whitespace (or the start/end of the string)
- `scanner.hasNext()`: returns true if the input has more tokens to read
- `scanner.next()`: returns the next token
- `scanner.nextLine()`: returns all tokens until the next newline

# Reading input in Java

- Scanner can read from any source, including Strings:

```
import java.util.Scanner;

class Program {
    public static void main(String[] args) {
        String sample = "Hello World! Testing tokenisation...";
        Scanner scanner = new Scanner(sample);
        while (scanner.hasNext()) {
            System.out.println("Next: " + scanner.next());
        }
    }
}
```

Maven

# What is Maven?

- Project management tool, similar to `Makefiles`
- Specifies source code structure, compiler settings, libraries...

# Why Maven?

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- **Dependency:** another library, project, or piece of software your project relies on

# Online dependencies

- **Pros:**
  
- **Cons:**

# Online dependency ecosystems

- **Pros:** easy to use; don't have to manually find libraries online
- **Cons:** can make your project bigger than it needs to be; awkward for developers with slow Internet

Bagel