

Workshop2 – Console I/O

COMP90041 Programming and software development

Prepared By: Chenyang Lu





Review



Console I/O

Console Output example:

System.out.print("Hello World");

Console input example:

```
Scanner keyboard = new Scanner(System.in);
int inputString = keyboard.next()
```



Console output

Console Output example:

System.out.print("Hello World");

- System: a Class
- out: an Object that belongs to System class, but the object type is
 PrintStream
- print: method belongs to **PrintStream** Class

System.out can invoke any public method that belongs to PrintStream Class



Console output

Other methods that belongs to PrintStream Class:

- print()
- println()
- printf()

To use this methods:

```
System.out.print("Hello World"); // does not end a line
System.out.println("Hello world") //end a line
System.out.printf("%6.2f",19.2) // used to format output
```

Demo Time...



Console input example:

```
// Firstly create a new Scanner Object named "keyboard"
Scanner keyboard = new Scanner(System.in);

//next() is a method belongs to Scanner class
String inoutString = keyboard.next();
```

- Scanner: a Class
- **keyboard**: an Object, the Object type is sacnner
- next(): method belongs to Scanner Class



Other methods that belongs to Scanner Class:

- next()
- nextInt()
- nextDouble()
- nextLong()
- nextShort()

To use this methods:

keyboard.next();

keyboard.nextInt();



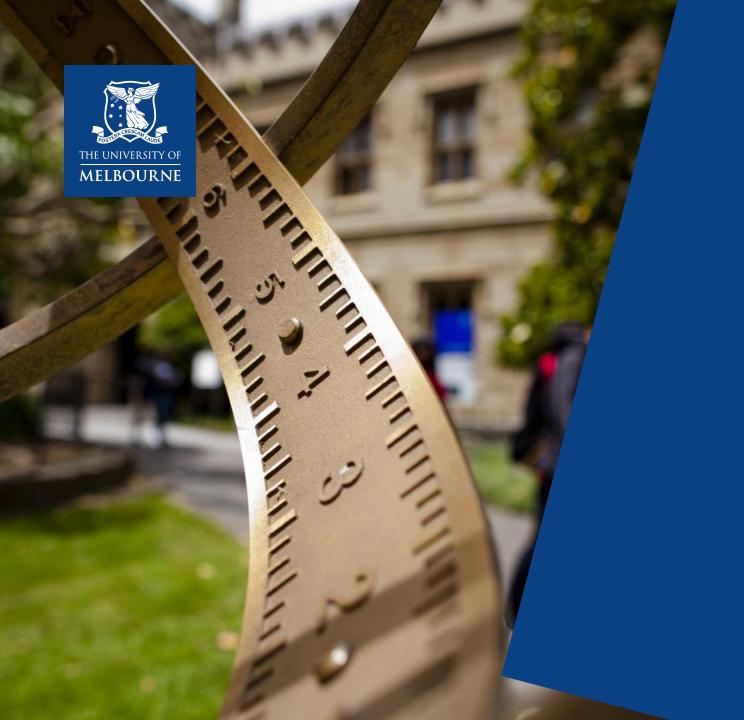
Hint:

- When using Scanner class, we must firstly import java.util.Scanner
- However, when using System.out.print(), we don't need to import extra package. Why?



Hint:

- When using Scanner class, we must firstly import java.util.Scanner
- However, when using System.out.print(), we don't need to import extra package. Why?
- Because System class in java.lang.System package, java.lang package is imported by default. Many fundamental classes are in java.lang package.



Project suggestions



Project suggestions

- Read week4 Lecture slides before you do the project
- Be careful about your coding style, read coding Style Example in LMS.
- Avoid excess use of static method
- Avoid long method, try to break-up your method
- Submit as early as possible ---