

Java Objects Part 2 Notes

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1 constants

- Are named *IN_CAPITALIZED_SNAKE_CASE*
- Can be done using *static* keyword
- Allows variables and methods to be expoused without instantiation

```
1 public class PezDispenser {  
2     public static final int MAX_PEZ = 12; // <- 1. static declared  
3     here :)  
4     ...  
5 }
```

Listing 1: lesson_1/PezDispenser.java

```
1 import java.io.Console;  
2  
3 public class Example {  
4     public static void main(String[] args) {  
5         ...  
6         System.out.printf("FUN FACT: There are %d PEZ allowed in  
7         every dispenser\n", PezDispenser.MAX_PEZ); // 2. <- And is used  
8         here :)  
9         ...  
10    }  
11 }
```

Listing 2: lesson_1/Example.java

Notes:

- Files can be compiled and displayed by typing *javac Example.java* && *java Example* in terminal

2 Exercise 1

- Solution included in *exercise_1.java*

3 Filling the Dispenser

- *void* keyword means nothing is returned at the end of a method

```
1 public class PezDispenser {
2     public void fill() { // <- This little guy here :)
3         this.pezCount = MAX_PEZ;
4         System.out.printf("The current count of delicious PEZ is %
5         d\n", this.pezCount);
6     }
7 }
```

Listing 3: lesson_3/PezDispenser.java

```
1 import java.io.Console;
2
3 public class Example {
4     public static void main(String[] args) {
5         ...
6         dispenser.fill(); // <- 2. Is used like this
7     }
8 }
9
10
```

Listing 4: lesson_3/Example.java

Notes:

- Files can be compiled and displayed by typing *javac Example.java* && *java Example* in terminal
- Always start with private methods, and turn to public when needed.

4 Exercise 2

- Solution included in *exercise_2.java*

5 Abstraction at Play

- *Golden Rule* Don't make users understand object internally
 - Simple questions such as 'is it empty?' is sufficient

```
1 public class PezDispenser {
2     public boolean isEmpty() { // <- This little guy here :)
3         return this.pezCount == 0;
4     }
5
6     ...
7 }
8
```

Listing 5: lesson_5/PezDispenser.java

```
1 import java.io.Console;
2
3 public class Example {
4     public static void main(String[] args) {
5         ...
6         if (dispenser.isEmpty()) {
7             System.out.printf("Dispenser is empty"); // <- 2. with
this little fellow here
8         }
9
10        ...
11        if (!dispenser.isEmpty()) {
12            System.out.printf("Dispenser is full\n"); // <- 3. and
this guy as well
13        }
14    }
15 }
16
17
```

Listing 6: lesson_5/Example.java

Notes:

- Files can be compiled and displayed by typing *javac Example.java* && *java Example* in terminal

6 Exercise 3

- Solution included in *exercise_3.java*

7 Incrementing and Decrementing

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