



# Introducing Classes

Java classes - a never-ending story



```
public class Classes {
    public static void main(String[] args) {
        try {
            Class.forName(Classes.class.getClass().getName());
        } catch (ClassNotFoundException cnfe) {
            System.err.println("Error in class " +
                Classes.class.getClass().getName());
        }
    }
}
```

# Java and classes

- A central concept
- Everything is based on classes
- (almost)
- You need to know how to write a class, if you want to know Java
- We have several chapters on classes

# Our plan

- We'll start with showing you what parts a class has:
  - Variables
  - Constructors
  - Methods
  - And what about "The main method" in a class?
- Some more details, like `final` members and packages
- Then we move on to more practical topics, like testing your classes and using your classes in a program
- Then we look at the source code of some standard API classes
- A little about the Java language keywords (because we didn't tell you all)
- And finally, we talk about immutable classes like `java.lang.String`

# Chapters on classes in Programming with Java

- Introduction (this is it!)
- Declaration - writing a class, basics
- Packages - grouping classes together
- Main - A class with a main method is the starting-point of a program
- Commenting code // You should do it!
- Declaring variables in a class
- Defining constructors
- Defining methods
- Final members
- Using packages

# Chapters on classes in Programming with Java

- Testing your classes - Do they work as you hoped?
- Using your classes - Why did you write them? What's their use?
- API source code - What does the source code of a Java API class look like?
- What other keywords exist? - You didn't tell us the whole picture, did you?
- Strings are immutable - Strings are *what, now?*

# Further reading

- Our wiki serves you chapters on classes!
- <https://docs.oracle.com/javase/tutorial/java/concepts/class.html>
- <https://docs.oracle.com/javase/tutorial/java/javaOO/classes.html>
- <https://docs.oracle.com/javase/tutorial/java/javaOO/classdecl.html>
- <https://docs.oracle.com/javase/tutorial/java/javaOO/variables.html>
- <https://docs.oracle.com/javase/tutorial/java/javaOO/methods.html>
- <https://docs.oracle.com/javase/tutorial/java/javaOO/constructors.html>