

IntelliJ & First Java Program

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Updated July 2018



If you want to follow along

- Make sure you have Java downloaded on your computer
 - You can check by running `java -version` in a terminal
- Make sure you have IntelliJ downloaded on your computer
- Have a copy of the `example_starter.txt` skeleton file saved on your computer, I put mine on my Desktop

Intro to Java

Skeleton Java Class

```
public class Example {  
    public static void main(String[] args) {  
        // code goes here  
    }  
}
```

**** This structure is required for all java code you want to run ****

Vocab Alert!

keyword: words that can't be used because they already have special meaning in Java

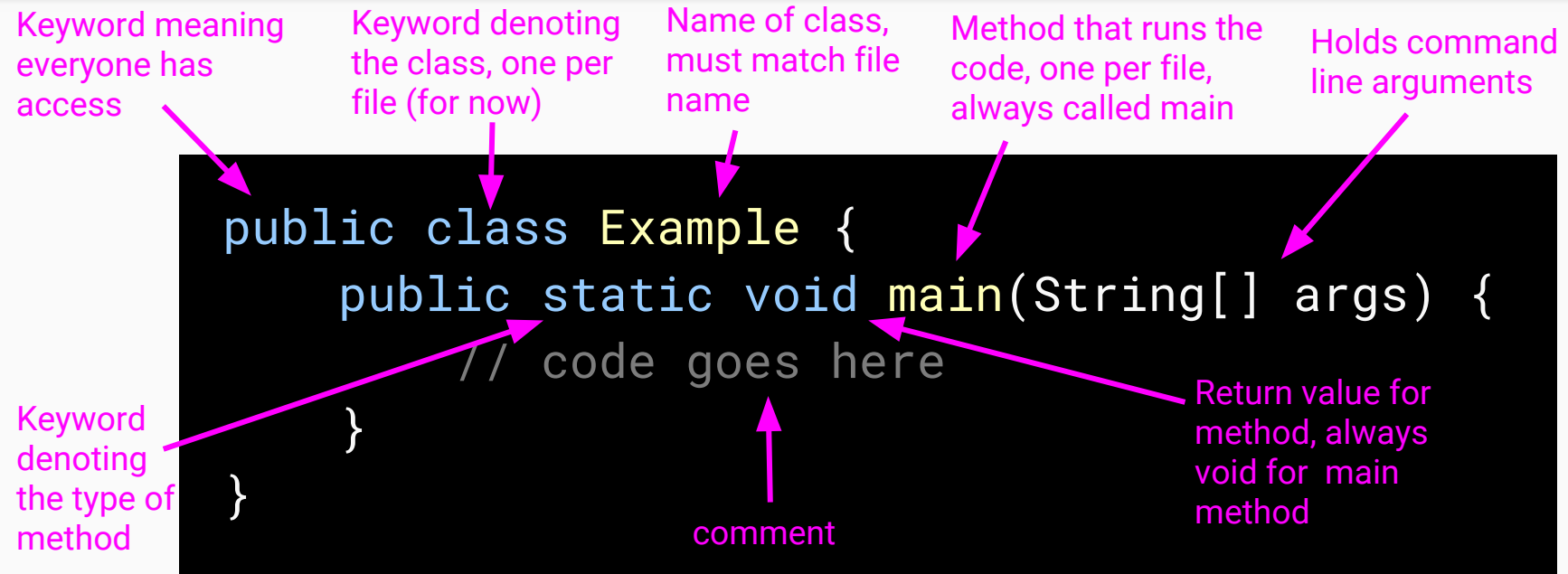
- Will get special syntax highlighting in your IDE or text editor
- Will get errors if try to use them at the wrong time

method: a collection of statements that get executed run together

return value: the type of information that is going to be passed back from a method

command line arguments: information that is passed into a program whenever it is run

Parts of the Code



Vocab Alert!

source code: set of instructions in a program

- In java this is the base Java program

compile: changing a program from one language to another

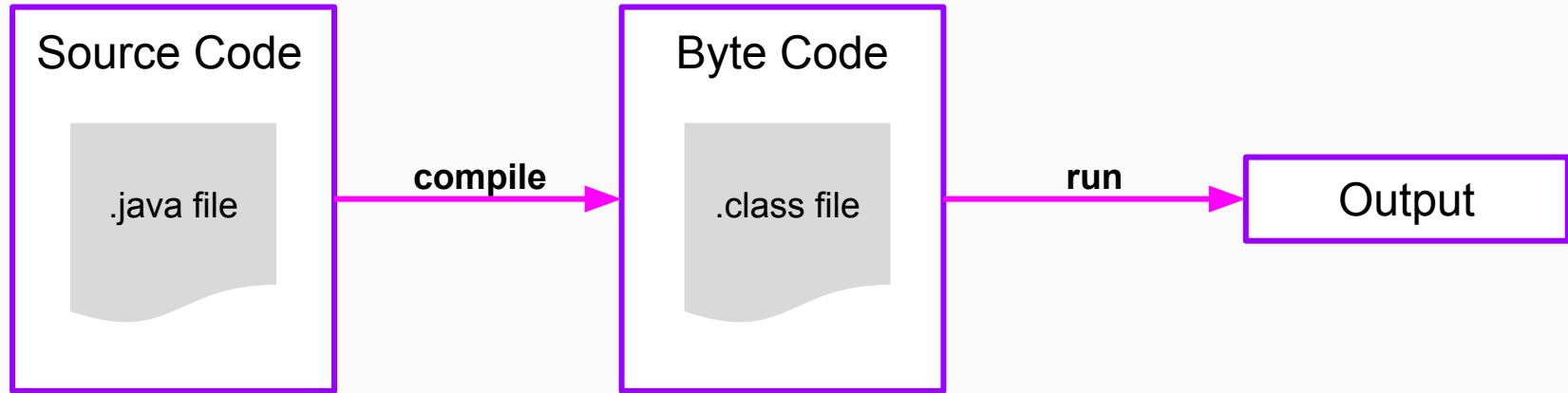
bytecode: code that is run on the Java Virtual Machine

- Java code is compiled into bytecode with a .class extension

machine code: what is run directly on the computer, just a collection of ones and zeroes that the computer interprets

output: stuff printed by a running program

Life Cycle of a Java Program



Printing in Java

print & println

Print **without** going to the next line:

```
System.out.print("stays on same line");
```

Print and go to the next line:

```
System.out.println("goes to line");
```

**** Print statements
need to be wrapped
inside a method ****

Things that matter

- The s in System should always be capitalized
- Every statement in Java has to end with a semicolon
- All words you want to print have to be enclosed in quotation marks

Vocab Alert!

syntax: structures, statements, and commands in a program

syntax error: error thrown whenever there is a problem with the syntax in a program, thrown during compilation

compile error: error thrown during compilation of a program

- Luckily IntelliJ will underline anything for us that might cause a compile error

escape sequence: character coupling that when printed does something special, like go to the next line in the console

Escape Sequences

`\t` - tab character

`\n` - new line character

`\\` - a `\` character, always requires 2 to print a single `\` character

`\"` - quotation, need the slash so that program doesn't think you're ending what you're trying to print

Setting Up a new IntelliJ Project

Create new Java
class in IntelliJ

Practice

- Print `hello world` that goes to the next line after
- Print `\ / \`
- Print `a[tab]b[tab]c`
- Print `hello world` using 2 separate print statements
- Print `hello world`, a word per line using a single print statement
- Print `"hello world"`

Practice for later:
write a program to print out Jobby

@
 (@#
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 @@/ @ @@@@@@@@@@@@@ @@
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OR

[illegible]

The End