

## 03: Our first Java Program

Important Terms

Hello Java!

## Important Terms

# Import Things to Know about Java

- ▶ Java is an **Object-Oriented Programming** Language.
- ▶ An **object** is a block of memory that contains variables and methods.
  - ▶ A **method** is an action that an object is allowed to perform.
  - ▶ If an object doesn't have a method, then it can't do that action.
- ▶ A **class** defines the variables and methods for **objects**.

# Import Things to Know about Java

- ▶ Every Java program contains at least one class.
- ▶ There is exactly one a class containing a **method** called **main**.
- ▶ The **main** method is the start of the program.
  - ▶ If you aren't sure where a program begins, look for **main**.
- ▶ The name of the **class** containing **main** must be spelled identical to the name of the file. This includes capitalization.
- ▶ The extension for this file must always be ".java".

Hello Java!

# Start Up NetBeans

1. Click the button in NetBeans for a new project.
  - ▶ It looks like a brown box with a green plus sign. You'll find it in the menu bar.
2. Make sure that you select "Java" under "Categories".
3. Make sure that you create a "Java Application" under "Projects". Click "Next".
4. Name your project "HelloJava".
  - ▶ Make sure that you spell it identical to how it appears in quotes.
  - ▶ "H" and "J" are capitalized.
  - ▶ There is no space between "Hello" and "Java".
5. Click "Finish".

Raise your hand if you have trouble with any of these steps.

## Begin Programming:

Look for this line:

```
public static void main(String[] args) {
```

Raise your hand if you have trouble finding this line.



## Remove a line of code.

Under the line of code that contains **main**, look for the next line.

```
public static void main(String[] args) {  
    // TODO code application logic here
```

- ▶ Keep the line that contains **main**. Delete the entire line of code that begins with “// TODO ...”
- ▶ Make sure that you keep all of the “}”’s after the line containing TODO.

Your code should look like this.

```
public static void main(String[] args) {  
  
}
```

If your code looks like this, click the green arrow on the menu button. This is the “Play” button.

## Program Output

This is **main** method is empty. The entire program does nothing. When you click “Play”, you should see this:

```
run:
```

```
BUILD SUCCESSFUL (total time: 0 seconds)
```

If you do not see “BUILD SUCCESSFUL”, please raise your hand.

## Add an output line

```
public static void main(String[] args) {  
    System.out.println("Hello, world!");  
}
```

Write the line between the two curly brackets. The two curly brackets represent the beginning and end of **main**. Don't forget to put a semicolon at the end of your line. Run your program with the green arrow button.

After running.

You should see this. Now you are programming in Java!

```
run:
```

```
Hello, world!
```

```
BUILD SUCCESSFUL (total time: 0 seconds)
```

If you don't see your message, please raise your hand.

## Add more output lines

```
public static void main(String[] args) {  
    System.out.println("Hello, world!");  
    System.out.println("My name is [YOUR NAME]");  
    System.out.println("My favorite drink is [BEVERAGE]");  
}
```