

1. Very first introduction to java

Sakib Abrar

CSE

Bangladesh University of Engineering & Technology

sakib.cgbs@gmail.com

September 6, 2020

Overview

What is Java?

Why should you learn Java?

How to setup development environment for java?

Our very first java program?

Examining the java file

Basic Overview of java

How does it work?

A simple, object-oriented, distributed, interpreted, robust, secure, architecture neutral, portable, high-performance, multithreaded, and dynamic language – Sun Microsystems.

It is a powerful general-purpose programming language. It is used to develop desktop and mobile applications, web applications, big data processing, embedded systems, and so on.

Java syntax is similar to C++, but is strictly an object-oriented programming language.

Why Java?

- ▶ Java is highly popular!!
- ▶ It is Versatile
- ▶ It is also Platform Independent
- ▶ Lots of Powerful Development Tools
- ▶ Java has a Large Community
- ▶ Great Documentation Support
- ▶ Java has multiple Open Source Libraries
- ▶ Last but not the least High Salary!!

Two things to get set up

1.JDK

Java development kit.



2.IDE

Integrated Development Environment(java supported).



First java program

Create and open a project in IntelliJ then create a new java class named FirstProgram.java then type

```
public class FirstProgram {  
    public static void main(String[] args) {  
        System.out.println("Hello World");  
    }  
}
```

Then hit run and see!

Examining FirstProgram.java

public static void main(String[] args)

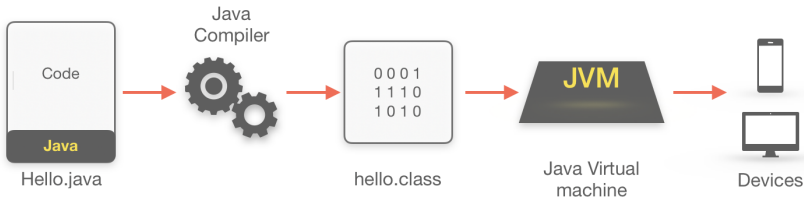
- ▶ **main** is the starting point of every Java application
- ▶ **public** is used to make the method accessible by all
- ▶ **static** is used to make main a static method of class Welcome. Static methods can be called without using any object; just using the class name. JVM call main using the **ClassName.methodName** FirstProgram.main) notation
- ▶ **void** means main does not return anything
- ▶ **String args[]** represents an array of String objects that holds the command line arguments passed to the application.
Where is the length of args array?

System.out.println

- ▶ Used to print a line of text followed by a new line
- ▶ **System** is a class inside the Java API
- ▶ **out** is a public static member of class System represents the standard output (similar to C/C++ stdout or cout)
- ▶ **println** is a public method of the class of which out is an object

- ▶ Everything should reside under a class(or probably many classes)
- ▶ The source file name must match the name of the public class defined in the file with the .java extension
- ▶ A Java source file can contain multiple classes, but only one class can be a public class

JDK got your back!!



The End