Modern Object-Oriented Languages

This lesson is about the currently used most popular Object-Oriented Programming languages and how Java is preferable among all.

We'll cover the following

Other Languages

Nowadays, there are a lot of object-oriented programming languages being used around the globe and Java is among one of them.

Each language has its own pros and cons. A language is chosen depending upon the nature of the task to be performed. Below we can find some of the most popular programming languages:

- **Java:** Mostly used for enterprise-level and Android software development.
- **JavaScript:** Rapid and productive web development.
- **Python:** Data science, machine learning and artificial intelligence.

- **Ruby:** Web application development.
- **C++:** System software development.
- **C#:** Game development, web forms and web applications development.

Java

Java, a general-purpose programming language, has been a mainstay in the world of computer programming for more than **20 years**. The key to Java's popularity has been its *"compile once, run anywhere"* philosophy. Theoretically, you can write Java software on any device, compile it into low-level machine code, and then execute it on any platform that's equipped with a Java Virtual Machine (JVM). This means Java is *highly cross-platform compatible*.

If you are familiar with Java, you must have noticed that whenever a program is written it is written inside a **class**. Generally speaking, this class is referred to as the `Main` class.

Let's start with writing a piece of code to add two numbers and then print their sum to the console:

```
class Main {

  public static void main( String args[] ) {
    int a = 5;
    int b = 7;
    System.out.println("The sum of the numbers is: "+ (a+b));
  }

} //end of Main Class
```

In the above code there is a `Main` class and inside this `Main` class there is a `main()` method. The highlighted lines show the start and end of the `Main` class.

This shows that even a basic program in Java is using classes. From this, it can be inferred that Java is an OOP-based language.

In the next section, you will learn about classes and objects in detail.