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Department of Computer Applications

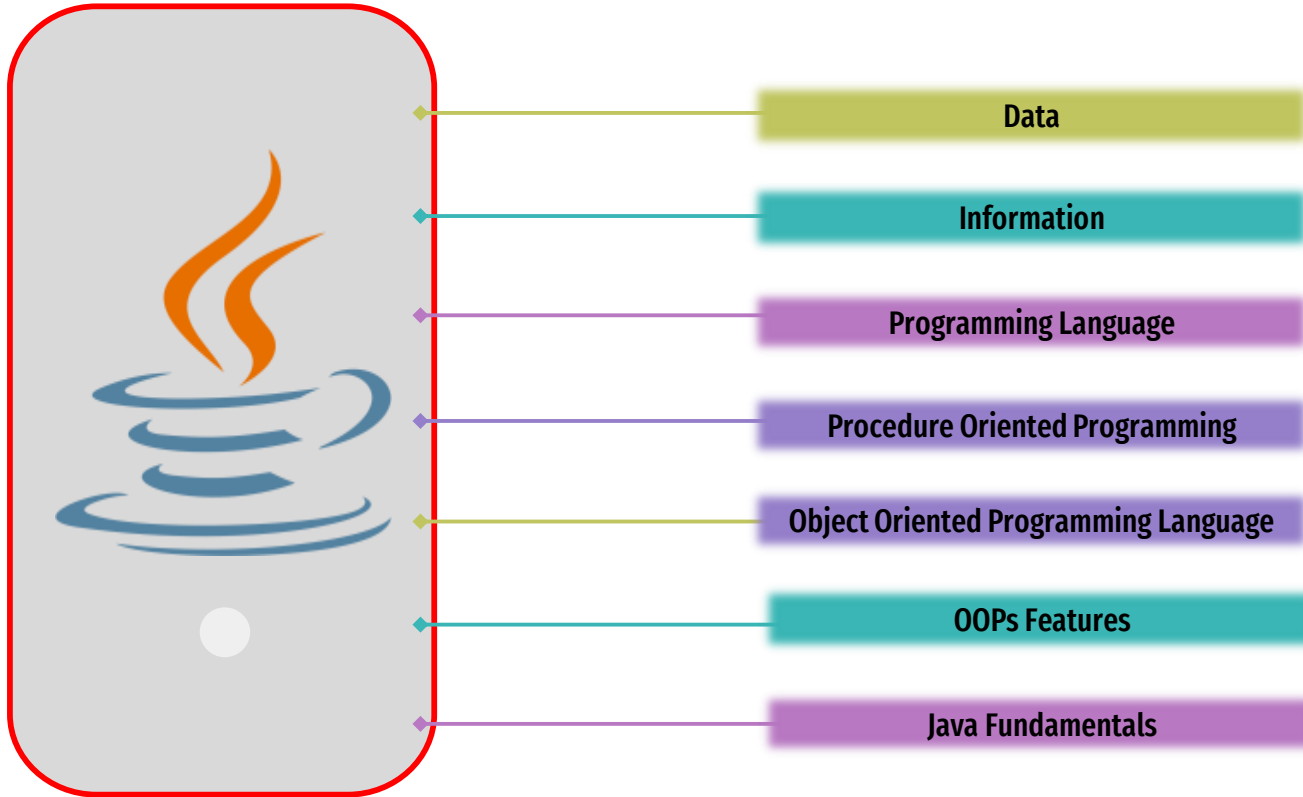
Course Code: 23CAT606

Course Name: Java Programming

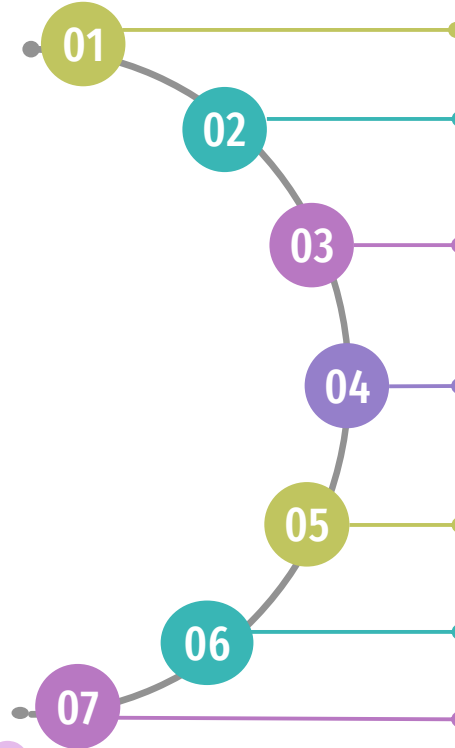
Unit I: Java Fundamentals

Topic 1: Java Features





Java Features



Object Oriented
Platform Independent

Secure & Robust

Multithreaded

High Performance

Dynamic
Simple

1. Object Oriented

Class

Object

Abstraction

Encapsulation

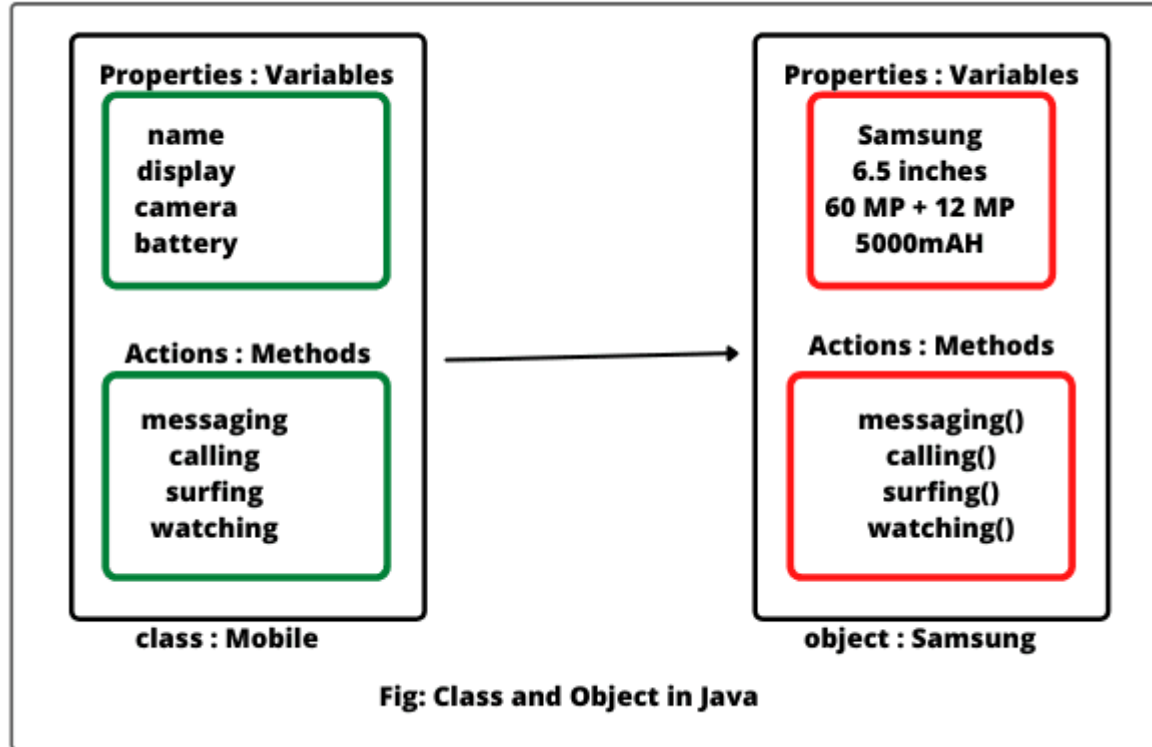
Polymorphism

Inheritance

Reusability

Message
Passing

Example: Class and Object



2. Platform Independent

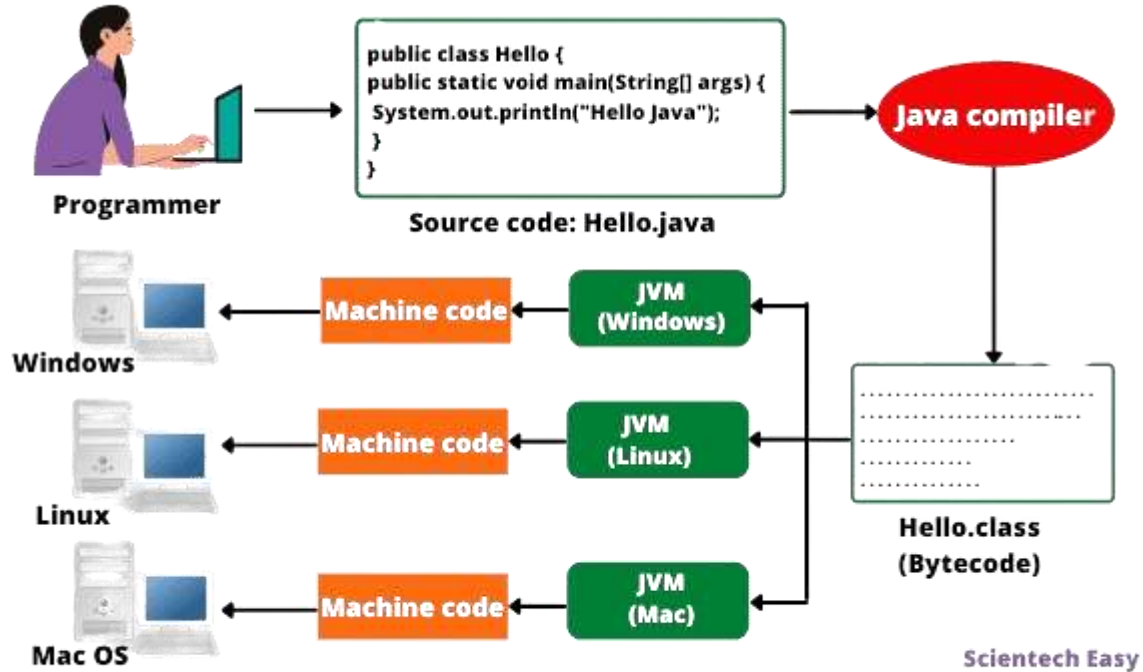


Fig: Java Programming Model

Sciencetech Easy

3. Secure and Robust



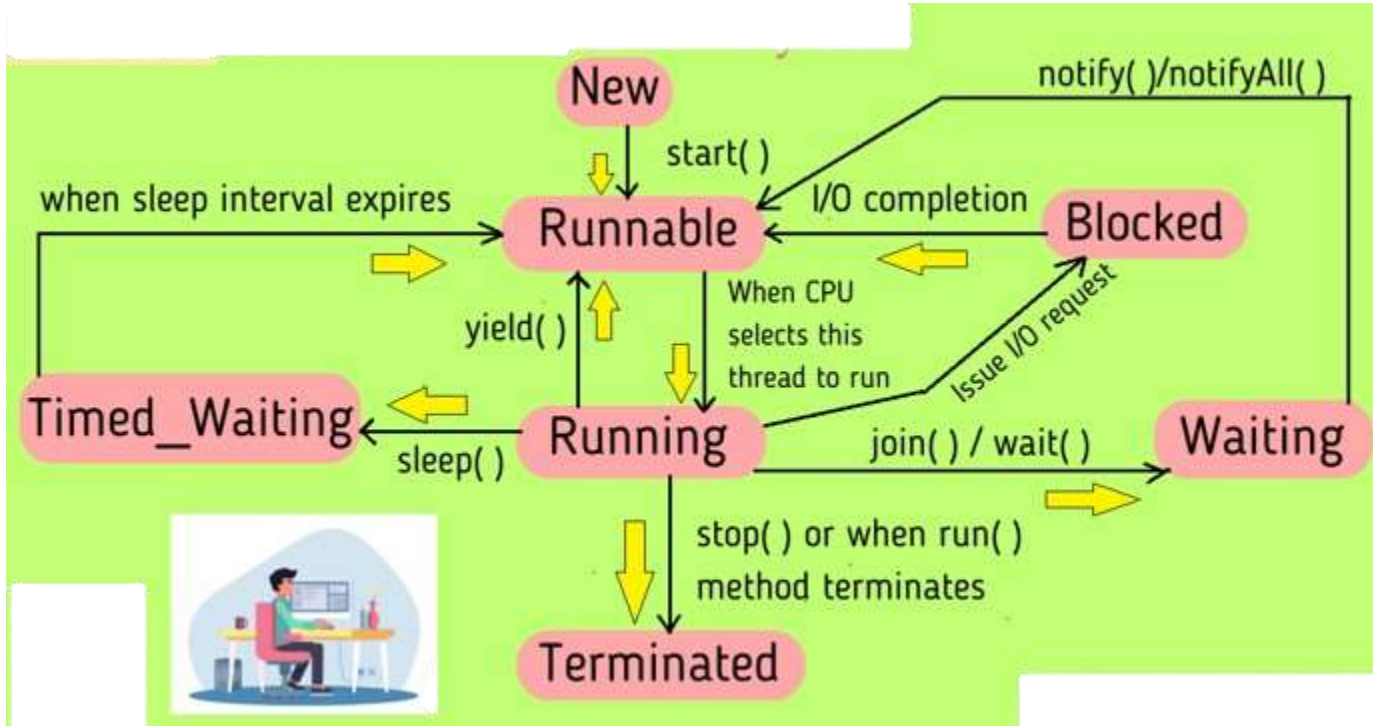
Secure:

Byte code which are generated can run on any machine which has the JVM and Secure because JVM itself checks the code at runtime.

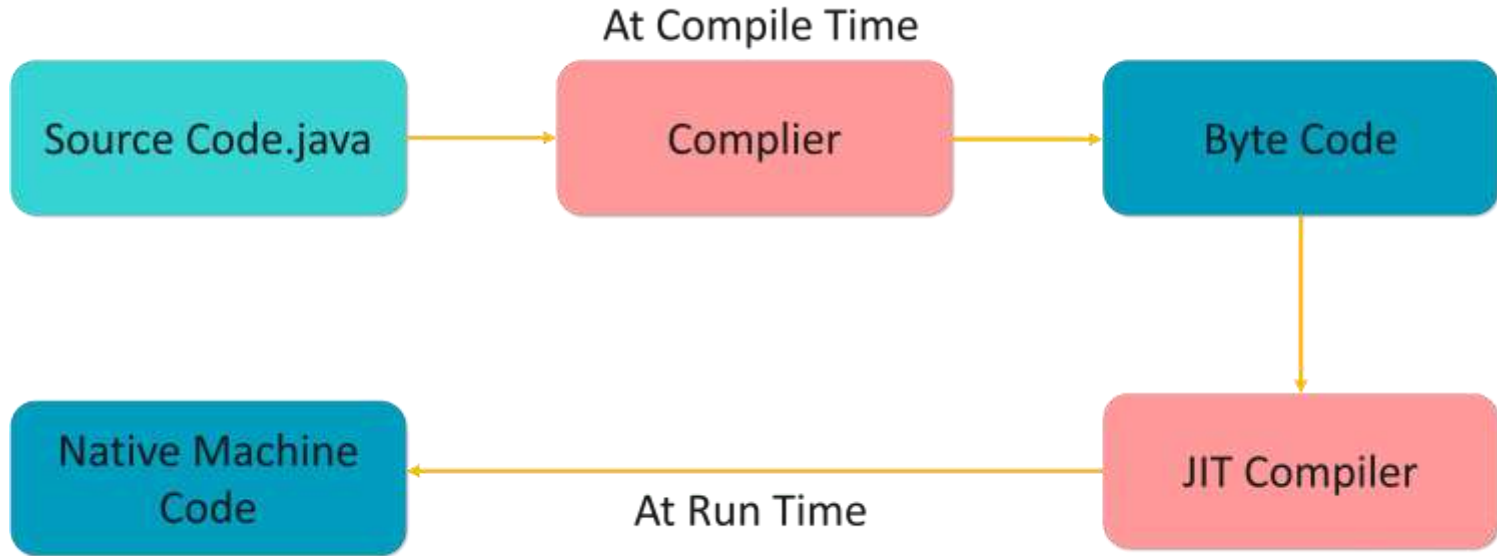
Robust:

1. Inbuilt function: Exception Handling
2. Robust Memory Management: Garbage Collection
3. Java performs compile-time and runtime type checking to prevent errors

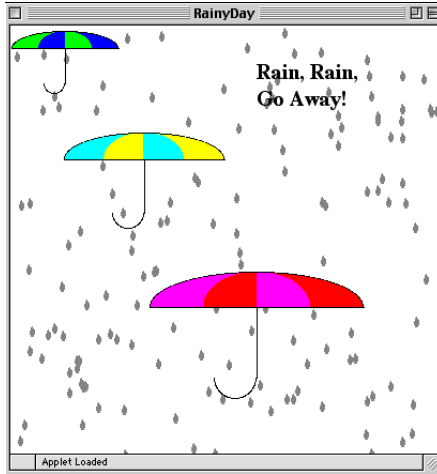
4. Multithreaded



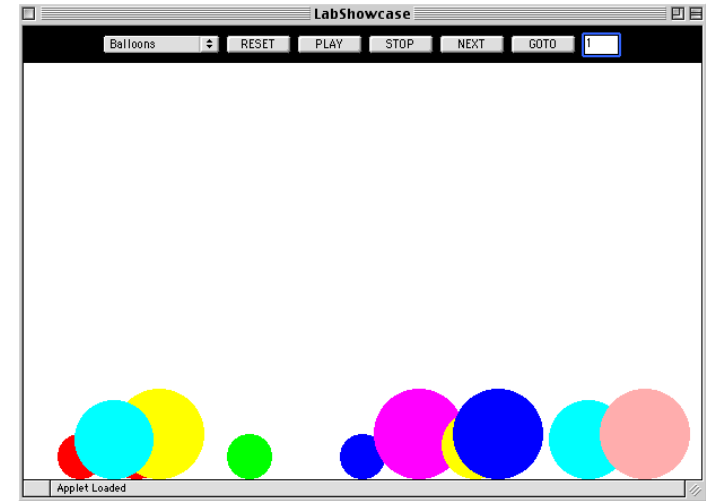
5. High Performance



6. Dynamic



Using applet program, we can also create animation dynamically on the Internet.



7. Simple



First: Difficult, clumsy, and confusing features of C and C++ had been omitted.

For example, the feature of pointers had been completely eliminated from Java.

Second: Require very little effort in learning.

Summary

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