

SNS COLLEGE OF TECHNOLOGY



(An Autonomous Institution)

Coimbatore - 641035.

Accredited by NBA - AICTE and Accredited by NAAC - UGC with 'A++" Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

Department of Computer Applications

Course Code: 23CAT606

Course Name: Java Programming

Unit I: Java Fundamentals

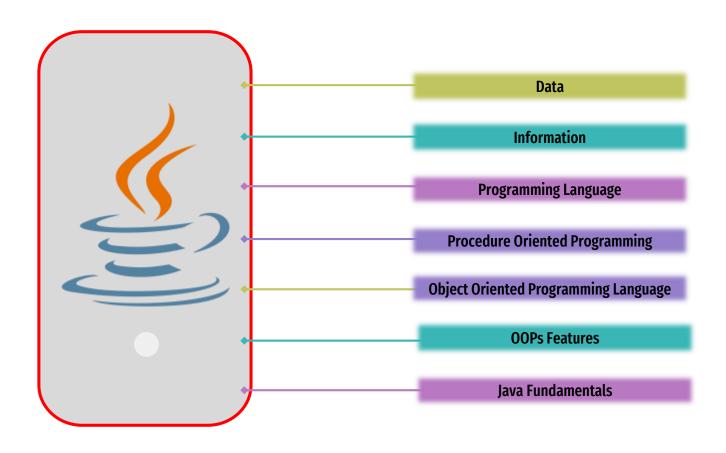
Topic 1: Java Features





Recall

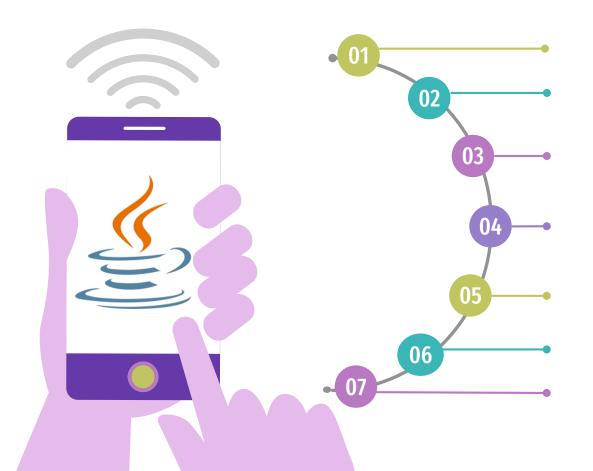






Java Features





Object Oriented

Platform Independent

Secure & Robust

Multithreaded

High Performance

Dynamic Simple



1. Object Oriented

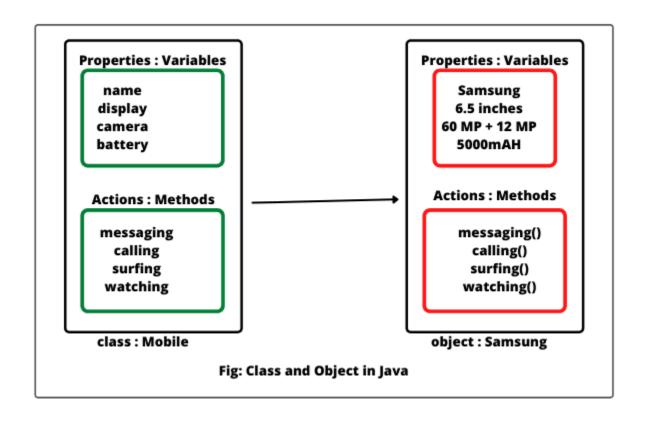


ClassObjectAbstractionEncapsulationPolymorphismInheritanceReusabilityMessage Passing



Example: Class and Object







2. Platform Independent



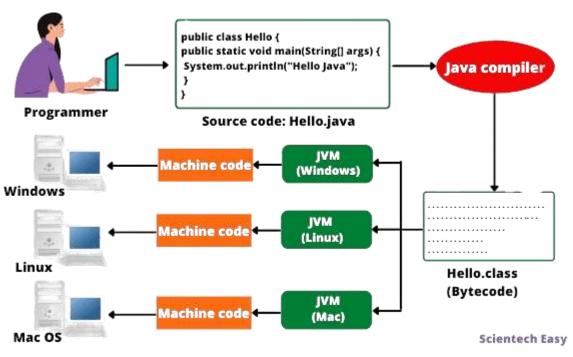


Fig: Java Programming Model



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.

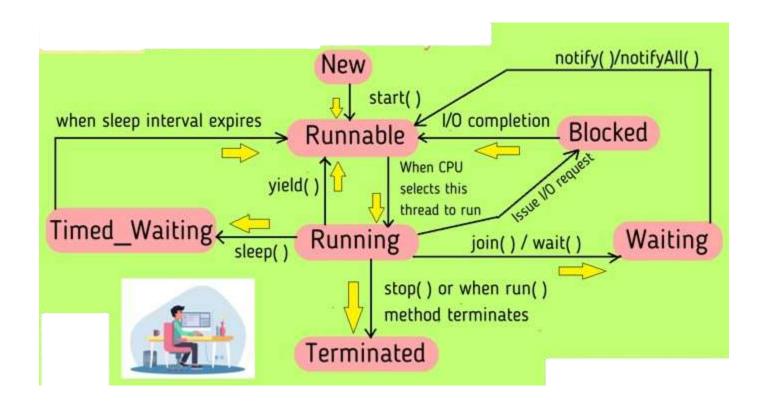
Robust:

- 1. Inbuilt function: Exception Handling
- 2. Robust Memory Management
- 3. Early error checking at compile time and Dynamic checking at run time



4. Multithreaded

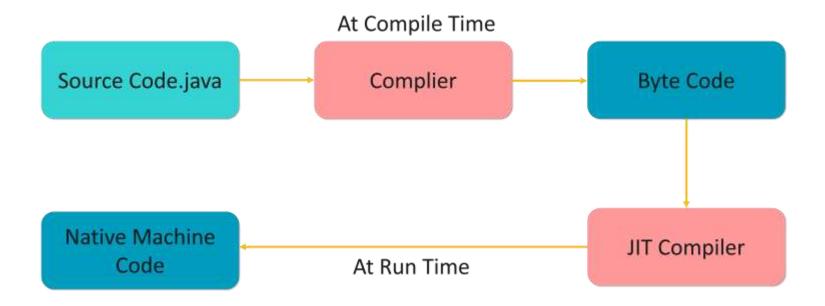






5. High Performance

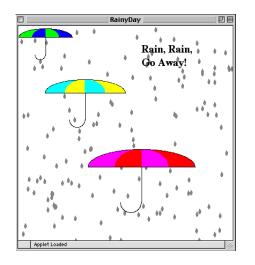






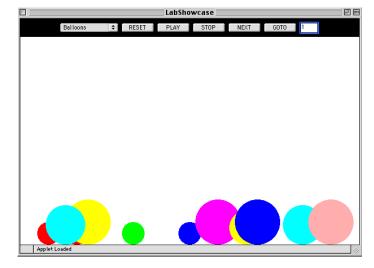
6. Dynamic







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.















20% MERCURY

Planet Mercury is the closest planet to the Sun

50% MARS

Despite being red, it's a very cold place

30% SATURN

Saturn is a gas giant and has several rings