

# INTRODUCTION



IN THE NAME OF ALLAH

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

THE GRACIOUS, THE MERCIFUL.

# LECTURE: 1

## INTRODUCTION OF JAVA PROGRAMMING



# WHAT DO YOU KNOW ABOUT **JAVA?**



# What is **JAVA**?



Java is a Computer Programming Language and a platform. Java is a high-level, robust, object-oriented and secure programming language.

# What is **JAVA**?



**Java is High Level Programming Language**

**Father of Java is James Gosling**

**Released by Sun Microsystems in 1996**

**Java is Open Source Software**

**Originally called OAK**

**Write Once Run Anywhere (WORA)**

# Features of **JAVA**?



Easy



Robust



Portable

Distributed



Object Oriented



Platform  
Independent



Secure



Interpreted



Multithreaded

# Where **JAVA** is used?

## Android Apps

All Android applications are written in Java programming language, with Google's Android API, which is similar to JDK



## Server Apps at Financial Services Industry

Lots of global Investment banks like Citigroup, Barclays, Standard Chartered and other banks use Java for writing front and back office electronic trading system, writing settlement and confirmation systems, data processing projects and several others

## Java Web applications

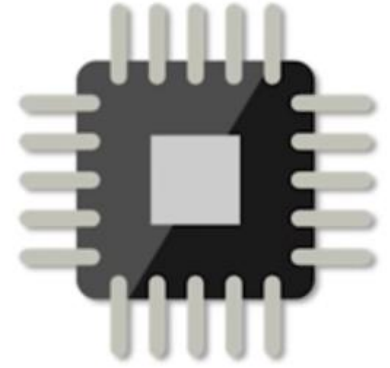
Many of government, healthcare, insurance, education, defence and several other department have their web application built in Java using Servlets, JSP, Struts, Spring MVC





## Embedded Systems

Java is the platform where you only need 130 kb memory to use Java technology (on a smart card or sensor)



## Web Servers and Application Servers

- Apache Tomcat, Simple, Jo!, Rimfaxe Web Server (RWS) and Project Jigsaw are web server space
- WebLogic, WebSphere, and Jboss EAP dominate commercial application server space

## Enterprise Applications

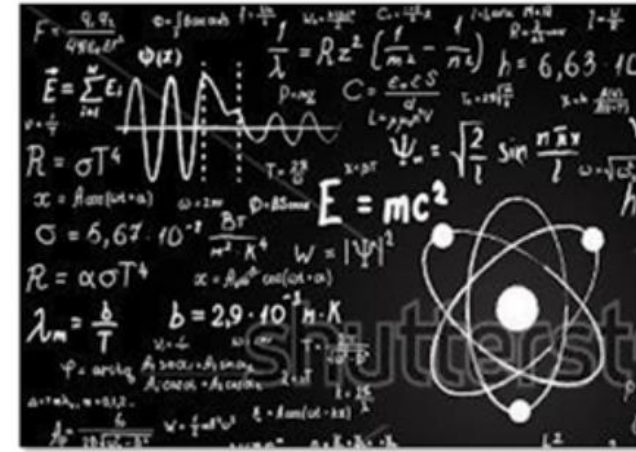
Java Enterprise Edition (Java EE) is a popular platform that provides API and runtime environment for scripting and running enterprise softwares



Activate Windows  
Go to Settings to activate Windows.

## Scientific Applications

- Java is the choice of many software developers for writing applications involving scientific calculations and mathematical operations
- These programs are generally considered to be fast and secure, have a higher degree of portability and low maintenance



## Big Data technologies

- Hadoop and other big data technologies are also using Java in one way or other
- For Example Apache Kafka components API – Producer and Consumer are written in java



## Internet of Things (IOT)

Internet of things which is a way to blend hardware and software together to solve problems faced in real life.



It is used not only in computers and mobiles but even in electronic Devices like...



**Smart Tv**

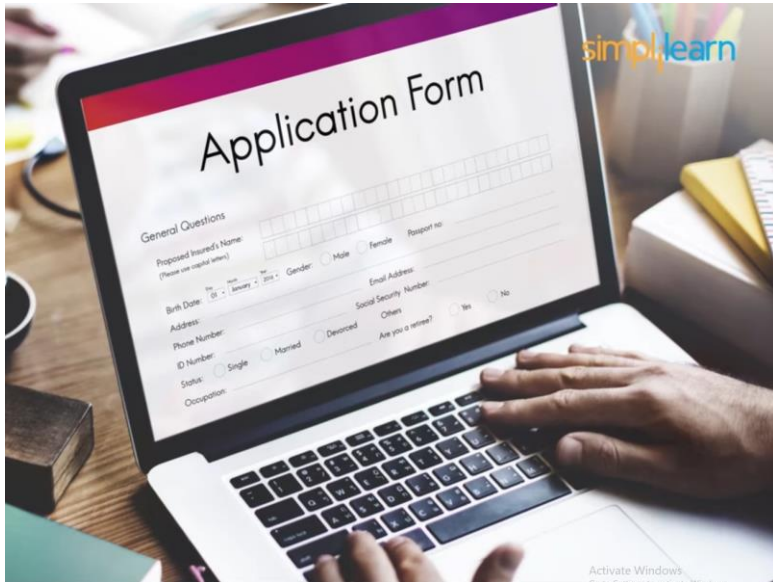


**Washing Machine**



**Air Conditioner**





Online Form

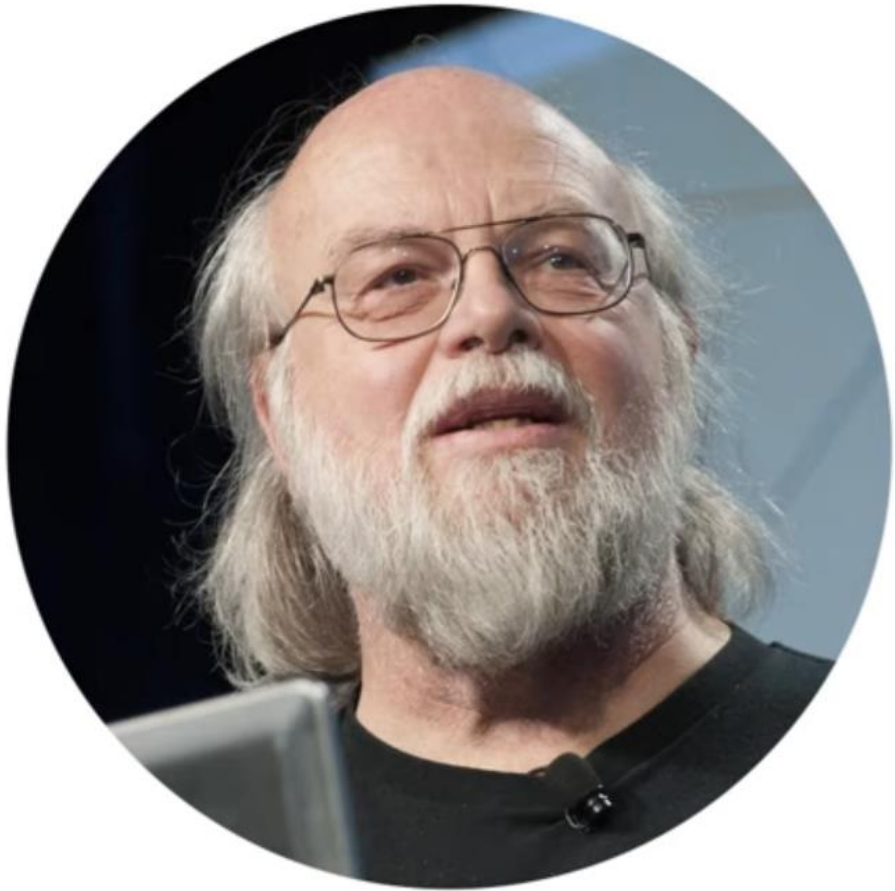


Online Banking



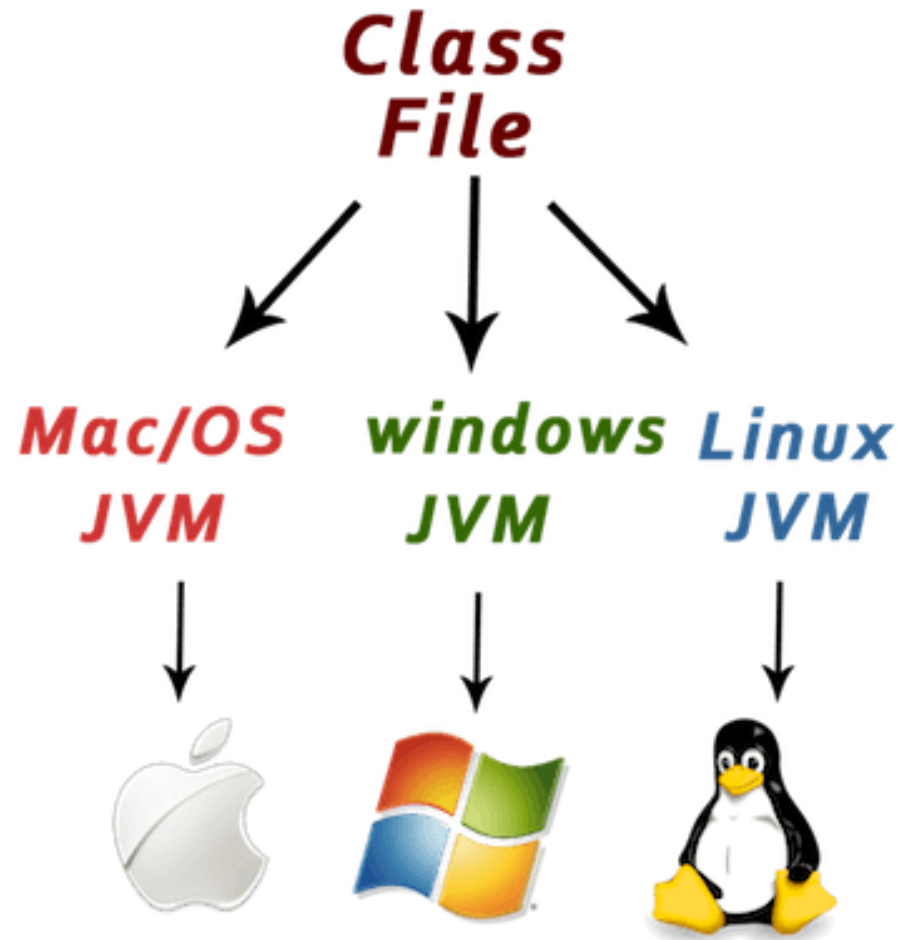
Online Shopping

A simple Motto to invent this Programming Language is

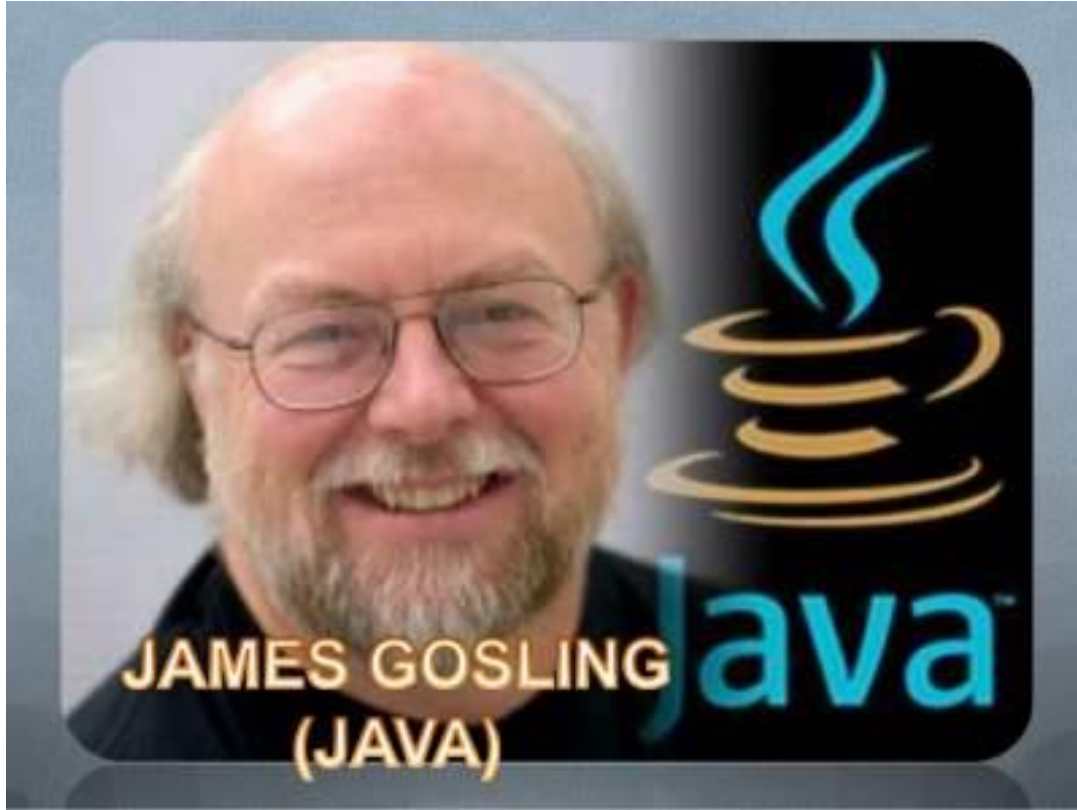


**“Write Once,  
Run Anywhere.”**

# THE BEST ADVANTAGE OF JAVA IS, IT IS PLATFORM INDEPENDENT



# Java is Invented By



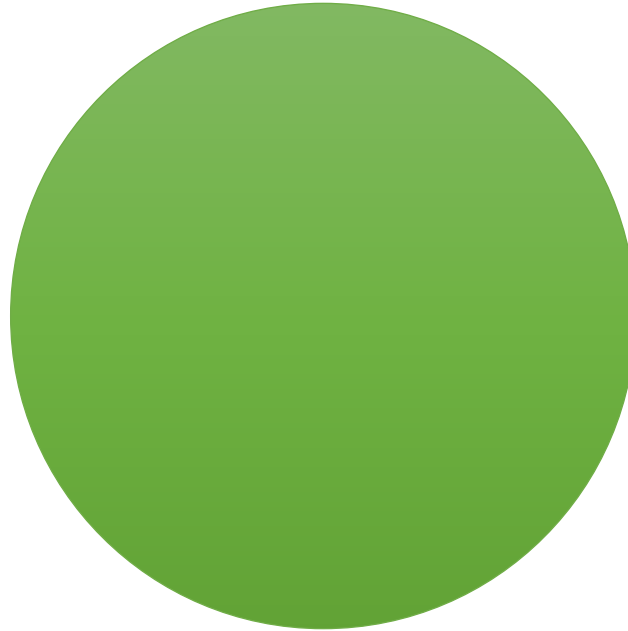


They named this Programming language is **OAK**





Later they named is Green



Later they named is Java Coffee

Java  
Coffee



Finally they named it **Java** in 1995



# **JAVA PLATFORMS/EDITIONS**

**JAVA SE (JAVA  
STANDARD EDITION)**

**JAVA EE (JAVA  
ENTERPRISE  
EDITION)**

**JAVA ME (JAVA  
MICRO EDITION)**

**JAVAFX**

# JAVA VERSIONS

Version	Release date
JDK Beta	1995
JDK 1.0	January 1996
JDK 1.1	February 1997
J2SE 1.2	December 1998
J2SE 1.3	May 2000
J2SE 1.4	February 2002
J2SE 5.0	September 2004
<b>Java SE 17</b>	

← Testing Version of Java

← Current Version of Java

# Why you need to learn **JAVA**?



1. Top 3 Most Popular Languages

2. Extremely Flexible

(Businesses, Web Applications, Android Apps, Games)

3. Easy to find a Job as a Developer

(Entry Salary Rs= 70000/= Glassdoor )



how many devices run java



All

Images

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Tools

About 93,700,000 results (0.58 seconds)

# 13 billion devices

Java is the #1 developer platform in the world. More than 10 million developers use Java worldwide. **13 billion devices** run Java.

<https://www.oracle.com> › Java › Moved by Java

[Moved by Java Timeline | Oracle](#)

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<https://twitter.com> › oracle › status ▼

[Oracle on Twitter: "#DidYouKnow there are over 13 billion ...](#)

25-Oct-2015 — Come on Oracle, there are obviously 3 billion **devices running java**. It says it right there.

<https://skeptics.stackexchange.com> › questions › do-3-b... ▼

[Do 3 billion devices run Java? - Skeptics Stack Exchange](#)

18-Jun-2012 — 1.1 billion desktops **run Java** · 930 million **Java** Runtime Environment downloads each year · 3 billion mobile phones **run Java** · 31 times more **Java** ...

[2 answers](#) · Top answer: There is actually some more detail on this on the Java website: • 1.1 ...



## 15. A Huge Developer's Community



You will be surprised to know that Java has 2nd largest StackOverflow community. Also, Java has 4th largest Meetup community with 1,400 Java Meetup groups completing over 580,000 members across the globe.

This is not all, Java is the 2nd most-tagged language at Github that has over 1.5 million Java projects and 1100 have been starred by more than 500 individuals.



# What we have learn from this exercise?

- What is JAVA?
- Features of JAVA?
- Where JAVA is Used?
- Motto of JAVA?
- History of JAVA
- Java Platforms/Editions
- Java Versions
- Why we need to learn Java?