# Java Version History

- Here is a list of all the versions of Java along with the main features introduced in those versions.

| Version Name | Coad Name | Release Date | Description |
|---|---|---|---|
| Java Alpha and Beta | | 1995 | • It was the 1st version but was having unstable APIs and ABIs.<br>• It was the 1st version but was having unstable APIs and ABIs. |
| JDK 1.0 | Oak | January 1996 | • 1st stable version |
| JDK 1.1 | | February 1997 | • AWT Event modelling retooling.<br>• Added Inner class, Java Beans, JDBC, RMI, Reflection, JIT<br>• Added Inner class, Java Beans, JDBC, RMI, Reflection, JIT |
| J2SE 1.2 | Playground | December 1998 | • JDK replaced by J2SE.<br>• Support strictfp keyword.<br>• Swing API integrated with core classes.<br>• Collection framework. |
| J2SE 1.3 | Kestrel | May 2000 | • HotSPot JVM included<br>• RMI Modified.<br>• JNDI(Java Naming and Directory Interface) Supported<br>• JPDA(Java Platform Debugger Architecture).<br>• Included Proxy Classes. |
| J2SE 1.4 | Merin | February 2002 | • Support assert Keyword.<br>• Improvement in libraries.<br>• Support Regular expression. |

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| | | | • Support Exception Chaining.<br>• Support Exception Chaining.<br>• Included Java Web Start.<br>• Support API Preferences (java.util.prefs). |
| J2SE 5.0 | Tiger | September 2004 | • Included Generics, Metadata, Autoboxing/Unboxing, Enumerations, Varargs.<br>• Enhanced for each loop.<br>• Support static imports. |
| Java SE 6 | Mustang | December 2006 | • Support Win9x version.<br>• Support Scripting languages.<br>• Improved Swing performance.<br>• Support JDBC 4.0<br>• Upgrade of JAXB to 2.0.<br>• Improvement in GUI and JVM. |
| Java SE 7 | Dolphine | July 2011 | • Support of dynamic language in JVM.<br>• Included 64-bit pointers.<br>• Support string in the switch.<br>• Support resource management in the try block.<br>• Support binary integer literals.<br>• Support underscore in numeric literals.<br>• Support multiple exceptions.<br>• Included I/O library. |
| Java SE 8(LTS) | | March 2014 | • Support of JSR 335 and JEP 126. |

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| | | | • Support unsigned integer.<br>• Support Date and time API.<br>• Included JavaFX.<br>• Support Windows XP. |
| Java SE 9 | | September 2017 | • Support multiple gigabyte heaps.<br>• Included garbage collector. |
| Java SE 10 | | March 2018 | • Support local variables type inference.<br>• Support local variables type inference.<br>• Included Application class. |
| Java SE 11(LTS) | | September 2018 | • Support bug fixes.<br>• Include long term support(LTS).<br>• Support transport layer security. |
| Java SE 12 | | March 2019 | • Support JVM Constant API.<br>• Include CDS Archives. |
| Java SE 13 | | September 2019 | • Updated Switch Expressions.<br>• Include Text Blocks.<br>• Support Legacy socket API. |
| Java SE 14 | | March 2020 | • Support Event Streaming.<br>• Improved NullPointerException.<br>• Removal of the Concurrent Mark Sweep (CMS) in the garbage collector. |
| Java SE 15 | | September 2020 | |
| Java SE 16 | | March 2021 | |
| Java SE 17(LTS) | | September 2021 | |

# # Evolution of Java

Java was initially launched as Java **1.0** but soon after its initial release, **Java 1.1** was launched. Java 1.1 redefined event handling, new library elements were added.

In **Java 1.2** Swing and Collection framework was added and suspend(), resume() and stop() methods were deprecated from Thread class.

No major changes were made into **Java 1.3** but the next release that was **Java 1.4** contained several important changes. Keyword assert, chained exceptions and channel based I/O System was introduced.

**Java 1.5** was called J2SE 5, it added following major new features :

Generics

Annotations

Autoboxing and auto-unboxing

Enumerations

For-each Loop

Var args

Static Import

Formatted I/O

Concurrency utilities

Next major release was **Java SE 7** which included many new changes, like :

Now String can be used to control Switch statement.

Multi Catch Exception

try-with-resource statement

Binary Integer Literals

Underscore in numeric literals, etc.

**Java SE 8** was released on March 18, 2014. Some of the major new features introduced in JAVA 8 are,

Lambda Expressions

New Collection Package java.util.stream to provide Stream API.

Enhanced Security

Nashorn Javascript Engine included

Parallel Array Sorting

The JDBC-ODBC Bridge has been removed etc.

**Java SE 9** was released on September 2017. Some of the major new features introduced in JAVA 9 are,

Platform Module System (Project Jigsaw)

Interface Private Methods

Try-With Resources

Anonymous Classes

@SafeVarargs Annotation

Collection Factory Methods

Process API Improvement

**Java SE 10** was released on March 2018. Some of the major new features introduced in JAVA 10 are,

Support local variables type inference.

Included Application class.

**Java SE 11** was released on September 2018. Some of the major new features introduced in JAVA 11 are,

Support bug fixes.

Include long term support(LTS).

Support transport layer security.

**Java SE 12** was released on March 2019. Some of the major new features introduced in JAVA 12 are,

Support JVM Constant API.

Include CDS Archives.

**Java SE 13** was released on September 2019. Some of the major new features introduced in JAVA 13 are,

Updated Switch Expressions.

Include Text Blocks.

Support Legacy socket API.

**Java SE 14** was released on March 2020. Some of the major new features introduced in JAVA 14 are,

Support Event Streaming.

Improved NullPointerException.

Removal of the Concurrent Mark Sweep (CMS) in the garbage collector.