

Java Development Trends for Future

In 2020, Java continues to be the world's most popular programming language among developers. According to IDC's latest report "Java Turns 25", over nine million developers representing 69% of full-time developers worldwide use Java – more than any other language.

Java's ubiquitous presence across organizations of all sizes stems from its hallmark attributes of platform independence, predictable stability, performance, a vibrant massive global ecosystem, and the continued technical leadership and community stewardship by Oracle. Openness and transparency of development under the OpenJDK Project and sustained evolution of projects like Amber, Loom, Panama and Valhalla exude confidence that the innovation of the Java language and platform are secure and well aligned with the needs of the fast-evolving IT landscape.

The innovation pace and predictability has been further bolstered by the introduction of the 6-month release cadence with Java 10 and the approach has proven to be viable with subsequent on-time releases leading up to the pending launch of Java 15 on September 15th. This 'no-surprise' model empowers developers and organizations to take bold steps forward with application architectures knowing that features, capabilities, and development toolkits will be available in a known timeline within manageable constructs to support their large-scale deployment requirements.

It is no surprise that the latest survey of over 580 developers globally, conducted by VDC Research, highlighted Java as having the highest importance to their organizations. In the same study, Java was ranked #1 in nine of the 14 trends including analytics, microservices, data management, social, big data, DevOps, mobile, continuous development tools, and chatbots. It ranked #2 in AI, blockchain, augmented reality, virtual reality and #3 in IoT. As a testament to the stability and ease of use, 48% of the respondents forecasted their Java based projects to be ahead of schedule compared to 19% not using Java.

With 51 billion Active JVMs worldwide, it is safe to say that Java is everywhere. Of these, 30 billion JVMs are cloud-based and this is projected to have continued growth in the future.

Along with its technical leadership driving engineering efforts through the OpenJDK Project, Oracle makes substantial programmatic investments to foster the vibrancy of the Java community. Through a vast collection of programs such as Java Magazine (technical articles for developers by developers), Oracle Academy (content to expand Java knowledge), Oracle University (classes and certifications on Java), and inside.java (technical news and views from Oracle's Java development team), Oracle seeks to further support and nurture the millions of Java developers globally.

Additionally, Oracle has launched a series of virtual events for developers. The Oracle Developer Live – Java edition will cover a wide range of topics such as modern Java programming tips and techniques, tooling improvements in areas such as ZGC and JDK Mission Control, cryptographic enhancements, and much more. To hear from the leaders who drive the Java language and platform forward and foster innovation across the ecosystem, join the virtual Oracle Developer Live – Java events on September 15th (for Americas) and September 17th (for EMEA and JAPAC).