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[I] Inspiration + Introduction :

[A] “Spring Boot is a rapid application development platform built on top of the popular Spring Framework.”
[ Source - https://www.vogella.com/tutorials/SpringBoot/article.html ]

“Spring Tools 4 is the next generation of Spring tooling for your favorite coding environment. Largely rebuilt from scratch, it provides world-class support for developing Spring-based enterprise applications, whether you prefer Eclipse, Visual Studio Code, or Theia IDE.” [ Source - https://spring.io/tools ]

“Should I use a 32- or a 64-bit JVM ? “– Let us explore different JVMs – it useful in Java based Software R&D.
[ Source - https://dzone.com/articles/should-i-use-32-or-64-bit-jvm ]

https://javainterviewpoint.com/spring-boot-hello-world-example-eclipse/

[B] *** “Jikes RVM (Research Virtual Machine) – provides a flexible open testbed to prototype virtual machine technologies and experiment with a large variety of design alternatives. The system is licensed under the EPL, an OSI approved license. Jikes RVM runs on IA32 32 bit (64 bit support is work in progress) and PowerPC (big endian only). “
[ Source - https://github.com/JikesRVM/JikesRVM ]

[C] *** “JamVM – is an open-source Java Virtual Machine (JVM) developed to be extremely small compared with other virtual machines (VMs) while conforming to the Java virtual machine specification version 2 (blue book). JamVM can be configured to use the GNU Classpath or the OpenJDK Java class library and recent versions support object finalization, Soft/Weak/Phantom References, the Java Native Interface (JNI) and the Reflection API.

The compacting garbage collector can run either synchronously or asynchronously within its own thread.”

*** “JamVM currently supports the CPUs: AMD64, ARM, x86, MIPS, PowerPC and SPARC.”
*** http://jamvm.sourceforge.net/
[D] Some of Our Technical Notes ((via)) Vixra.org :


[E] Some Information on Prolog/PDT -

[a] Prolog Development Tool – PDT  -  &&  [b] Prolog Development Tools – ProDT  -

[ Source - https://www.swi-prolog.org/IDE.html ]

[b] www.jiprolog.com – Java based Prolog

[F] Information on Palladio Simulator – Software Architecture R&D -

https://www.palladio-simulator.com/tools/ - “Palladio is a software architecture simulation approach which analyses your software at the model level for performance bottlenecks, scalability issues, reliability threats, and allows for a subsequent optimisation. Palladio requires neither buying expensive executions environments (servers, networks, or storage) nor fully implementing a software product. Construction rules are automatically checked by Palladio and thus allow optimal software architectures without costly trial-and-error-cycles. Like in other engineering disciplines, Palladio enables software engineers to construct software straight and in the right way. “

[G] Mongo DB With Java – “The MongoDB Java reactive streams driver. Why Java and MongoDB? Java is the most popular language in the IT industry at the date of this blog post, and developers voted MongoDB as their most wanted database four years in a row.”


[ Source - https://www.baeldung.com/java-mongodb ]


[H] BaseX –XML Data Base System - “BaseX is a robust, high-performance XML database engine and a highly compliant XQuery 3.1 processor with full support of the W3C Update and Full Text extensions. It serves as excellent framework for building complex data-intensive web applications. It comes with interactive user interfaces (desktop, web-based) that give you great insight into your data “. [ Source - http://www.basex.org/ ]

Please Make a Note - Here, we are experimenting only with MongoDB. Readers are requested to try BaseX DB for further R&D.
Java based Informatics Framework for our R&D Spring Tools 4 for Eclipse/JamVM:

Algorithm I - Advanced Informatics Framework for Next Generation Software R&D

Algorithm II - Modified Algorithm I.

We did Software Architecture Modeling with Eclipse Palladio Studio.
[III] Acknowledgment/s:

Special Thanks to all my Friends+Mentors+Colleagues. Non-Profit R&D.

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