

## A short note on Documentation tools

**Javadoc:** Generates API documentation for Java code directly from Java source code comments.

**Doxygen:** Creates documentation from annotated C++, C, Java, and other source code files. Supports various output formats like HTML and LaTeX.

**Swagger/OpenAPI:** Generates interactive API documentation and client libraries from API specifications.

**Postman:** Provides interactive API documentation and testing tools for REST APIs.

**Jekyll:** A static site generator that can be used to create documentation websites from Markdown files.

**Sphinx:** Used for creating documentation for Python projects; supports reStructuredText and generates outputs in formats like HTML and PDF.

**MkDocs:** A static site generator designed for project documentation, using Markdown for content.

**GitBook:** An open-source tool for creating beautiful documentation using Markdown and Git.

Among them, **Javadoc** is preferred for several reasons:

1. **Automatic Generation:** Javadoc automatically generates API documentation from Java source code comments. This ensures documentation is always up-to-date with the codebase.
2. **Standardised Format:** It follows a standardised format that is widely recognized in the Java community, making it easier for developers to understand and use.
3. **Integration with IDEs:** Many Integrated Development Environments (IDEs) like IntelliJ IDEA and Eclipse support Javadoc integration, making it easier to generate and view documentation directly from the development environment.
4. **Detailed Documentation:** It supports detailed documentation features such as method descriptions, parameter explanations, return values, and code examples.
5. **Cross-Referencing:** Javadoc allows for cross-referencing between classes, methods, and fields, which helps users navigate through the documentation.
6. **HTML Output:** It generates well-organised HTML documentation that is easy to browse and search, providing a user-friendly interface for developers.

### More about javadoc:

<https://docs.oracle.com/javase/8/docs/technotes/tools/windows/javadoc.html>

