SonarQube

**Website:** https://www.sonarsource.com//

1. **Code Comprehension Support:**

SonarQube is an excellent tool for static code analysis. It gives precise information on code quality, including defects, vulnerabilities, and code smells. Its dashboards and visualizations allow developers to immediately grasp the state of their codebase.

1. **Code Translation Support:**
2. SonarQube does not directly allow code translation. It prioritizes code analysis to improve quality and maintainability over code translation from one language to another.
3. **Support for Extracting Design Artifacts**:
4. SonarQube's analysis can extract certain design artifacts, such as duplicated code and architectural smells, which can indicate design flaws.

**Advantages:**

1. Comprehensive analysis with support for multiple languages.
2. Integration with various CI/CD pipelines.
3. Extensible through plugins.

**Disadvantages:**

1. Analysis can be resource-intensive.
2. It requires some configuration and setup effort.
3. Support for legacy languages is limited.

**2. JArchitect**

**Website:** [*https://www.jarchitect.com/*](https://www.jarchitect.com/%20/)

**Code Comprehension Support:**

JArchitect is intended for the analysis of Java code. It offers thorough insights into the dependencies, structure, and quality of the code, which makes maintenance and comprehension easier.

**Code Translation Support:**

Code translation is not supported by JArchitect. Its main objective is to analyse Java codebases for architectural and quality problems.

**Support for Extracting Design Artifacts:**

Developers can better understand the design and architecture of their code by using JArchitect, which can extract a variety of design artefacts such dependency graphs, code metrics, and architecture diagrams.

**Advantages:**

thorough examination specific to Java.   
aids in codebase refactoring and maintenance.   
thorough reporting and graphics.

**Disadvantages:**

limited to Java.   
can be difficult to set up and adjust.   
Higher price for versions with all the features.