



silverthread

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Important FAQ's About Your Codebase

Silverthread has a long history of working with software organizations to improve their software economics by fostering better technical health. This month's newsletter will focus on some common questions we receive during customer engagements.



Question: What are the Dimensions of Technical Health?

There are two dimensions to consider when assessing the technical health of a software asset – code quality and design quality. Code quality is a more traditional approach to software assessment that measures the complexity of individual source files in a codebase. Improving code quality is generally an exercise in modifying source code in single, specific places. Design quality, on the other hand, assesses the structure of the codebase as a whole in order to find complexity between files and software components and is generally more valuable to prioritize. Improving design quality is generally an exercise in large-scale architecture and may require more time and thought than when improving code quality.

Question: Why is Design Quality Important?

Design quality is an important, but often overlooked part of the technical health story. When working in architecturally complex areas of a codebase, developers become less productive and are more likely to introduce costly defects during the course of their work. Design quality challenges are also more difficult to diagnose and measure due to their systemic nature that is typically hidden from the human eye. Using tools to not only identify design quality challenges, but understand the impacts of these challenges, and remediate them is important for a modern software development organization.

Question: How Does Silverthread Make Software Economic Projections?

In a modern software development organization, it is important to not only understand the presence of code quality and design quality challenges but to also understand the impacts of technical health on the performance of the development team. Silverthread has performed years of research with software development teams where productivity and defects could be tracked over time. By measuring these teams, Silverthread produced a collection of models that are used to predict software economic outcomes given the technical health of a software asset, such as agility and defect rates. Silverthread uses these models to predict the same outcomes for new codebases as well.

Silverthread's tools and teams work to make both dimensions of technical health simpler to track and manage for today's modern software development organizations, while also providing a unique insight into the real-world impacts of technical health on the business. Contact us to learn more about technical health and its impacts on your teams.

Contact Us to Learn More



Feature Release

Version 1.24.41

New: [Detailed Inventory Report](#)

An easy-to-read report that details your total number of lines of code, files, and languages in your portfolio per system.

Improved

- (Web) Removed decimals from portfolio scores

Download Version 1.24.41

TRENDING INVENTORY SYSTEMS ▲ There are 2 snapshots missing revision dates. Those snapshots' data

Detailed Inventory Report

Language	Inventory Files	Inventory LOC	Code Quality Analysis	Design Quality Analysis
Batch	17	791	-	-
CSS	2	151	YES	YES
Java	1,302	320,215	YES	YES
Powershell	4	831	-	-
Python	24	6,203	YES	YES
XML	10	2,187	-	-
TOTAL	1,359	320,568	N/A	N/A

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