



silverthread

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## Out With The Old, In With The New:

### Need Help Cleaning Up Your Architectural Technical Debt?

Technical debt is the accumulation of side effects from taking shortcuts during software development, preferring short-term benefit to long-term sustainability.

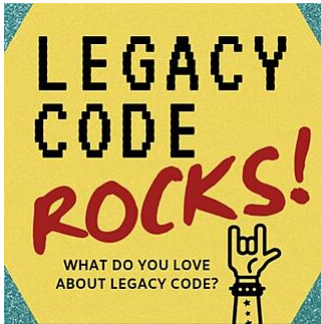
These tradeoffs can be felt in several ways, and while many software development frameworks attempt to handle code-level technical debt, another less obvious side-effect is often left unaddressed. This second form of technical debt is architecture debt, which results in a subtle but continuous shift of a codebase's actual structure away from its documented design – we call this “architectural drift.”

When the actual structure of a codebase begins to diverge from its documented design, several serious side-effects occur. First, newer engineers in the system encounter behavior they did not anticipate while adding new features or correcting bugs. This increases rework and adds to senior developer load as they answer questions or provide feedback. Second, developers working in separate areas of the codebase will develop contradictory mental models of how the system is structured and should behave, making adding cross-functional features more difficult and more costly. Lastly, the likelihood of architecture-level misbehavior, such as poorly defined APIs, public/private violations, and uncontrolled complexity growth, become more likely as architects and developers struggle to share a common understanding of the software asset.

Modern codebases demand responsible architecture management that evolves as the codebase grows over time, supporting a common understanding of as-designed vs. as-coded structure. Silverthread CodeMRI products allow managers, architects, and developers to define, implement, and promote a common understanding of design. Configure your codebase like a firewall and take the guesswork out of managing architectural drift.



## UPCOMING NEWS



### Coming In February: Legacy Code Rocks Podcast

Dan Sturtevant, Silverthread's CEO, will be featured on a February episode of Legacy Code Rocks! A podcast discussing legacy systems and the programmers who enjoy working on them. We share the podcast in next month's newsletter!

Know someone who would benefit from this newsletter? Share it with them!