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CSD380 Module 6.2 Assignment

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Case Study: Strangler Fig Pattern at Blackboard Lear (2011)

Blackboard Inc. had a new flagship project called Learn that was launching and their infrastructure still had Perl code embedded throughout the codebase. It was built with a monolithic architecture that was tightly connected and had scalability issues. Modernizing to handle increasing user demands, new technology, and allow maintenance and scalability had David Ashman investigate how everything was working through times of commits and showing increasing difficulty to change code. Ashmans solution was a project using the strangler fig pattern that launched in 2012.

Identifying and isolation of functions that could be replaced or enhanced occurred by using what was internally called building blocks. The building blocks allowed developers to work in separate modules that weren’t part of the monolithic code base and didn’t require assistance from other groups to work on.

Building blocks allowed source code size to decrease and an exponential growth in commits after teams were allowed to work autonomously. Ashman noted that using the Building Blocks architecture allowed them to update faster, get faster feedback, and in turn provide better quality features that kept up with the growth of the Lean platform application.

All this was possible by using the Strangler Fig Pattern that decoupled features from the main “trunk” of the code and allowed individual growth of each module. Improvements were done incrementally without bringing the entire system down and continuously improve with feedback provided while easily testing features.

References:

Kim, G., Humble, J., Debois, P., Willis, J., & Forsgren, N. (2021). Pgs. 215-217. *The DevOps Handbook: How to Create World-Class Agility, Reliability, & Security in Technology Organizations*. IT Revolution.