Joe Huffer

11/24/2024

CSD380

Professor Sampson

Assignment 6.2: Case Study: Strangler Pattern at Blackboard Learn (2011)

After reviewing the case study in Chapter 13, it is obvious that Blackboard Learn was facing significant challenges with the legacy J2EE codebase. We have actually read about this particular issue and replacement narrative, regarding Blackboard specifically, in other units – so the impact of h. this took place is clearly a spectacle. Focusing on the challenges, we are shown that the challenges of navigating and increasingly complex codebase was resulting in a slow-down of developer work in maintaining the legacy system of J2EE – specifically feedback cycles and then inability to respond to that and make alterations effectively was referenced.

Blackboard Learn’s technology team was tasked with implementing a ‘Strangler Pattern,’ which meant they were going to purposefully construct smaller branches of code that would work in tandem with the old codebase, with the eventual intent of replacing the legacy codebase entirely. This architectural approach provided those teams with a way to incrementally replace their robust and complicated codebase with a simpler and more modular architecture. By implementing “Building Blocks” this team was able to successfully decouple parts of the system which then enabled developers to work independently using a wide range of fixed APIs at their disposal. Ultimately, this allowed for safer and faster development, and it was used to reduce risks associated with other large-scale replacement schemas.

Through this process, Blackboard Learn expressed the importance of:

* Successfully breaking down complex systems over time into manageable components.
* Using architectural principles to ensure that code is scalable, flexible, and able to be maintained. Also, slightly referenced, modularity regarding the Strangler Pattern is *possible* and even encouraged.
* Now that you are creating modular designs, you can begin conceptualizing and implementing phases of autonomy and innovation into a more modern design.
* Also, it is important to capture and track this progress while also to test fairly rigorously in hopes to minimize pitfalls surrounding migrations.

To conclude, the Strangler Pattern allowed Blackboard Learn to transition from an outdated, monolithic system to a more modern and efficient architecture. This incremental approach not only solved immediate challenges but paved the way for a more long-term solution to modularity, scalability, and how to enhance developer productivity.

Works Cited:

Kim, Gene, et al. *The DevOps Handbook: How to Create World-Class Agility, Reliability, & Security in Technology Organizations*. IT Revolution Press, 2016.