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CSD 380

Assignment 6.2

Strangler Pattern at Blackboard Learn

Before summarizing the case study of Blackboard Learn, lets understand the Strangler Application Pattern for a moment. Organizations may come into situations where development of their current software (will be legacy) is a challenge to support; maybe excessive work leads efforts that does not get merged or the latest technology is more supportive of business needs. To achieve migration, current functionality is managed by an Application Programming Interface (API), a blanket used to make calls to old functionality as needed allowing developers to incrementally upgrade and modify their services. Technical debt will come along with a movement or upgrade such as this but it should be warranted as remaining with the current architecture may lead to a debt that exceeds that.

One reason that a transition to a new architecture using the Strangler Pattern may be spontaneous or excessive growth outside of the capacity of the organization. This was the case for for Blackboard Learn – a learning managementsystem for instructors and students which we as students should be accustomed to using. At the start of 2010, David Ashman, Chief Architect observed that their build and integration process was complex creating longer lead times leading to a poor user experience. Additionally, observation of the repository, the amount of new lines code did not corelate to the amount of commits which was at a decline, leading to the conclusion that there was complexity in their current system that left developers uncomfortable.

Very much following the strangler fig pattern to transition to a new architecture they followed a internal protocal known as Buidling Blocks, allowing developers to autonomusly work in separate modules and accessomg any data via an API. What was interesting is this became the architecture and worklow, commits to the Building Block repository and a minimized but existent monolith still received decreased support.

As someone who attended college around the time of this transition I was one of those users who experienced excessive downtimes and a frustrating system that often left professors and students alike in confused states on how to progress through the corriculum. With that said this implementation has happened over a decade ago at this point and it’s safe to say, that they’ve grown as an organization and application supporting education in a now common and normal - online way.

References:

Kim, Gene; Humble, Jez; Debois, Patrick; Willis, John; Forsgren, Nicole . *The DevOps Handbook* . IT Revolution Press, LLC . 2021 . e-book