From Technical Debt to Business Growth: Enhancing a Platform's Performance and Reduce Operational Costs

This company offers a digital platform for yoga and exercise tutorials. The product includes over 2000 videos about stress management, personal development, breathing exercises, and more!

INDUSTRY HEADQUARTERS TECH STACK

Healthcare Stockholm, Sweden

Ruby React

Project Description

Our team embarked on a transformative project for a client facing significant software hurdles. Their existing application, crucial to their operations, suffered from three major setbacks: a complete **absence of test coverage**, reliance on an outdated software version, and an overwhelming presence of legacy code. Our project's primary objective was to rejuvenate and fortify the system. We aimed to implement robust test coverage ensuring stability, migrate to a current software version for enhanced security and features, and systematically refactor the legacy code to improve its scalability, maintainability, and compatibility with modern technology standards.

Challenges

In our mission to update our client's application, we faced a host of challenges. Firstly, there was no test coverage, making every code change risky due to the absence of a safety net to catch errors or functional issues. The app also ran on **outdated software**, adding concerns about security and compatibility with modern systems.

Compounding these issues was a large amount of legacy code, which was complex and often undocumented. This made any refactoring difficult and time-consuming, as every alteration had the potential for unforeseen consequences. The lack of modularity and reliance on outdated libraries further complicated the task and posed security risks.

In summary, the project was a balancing act, with challenges around security, compatibility, and maintainability making each update a delicate procedure.

Approach & Results

Addressing the client's challenges would necessitate a systematic and phased approach. Initially, we prioritize establishing a **robust test suite**. By introducing test coverage incrementally, starting with critical application pathways, we can begin to ensure that subsequent changes won't introduce regressions or disrupt essential functionalities.

Parallel to this, a detailed audit of the existing software version would be conducted. Identifying key features, dependencies, and potential pitfalls would enable a smoother transition to an updated software version. Upgrading would not only enhance security with the latest patches but also **introduce modern features**, optimizing performance and user experience.

The legacy code, arguably the most intricate challenge, would be addressed through a combination of refactoring and rewriting. Prioritizing modular design, we disentangled tightly-coupled components, making the codebase more manageable and maintainable. Whenever feasible, outdated libraries and tools would be replaced with contemporary, well-supported alternatives.

By the project's culmination, the client would have a revitalized application marked by improved stability, enhanced security, and optimized performance. Its modernized codebase would be easier to maintain and extend, ensuring long-term scalability and compatibility with evolving technological standards.

Client's opinion:

They are honest, straightforward, and solution-oriented. The collaboration was fruitful as The Codest Ruby development team was able to produce a more optimized platform that increased sales and retention rates.

PETER MUNTENAU

CEO at Yogobe