

Case Study

Transforming an inventory module into critical medical training software

Overview

KbPort is a software and hardware development company focused on improving educational outcomes. With over 25 years of simulation experience, KbPort has been committed to enabling institutions to achieve exceptional educational outcomes by using the most advanced technology to offer the highest fidelity systems possible. Our engagement involved a complete rebuild of Version 6 of the Simplicity software. This rebuild would enable KbPort to present a modern user experience (UX) to customers as well as build a solution that was more maintainable and scalable, and one in which development was better able to support.

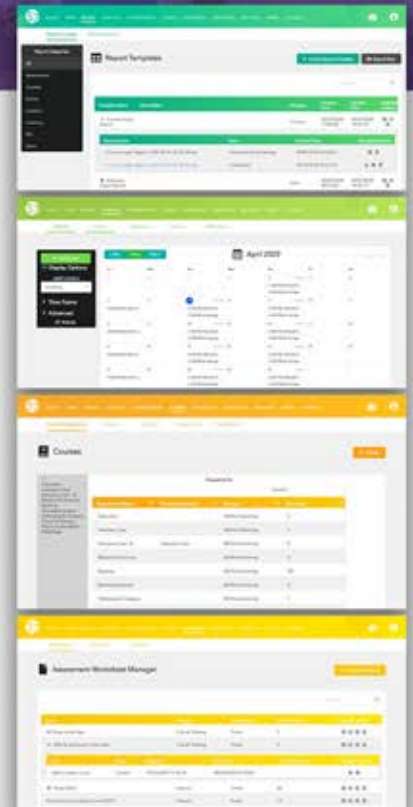
Opportunity

KbPort services multiple types of clients including web/cloud customers and hybrid customers. The previous solution wasn't built to serve both the university model and the health system model. Additionally, KbPort has a client base who, for security or government regulations, required on-premises installation versions. These on-premises installations (and updates) were cumbersome to provide - the solution needed to be delivered in a more streamlined and sustainable way. A newer version would include capabilities, like auto provisioning, giving customers the control over when to push updates or fixes. For this engagement, Rivers Agile aimed to achieve parallel goals of upgrading the tech stack while incorporating modern development methods and establishing quality assurance best practices and tools for performance testing.

Results

The Rivers Agile team illustrated benefits outside of the traditional consulting role, helping organizations, like KbPort, mature their QA approach into a proactive keystone of the development lifecycle. During the engagement, the Rivers Agile team introduced KbPort to best practices for classifying and prioritizing defects. Additionally, we established a simple, yet powerful, QA automation solution to generate organic data in testing environments through Selenium IDE. Rivers Agile also helped to implement concepts of pairwise/combinatorial testing with the team and demo-ed the ACTS (Automated Combinatorial Testing for Software) tool for both development and QA team members. With our guidance, KbPort now has the tools and best practices for manual performance testing and templates to support testing web application response time.

We created an interconnectivity between all of the KbPort applications, foundation and shared resources. The KbPort team now has the ability to build upon that in the future with less headaches and more scalability. That is probably the most substantial achievement - the ability to become scalable. Ultimately, Rivers Agile assisted the KbPort team in transforming a lone inventory module into 9 integrated modules in a fully-functioning, critical training software.



Client
KbPort

Location
Pittsburgh, PA

Industry
Medical Simulation

Project Scope
UX/UI Design, Software
Development & Testing

Product Created
Simplicity V7