

# Kuali Student Financial Aid (KSFA) Technical Kickoff Meeting Summary

The Kuali Student Financial Aid (KSFA) software development is beginning. It will be a component of Kuali Student (KS). A Technical Kickoff Meeting was held Thursday and Friday, August 7 and 8, 2014 to coordinate the two development efforts.

Kuali Student participants Rajiv Kaushik, KS Program Director, Sean Phillips, Larry Symms, Mike Pasarella-George, Cheryl Medley and Tom Coppeto were in attendance. Others attended remotely for certain portions of the meeting. Darcy Van Patten attended as the IT (Information Technology) lead for the University of Washington (currently the First Implementing Institution). The KSFA Development team from Sigma Systems Inc. included CEO Randy Timmons, Cliff Clevenger, Paul Heald, Tim Bornholtz, Rick Hafenbredl and Justin Tilton, who attended remotely. The meeting took place from 1 – 5 PM on Thursday (8/7) and from 9 AM – 4 PM on Friday (8/8).

The meeting began with Product Manager Rick Hafenbredl giving an overview on the governance, scope and roadmap for KSFA. The rest of the afternoon discussed Core UX (User Experience) functionality. The Kuali UX project will provide UI (User Interface) and the User Interaction Model guidance.

Kuali Rice (middleware) provided a series of releases, starting with version 2.4 on April 18, 2014 through 2.4.2 on July 10, 2014. A release of Kuali 2.5 is scheduled for August 28, 2014. Because Kuali Rice provides infrastructure – Kuali Identity Management (KIM) and Kuali Rapid Application Development (KRAD) – there are advantages to use the same version for development. However, upgrades between the versions of Rice this year have required significant effort to make code backward-compatible. The KS team strongly recommended that Sigma begin all development using Rice 2.5 and not spend time to modify working code before version 2.5 is released. As the first implementation of KSA (Kuali Student Accounts) is in progress, a large effort is underway to retrofit KSA to the 2.4.x technology. Boston College was planning on implementing version 2.4.2 released July 10, 2014. Because version 2.5 will be released later this month Sigma Systems agreed that standardizing on 2.5 was the most prudent approach. Although Rice 2.5 will not be formally released until later this month, Larry Symms agreed to provide Sigma that code now and said it [Kuali Rice] was stable enough to begin using.

For performance reasons, there is a question of whether KRAD or AngularJS – an open source product from Google Inc. – should be used. Since performance depends upon complexity of the screen, there was consensus an evaluation of the needs for each screen (or set of screens) would determine the development platform for that set of screens in KSFA. Thus the initial development for ISIR load (Institutional Student Information Records from the U.S. Department of Education, the basis for verification), which requires a complex menu with light boxes and sub-collections, would therefore be done in AngularJS.

Because of complexity, KSA uses a rules management system other than Kuali Rule Management System (KRMS), the rules engine built into Rice. Larry Symms discussed recent enhancements and also presented KRMS in action with a UI that allowed users to select certain

rule frames and then enter variables into those. The example shown selected a rule “When GPA is over...” and allowed the user to enter “3.0” as the term. This changed the plan from the original one of evaluating KRMS for gaps during Phase 1 to a new plan of using it as a pilot program to make use of the current functionality as much as possible in Phase 1. Gaps will still be recorded and reported to the Rice team so that they can be addressed in future development.<sup>1</sup>

On Friday, Laura Cronin presented on current Quality Assurance (QA) procedures in KS. She discussed automated regression testing performed using Cucumber<sup>2</sup> which runs scripts written in Ruby. Sigma believes a training need exists for the current QA team and Sigma needs to provide additional training or find a new individual with the skillset to fill the role of QA engineer. That action item has started. Mark Curtz also presented on current documentation procedures within KS. He had set up a repository for KSFA documentation and showed where and how that should work. Sigma appreciates his efforts and will begin to use that area to build the library of functional and technical documents for KSFA. Tom Coppeto also presented on the services in KS and how KSFA would fit into that existing structure.

The final discussion topic was next steps for the FII at the University of Washington. Darcy Van Patten described the University’s experiences with myPlan and other past projects; Sigma discussed their experiences with KSA. Due to the highly sensitive nature of financial aid data, it was agreed that hosting real-life production ISIRs in the cloud is not the preferred approach. Instead, UW plans to host an instance of KSFA behind their firewall and will grant access to the PM and all Functional Council members to allow for evaluation and testing. Both parties agreed to begin off-line discussions on topics such as the reference data requirement needs for Phase 1 and installation and release cycle timing for the system. Sigma will host its own cloud-based database with mocked-up data so their development team can do some initial analysis without navigating the University of Washington’s firewall.<sup>3</sup>

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<sup>1</sup> Since this Kickoff meeting the U.S. Department of Education announced a meeting of the Advisory Committee on Student Financial Assistance (ACSFSA) on September 12, 2014 briefing on the forthcoming federal ranking of colleges and universities. Most colleges and universities do not have a federal student loan default rate that would jeopardize federal financial aid (especially Pell Grants). However, small changes in the default rate for a college or university would significantly change the federal ranking. For this reason they are expected to implement some of the algorithms from guarantee agencies that were effective as part of the verification process. These would include additional data that may not be required by the federal rules. These algorithms are more complex than the simple rules from the forthcoming *Application and Verification Guide 2015-2016*. There is research on the sensitivity of ranking to the default rate that is expected in September or October that would provide guidance.

<sup>2</sup> “Cucumber is a testing framework that helps to bridge the gap between software developers and business managers. Tests are written in plain language based on the behavior-driven development (BDD) style of *Given, When, Then*, which any layperson can understand. Test cases are then placed into *feature files* that cover one or more test scenarios. Cucumber interprets the tests into the specified programming language.” (From IBM’s *Automated Testing with Selenium and Cucumber*.)

<sup>3</sup> The U.S. Department of Education provides an ISIR test dataset to be used for testing the electronic data exchange and verification software. These are fictitious cases. Development can initially use these cases without concerns about privacy.