ACS 560

Academic Measurement and Achievement Mentor Project Conclusion

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The Academic Measurement and Achievement Tool (AMAM) is a web-based application for empowering parents and students in the education process by providing high quality real-time assessments, results and remediation resources.   The AMAM product provides functionality and quality attributes not found in other currently available products.

Design of the AMAM is complete through the inception and elaboration phases of the Rational Unified Process (RUP) process. Implementation, testing and deployment are not within the scope of the project. The AMAM project fulfills part of the requirements for the ACS 560 graduate course (Fall 2011) through Purdue University, Fort Wayne.

The three-tier architectural design will deliver a rich, user-interface, high performance testing and reporting capabilities and secure data storage. The system will provide concrete user functionality such as on-demand assessments, immediate feedback, cumulative and subject- specific reports and relevant, standard-linked remediation and enrichment resources. The system also provides a broad spectrum of system attributes including accessibility, correctness (accuracy and timeliness), reliability, robustness and usability. Modularity was a key design consideration for components of the system so that replacement and future modification would be relatively simple.

Through the development of the AMAM web application, both team members have gained a new perspective on the process of software engineering. We have utilized several new development tools (MS Project, Acclaro, and Visio), have gained familiarity with the RUP software engineering lifecycle model, have been exposed to several IEEE standards and documents (IEEE-830, IEE-1016, IEEE-1058), and have developed effective communication methods and strategies for division of labor.