Agile Scrum in a BIS Undergraduate Capstone Course: Going from Being Students to Becoming Professionals

Roslin V. Hauck
Illinois State University
Rosie.Hauck@IllinoisState.edu

Abstract

The capstone course for the Business Information Systems major at Illinois State University has been redesigned to provide an innovative and truly experiential learning opportunity for our majors. Following the needs of industry, the students in the capstone course use Scrum to develop systems for a client partner in an Agile environment. Students learn the tools, create the artifacts, and conduct the events using Scrum, all in self-organizing team fashion. Each Scrum team has its own Scrum Master and Product Owner, who help the team navigate through the projects' four sprints. In addition, we have partnered with a Certified Scrum Coach so that midway through the project, students have the opportunity to take the Scrum Master certification course so that by the end of the course, students not only have experience working in an Agile Scrum team, many of them also have their professional Scrum Master Certification as well.

In the spring semester of 2016, the course had an overload of 31 students (capacity for the class had been set at 25 students), organized into five 6-7 person project teams. With our class client partner, a not-for-profit zoo organization, we had five concurrent systems development projects. The project work consisted of four, 1.5-2 week sprints, concluding with the teams deploying their systems at the end of the semester.

Over the course of the semester, although my role shifted from instructor to coach and eventually to mentor, my goal was to establish a classroom culture and environment that encourages trial-and-error, as well as adaptive and iterative learning. Some of the outcomes that I have observed in my students include an increase in student creativity, collaboration between teams, development of leadership skills, and an intrinsic motivation to deliver value to the client.

The goal of this TREO Talk is to share my stories and get feedback from participants with regards to the design of the course, including the skills and activities incorporated into the class, the challenges of putting together this course, as well as the impact that this course has had on our students. With increasing pressure on IS programs to explicitly demonstrate that we provide value and impact, I hope to be able to share my experiences and lessons learned to help other instructors who may be seeking ways to help their students gain valuable experience and make that transition into becoming professionals.