TEACHING AGILE PROJECT MANAGEMENT BY COMBINING GROUP INTERACTION AND SIMULATION

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2018 Teaching & Learning Summit, Eberly Center, Carnegie Mellon University

An activity designed to help students learn to collectively manage an agile project (Scrum) by creating situations that impact the execution of a plan created by them

Design motivation:

In courses adopting a software development project as its practice component, its programming tends to overshadow other concerns, even when programming might not be the course’s learning objective, as the students’ focus shift from learning and reflecting about the material taught to handing-in some kind of working software

Software development requires many hours of work spent on tasks that might not be related to the course’s objectives and learning is haphazard. Simulations, on the other hand, take place in virtual time and controlled conditions which offer the instructor the opportunity to create teachable moments

Students tend to deal with group assignments by dividing the work such as each group member completes and presents a specific part of the project. This approach sorely limits team interaction and reduces occasions for shared learning—precisely the essence of agile methods.

When work is performed outside the classroom, instructors see only the results of the student’s efforts and not the process itself. So, in the instance of lesser outcomes, the instructor may try to infer what went wrong, but the opportunity to provide feedback in a timely manner, and in the appropriate context, has been lost.