

Basil room
2.40-3.05pm

NUSCollab: Tools for online collaboration

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Online collaboration and cooperation on large projects in an authentic learning environment are essential skills for a successful carrier, and thus it is mandatory that university graduates acquire these skills during their Computer Science studies. As modules in the National University of Singapore (NUS) move towards project-based learning with students working in teams, much of the learning process happens through social constructivism during team interactions that often take place online. Usually, this online learning process, through collaboration and cooperation, is done through ad-hoc project management, where teachers have little input in terms of supervision. Based on our observations, students use email and instant messaging such as WhatsApp, collaborative editing tools such as Google Drive, and version control systems for software development, such as Git, among others.

To create an authentic learning environment in project-based courses, we developed NUSCollab (<https://nuscollab.comp.nus.edu.sg/>), a web platform that enhances authentic learning and offers a structured framework for team collaboration through integrating tasks lists and third-party tools. NUSCollab helps teachers and students to aggregate and search for project-related data, and easily give feedback to team members. This easy-to-use platform is extendible to integrate tools commonly used in a university setting, and allows for realistic usage analytics to be collected and used for student assessment. Furthermore, it offers an authentic learning experience to students by enabling the application of software engineering principles in practice, following a typical software development life cycle, and documenting project decisions. This project management platform promotes a realistic environment for teams, enables learning through online interactions, and allows teachers to give timely feedback on project developments by student teams.

Note

This is a Teaching Enhancement Grant (TEG) project supported by the Centre for Development of Teaching and Learning (CDTL).