Using Scrum in an Online Smart Classroom Environment: A Case Study

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Abstract : The present digital world poses many challenges to various stakeholders in the education sector. In particular, lecturers of higher education (HE) are faced with the problem of ensuring that students are able to achieve the required learning outcomes despite rapid changes taking place worldwide. Different strategies are adopted to retain student engagement and commitment in classrooms to address the differences in learning habits, preferences, and styles of the digital generation of students recently. Further, the onset of the coronavirus disease (COVID-19) pandemic has resulted in online teaching being mandatory. These changes have compounded the problems in the learning engagement and short attention span of HE students. New agile methodologies that have been successfully employed to manage projects in different fields are gaining prominence in the education domain. In this paper, we present the application of Scrum as an agile methodology to enhance student learning and engagement in an online smart classroom environment. We demonstrate the use of our proposed approach using a case study to teach key topics in information technology that require students to gain technical and business-related data analytics skills.

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