Implementing Virtual Pair Programming in E-Learning Environment

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ABSTRACT
Programming subjects are one of the core and important subjects that should be taken by students majoring in information system or computing. The problem of teaching and learning of programming has been widely reported in literatures. Many attempts have been made to solve this problems and this has led to many new approaches in teaching and learning of programming. One of the approach that has been proposed is the use of pair-programming, which is one of the practice of eXtreme Programming (XP). The advent of e-learning has given birth to the idea of Virtual Pair Programming (VPP). This paper describes how asynchronous mode of collaboration using VPP could be implemented for e-learning learners to learn programming.

Keywords: Pair-programming, Virtual Pair-programming, Programming, E-Learning, Distance Education