An Automatic Generating Unified Modelling Language Use Case Diagram and Test Cases Based on Classification Tree Method

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Abstract : The processes in software development by Object Oriented methodology have many stages those take time and high cost. The inconceivable error in system analysis process will affect to the design and the implementation process. The unexpected output causes the reason why we need to revise the previous process. The more rollback of each process takes more expense and delayed time. Therefore, the good test process from the early phase, the implemented software is efficient, reliable and also meet the user's requirement. Unified Modelling Language (UML) is the tool which uses symbols to describe the work process in Object Oriented Analysis (OOA). This paper presents the approach for automatically generated UML use case diagram and test cases. UML use case diagram is generated from the event table and test cases are generated from use case specifications and Graphic User Interfaces (GUI). Test cases are derived from the Classification Tree Method (CTM) that classify data to a node present in the hierarchy structure. Moreover, this paper refers to the program that generates use case diagram and test cases. As the result, it can reduce work time and increase efficiency work.