Software Quality Management

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Motivation For selection: My topic for the assignment 3 is whether using the pair programming in designing and developing the code show impact on the quality of the product. Does the pair programming show impact in reducing the defect density, which in turn improves the quality of the code. Reduce in the defect density by using the pair programming instead of using solo programmer to work on code is the research area where it is keen to know if there is any improvement in the quality, if so, which one is followed to achieve the improvement. Generally Pair programming means one person handles mouse or keyboard to write the code. The other person scrutinizes or verifies the code for any modifications or improvements to reduce the bad smell codes (ineffective Lines Of Code).

Selected article1: This paper is selected because it exemplifies the impact of pair programming in four different software development projects on software product quality. The article is interesting because the different projects given in this article the research case study can help to understand whether there is impact in software quality when the pair programming is implemented. This article help to understand whether the pair programming show impact on the attributes like design, readability, understandability and other internal quality attributes. Thus article show results where in 2 case the productivity of pair programming is higher and in 1 case the productivity of solo programming is high. In where the impact of solo programming can and cannot achieve quality and productivity for a product can be understood from this article. These article present the information about the defect density that is appeared in the code when pair programming and solo programming is used. Thus this article can help to study the impact of pair programming on the quality of the product. Thus study provides the information on the existing evidences about the impact on pair programming and the current findings form 4 different software projects with respect to impact of pair programming on software product quality.
Selected article 2: This article is an extensive case study on pair programming in software development teams and its benefits. First article helps to find in which case to utilize the pair and in which case to not utilize the pair programming. Thus article gives the glimpse of pair programming and its benefits, which include the quality of the code. Thus article is important because it supports the statement pair programming is a suitable method to ensure the quality of the code as the observer does the first review while the driver writes. This article also supports the statement like the program implemented by pair have same functionality as the solo once but with less number of lines of code (LOC) and the quality is thus higher in this case. Usually the quality of the program is identified by the passed test cases, the pair programing show higher pass percent than solo programing. Thus selecting this article will help to understand the benefits of pair programming over solo programming and its impact over the quality of the code.