Research Proposal: Digging deeper into Software maintainability

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1 Introduction

Software maintenance can be defined as any modification to the product after delivery to the customer. Maintenance is considered the most expensive portion of a project's life-cycle and is known to take up around 40% to 80% of the total costs of the project according to a paper by Robert Glass [Glass,].

A 1999 study[Zhang and Pham,] after analysing 32 factors found that Software complexity, Programmer skill, testability and test coverage to the major factors affecting Software reliability and maintainability.

Considering the critical role played by maintainance in a software project's lifecycle I would like to focus my research on uncovering the influence of software models on Maintainability and related attributes such as Reliability, Understandability, Software complexity and technical debt.

2 Topic Description

References

[Glass,] Glass, R. Frequently forgotten fundamental facts about software engineering. 18(3):112–111.

[Zhang and Pham,] Zhang, X. and Pham, H. An analysis of factors affecting software reliability. 50(1):43–56.