SE 329, Assignment #1

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Section 1: Quality of the document summary.

What is a Capability Maturity Model? A Capability Maturity Model (CMM) is a system of methods used in particular areas of study (e.g Software Engineering) to develop and clarify an organization's development process.

Moreover, this leads us to think aboue what are the fundamental concepts for process maturity. A Software process maturity is the degree to which a particular process is unequivocally characterized, overseen, measured, controlled, and viable. Maturity suggests a potential for development in ability and demonstrates both the abundance of an association's software process and the consistency with which it is connected in tasks all through the association. The software process is surely known all through a develop association, for the most part through documentation and preparing, and the process is persistently being observed and enhanced by its clients. The ability of a develop software process is known. Software process maturity infers that the efficiency and quality coming about because of an association's software process can be enhanced after some time through reliable picks up in the teach accomplished by utilizing its software process.

A maturity level is a well-defined evolutionary plateau toward achieving a mature software process. The CMM have five maturity levels, level 1 (the least mature) to level 5 (the most

mature). The five levels are: Initial, Repeatable, Defined, managed, and optimizing.

The first level is the “Initial” level, at this level the process is characterized as ad hoc, and occasionally depends on individual effort; moreover, the process is undocumented which disordered or flimsy condition for the process.

The second level is the “Repeatable” level, at this level basic management processes are established to track cost, schedule, and functionality. It is characteristic of this level that some processes are repeatable. Although preparation might not be thorough, it might guarantee that current processes are kept up between times of stress.

The third level is the “Defined” level, at this level the software process for both management and engineering activities is documented, standardized, and integrated into standard software process for the organization. All projects use an approved, tailored version of the organization’s standard software process for developing and maintaining software.

The fourth level is the “Managed” level, at this level detailed measures of the software process and product quality are gathered, the reasonableness of the process in different conditions has been tried and the process refined and adjusted, and both the software process and products are extensively understood and controlled.

The final level is the “Optimizing” level, at this level the main focus is on continuously improving process performance through both incremental and innovative technological improvements and changes, continuous process improvement is enabled by quantitative feedback from the process and from piloting innovative ideas and technologies, and the levels of CMM are sufficient to measure the maturity of organization as it measured across different levels.

In improving the process maturity level helping managing projects; the purpose is to continually improve the software processes used in the organization. Maturity will affect the esteem which an organization can pick up by executing project management. As a result, maturity in project management ends up being sought after by various organizations as are Project Management Models that rose as to which an organization could advance toward ideal improvement in project management.

Section 2: Quality of the in-class discussion summary.

To start productivity amongst our team we planned to distribute work using Trello as well as to stay updated on what tasks are done, we will use GIT_hub to share our work and to test everything quickly on the server, and we will use software material as well as hardware material such as Linux and raspberry pi.

What I like about the CMM is that it increases accuracy, quality, productivity, and delivery time of schedule and cost estimate. Also, improvement has increased in going to the next level in the CMM since different problem had been addressed at each maturity level which resulted in multiple benefits.

However, what I dislike about the CMM is that is only helps on the off chance that it is instituted ahead of schedule in the product development process. It can't be used as an emergency technique for convalescing a alarming position. Furthermore, the CMM cares more about the improvement of management related projects which will cause an issue in the software development process. Sometimes code development might be more essential in the context of software.

Section 3: Quality of the discussion on the use of CMM.

CMM has many uses; some of the uses of the CMM is that it increases accuracy, quality, productivity, and delivery time of schedule and cost estimate. Also, improvement has increased in going to the next level in the CMM due to the fact that different problem had been addressed at each maturity level which resulted in multiple benefits.

Every team should try to improve their maturity level. In order to improve the maturity level of my team; inspiration is needed rather than giving orders and expecting people to follow, teamwork

is needed in order to overcome any obstacle that may come across our project, setting goals will concentrate the team's vision on accomplishing the task.