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### Final Project Reflection

SDLC (Software Development Life Cycle) is the practicability of the quality and customer method to the development of software applications. Its is a method of assessing and advancement of the development process (Mahalakshmi, Sundararajan, 2013). It consists of some main parts that are recommended to all the projects of software development. It aids in maximizing the outcome and efficiency at each step. With the increase in the power of computing, there is a demand for software developers at the highest. SDLC attains the goals of delivering the software faster and enhancing the needs of the customers by the identification of the inefficiency and the greater coasts and then smoothly runs them. From the start to the end in the development of the project, these main steps are included: Requirements Gathering, Requirements Analysis, Design, Development, Testing, Deployment, and Maintenance.

The waterfall model is the very first processing model to be introduced. It is mostly called the life cycle model of the linear sequential. introduced. It's a simplified method to apply as every method of the phase is completed before the other begins. One of the important points is that there is no overlapping in the whole process. It is the first model and the approach that was ever applied in the development of the process. It is the process of the sequential design in which the progress is assessed by its flowing downwards slowly (Bassil, 2012).

One of the advantages of teg waterfall approach is that it gives an allowance of the departmentalization and commands. It's a step that is easy to comprehend and because of the rigidity of the model, it's easy to control and manage. Each phase is completed once in a while. Each phase has a specific sort of deliverables and a process that is reviewed. It's simple to arrange the tasks (Balaji, Murugaiyan, 2012). Their results are well elaborated and work great for smaller projects.

The main disadvantage of this approach is that it does not give an allowance for revisions and reflections. It's not easy to go back and do some changes, this is the only software and there is no other current one. There are high chances of risks. This is suitable for smaller projects and does not apply to the bigger ones. No accommodation of the changes is there. The deliverance of the project will be in the end.

It is an attempt that uses the continuous iteration of the growth and testing during the project's development lifecycle. This is different from the model of the waterfall and in it, there is growth and the activities of the testing concurrent. For complex and bigger projects it is best applicable. The client is not required to wait on a longer basis to gain access to the project. The requirements in this method are varied. One of the flaws is that it does not work best in fixing the budget as it's not the same every time.

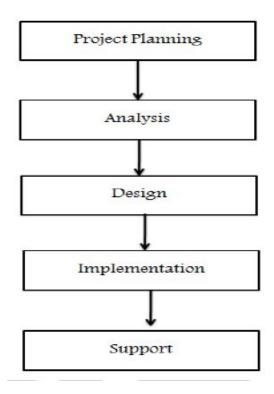
Kits ensure and are responsible for extracting and increasing the outcome and the product that is resulted from the Scrum Team. It is not a team but an individual who represents the requirement of the stakeholders in the backlog of the product. Its function is to develop and communicate the goal of the product. Its function to create and accurately communicate the backlog items of the product. One more role of it is to order the items of the product backlog (Qureshi, 2012).

As defined and explained in the Scrum Guide, the Scrum Master is responsible to establish the Scrum. It serves in directing and training the members of the team towards managing on the self basis and the functionality. They truly serve the team and the bigger organization and are responsible for the effectiveness and efficiency of the team. It also serves the owner of the product in many ways like exploring the goal definition of the product and the management of the backlog items of the product. It functions in eradicating the hurdle between the team and the stakeholder.

It is the engagement session conducted by the scrum master and the meeting is in between the members, the owner of the product, and the scrum master. There is an identification of the work in the future. For the demands in the JIRA, we will be developing user stories. The project tool for management is JIRA and all the stories will be developed in it in the meeting of the backlog grooming.

The members of the agile team are smaller, the size of the agile team industry would be seven or fewer in this. The agile team consists of testers and developers. One of the members will be the teach lead in the agile team and the qualities that a tech lead possesses constitute the technically powerful person who is well acquainted with the whole project. He is right responsible for raising the team members when they are facing any issue in technology with his skills and capabilities. For the newbies and the new entries of the project he is responsible for transferring the knowledge.

# The Diagram



## **Stages**

## I) The Planning Stage:

- The main objective of this phase is the identification of the project's scope.
- There is the judgmental of the feasibility in this phase.
- In this phase, the plan of the resource, the schedule and the costs are determined.

## II) The Analysis Stage:

- The requirements of the business are analysed and illustrated in this phase.
- Many demands and the analysis are done in this phase such as:
  - o Collecting the requirements of the system

- For the exploration of the requirements, the establishment of the prototypes.
- The evaluation of the alternatives.
- Reviewing the demands.

### III) The Design Stage:

- The demands that are analyzed in the above phase are modeled.
- Many things are done in this phase such as:
  - o The architecture of the application.
  - o The network designed and built.
  - o The user interfaces are designed and built.
  - o The databases are spun up.
  - o The prototypes are set up for all POCs.
- The controls of the systems are tested and configured.

### IV) The Implementation Stage:

- The information that is reliable is applied in this phase generally using some programming languages like C, C++, C#, JAVA, Go, etc.
- The basic tasks that are done during this applicability are:
  - o The construction of the components of the software.
  - o The verification of the code and its testing.
  - o The data conversion.
- The guidance to the users and the system's documentation.
- Tie installment of the system in the workplace.

### V) The Support Stage:

- The purpose of the phase is to help the system sustain in the state of running for a lot of years.
- The many tasks that are accomplished in this step are:
  - o The maintenance of the systems.
  - o The enhancement of the systems.
  - o The availability of the support for the users of the system.

## 6 Steps of Life Cycle of Agile Development

- 1. Scoping and prioritizing the projects
- 2. The initial sprint's diagram demands
- 3. The iteration or te construction Construction/iteration
- 4. The emancipation of the iteration into the production
- 5. To produce and the continuously support the release of the software
- 6. Retirement

The roles of the scrum are as:

- Owner of the Product
- Master of the Scrum
- Stakeholders
- Scrum Team

### References

- 1. Balaji, S., & Murugaiyan, M. S. (2012). Waterfall vs. V-Model vs. Agile: A comparative study on SDLC. *International Journal of Information Technology and Business*Management, 2(1), 26-30.
- 2. Bassil, Y. (2012). A simulation model for the waterfall software development life cycle. *arXiv preprint arXiv:1205.6904*.
- 3. Mahalakshmi, M., & Sundararajan, M. (2013). Traditional SDLC vs scrum methodology–a comparative study. *International Journal of Emerging Technology and Advanced Engineering*, *3*(6), 192-196. What is
- 4. Qureshi, M. R. J. (2012). Agile software development methodology for medium and large projects. *IET Software*, *6*(4), 358. https://doi.org/10.1049/iet-sen.2011.0110