**MS(CS/SE) Research Project**

**Interim Report**

|  |  |
| --- | --- |
| Name | Faizan Shahid |
| Student Id | SP21-MSSE-0017 |
| Project Title | Quality Assurance with Agile Project Management |
| Supervisor Name | Sir Sarmad Ali |

**List of Meetings**

|  |  |  |
| --- | --- | --- |
| **S. No.** | **Date** | **Topic** |
| 1 | 26/2/2022 | Meeting with supervisor and discuss the area of research |
| 2 | 3/3/2022 | Discussion about gathered research papers about the topic. |
| 3 | 3/15/2022 | Literature review discussion |
| 4 | 4/1/2020 | Discussion about interim report correction about interim report and also discuss about the framework implementation . |

**Research Papers for Literature Review/ Gap Analysis (at least 3)**

|  |  |  |  |
| --- | --- | --- | --- |
| **S.No.** | **Paper Title** | **Journal/ Conference** | **Year** |
| **1.** | Quality Management techniques embedded in Agile Project Development | MATEC Web of Conferences 121, 05003 (2017) | **2017** |
| **2.** | Enabling Focused Software Quality  Assurance in Agile Software  Development Processes for Mobile Applications using Text and Usage  Mining Methods | International Joint Conference on  Computer Vision, Imaging and  Computer Graphics Theory and  Applications | **2017** |
| **3.** | Quality assurance within the agile system development life-cycle | International Journal of Economics and Management Systems | **2018** |
| **4.** | Incorporating quality control activities in scrum in relation  to the concept of test backlog | journal | **2017** |
| **5.** | Teaching agile methodologies in a  project management course | 3rd International Conference on Higher Education Advances | **2017** |
| **6.** | Quality Metrics in Agile Software Development Projects | journal | **2018** |
| **7.** | Documentation of Quality Requirements in Agile Software Development | journal | **2020** |
| **8.** | What Matters to Students –  A Rationale Management Case Study  in Agile Software Development | journal | **2020** |
| **9.** | Evaluating the Quality of Proposed Agile XScrum Model | Conference | **2017** |
| **10.** | Critical Success Factor of Agile Methodology in  Software Industry of Nepal | Journal of Information Technology and Digital World (2020) | **2020** |

**Abstract**

Now that agile development methodology has gained a lot of traction in the IT sector,

Risks abound in the project management cycle. Old project management entails: It may be difficult to immediately identify these risks before they have an impact on the project. Agile management is ready to carry such challenges to bear throughout product development life cycle because it focuses on incremental releases.so it is very importance to understand about Agile project management and how to implement quality tools and techniques in agile development methodology. The traditional project management adopts a typical forecasting management method. First, the feasibility of the project is analyzed, and then the project plan is formulated. The specific implementation of the project is a continuous process. This project management model has great shortcomings. When a project plan changes, it is inevitable to adjust the subsequent activities. In an agile approach to project quality, there is an emphasis on continuous improvement of the delivered product - the team is constantly striving to make the product better. The project process is designed to accommodate changes in client or customer requirements and strive to minimize documentation of quality requirements, processes or activities. Daily meetings to manage quality activities (e.g., as part of Scrum) and user stories are the basis for understanding quality requirements. Where we are talking about agile project management it is very important to highlight the practices of quality management and its tools so agile project management is one of the best approach which satisfy the level of quality in its products that’s why people are running towards this approach. Customers will gravitate toward these approaches if the product is of high quality. Many consumers and IT specialists are wondering, "Why has agile development achieved so much popularity among all other development methodologies? “By following this approach is it delivering exactly what the client wants? Will this strategy result in a high-quality output if we use it? So, in this article, I've analyzed that agile development methodology is one of the most demanding and convenient approaches for business professionals to start their firm from the ground up and take it to the next level, so it's critical to keep quality throughout the development life cycle. The startup trend, which turns a brilliant idea into a unique product, was born out of (QMT) and innovative strategies. In this article I have also mention that by using agile development processes It is feasible to place a product with a quick time to market using a strategy that is based on establishing a limited set of functionality in order to create a minimal viable product (MVP).

I accomplished this by first examining what Agile is and what it stands for, its evolution over time,

And its core principles, before delving into the quality management process and the role of quality Assurance within this discipline. I then examined how quality is measured in Agile, as well as the

Success factors of agile methodologies, and compared them to the success factors of Total Quality

Management (TQM). By doing so, I was able to highlight the success factors that were present in Both TQM and Agile methodologies, as well as provide recommendations for future improvements Key words: QMT, Agile methodology, project management.

Key words: QMT, Agile methodology, project management.

**Project Plan**

(Planning and scheduling of project in phases)

