ASSIGNMENT 1
Reflections on Adaptive/Lean Software Testing principles

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1 Chapter:
Introduction

While traditional testing methodology has been in use, since the inception of software engineering, the method is unidirectional and fails to provide the product's development testing needs continuously. Although traditional testing might be quite handy for small software products with precise requirements, it is quite time consuming and might affect the product delivery speed in long run[1].

With the advent of lean testing, we observe, the incremental and iterative approach of lean testing helps in ensuring optimum quality, risk management and a healthy software development. It is said that, it's better to mould our practices to the environment rather than moulding the environment for our practices[2].Lean testing efficiently follows this concept to meet the requirements by reducing waste, time consuming and unnecessary steps by increasing the quality of products.

2 Chapter:
Results

2.1 What you think is the most important principles of Lean software testing and why you think they are important?

The three main principles of lean testing software according to my perspective is:

- **Provide continuous feedback:** Providing continuous feedback improves software quality and checks if the requirements are met at every stage of software development. It helps in identifying if there are any defects in development process and quality of the product. Providing continuous feedback helps in good communication between developers and testers and improves overall software product.
- **Deliver value of customer:** Focusing on the big picture helps in delivering a value product to the customer. Mitigating the scope creep i.e., helping and evaluating if the system is satisfying the requirements correctly without adding more requirements helps in improving quality product. Anything more than required is a waste of resources, time and labor.
- **Respond to change:** Continuous improvement in software development involves a lot of change. Responding to a change,

respecting feedback and adapting new technologies sometimes can save a lot of development time and delivery cost.

2.2 An example of practices or situations where the Lean software testing principles are useful or important.

Lean testing principles might be important in mobile application start-ups where, continuous feedback with developers and testers can help in improving overall user experience. Continuous Testing in the mobile development process can help in finding bugs and glitches in application. This improves in delivering value product to the customer at low costs[3].

Lean software testing can also help in product developments where the value of time and resources is quite costly. It also helps the developers in mitigating the scope of the product without any deviation, which quite happens in big product development software.

2.3 An example of what practices and principles you have used in old projects or that you will use in future projects and how they work together.

I have recently developed a mobile app where the user interface has been quite unsatisfactory at the end because we were so focused on developing the product. I would have implemented providing continuous feedback principle to deliver a value product to the customer by improving overall customer experience and user interface. Because at the end, what matters is customer satisfaction.

3 Chapter: Conclusion

Lean testing might be arguably best-testing approach for software development. Lean testing provides robust software testing strategies, which helps in providing reliable software[1]. Although there is no one size fit approach in testing, we can conclude that lean testing is more well-grounded with modern software development. It helps in improving quality, overall organizational work, and effectiveness, reducing wastage, and cost efficient.

References:

[1]"Traditional Testing Vs. Agile Testing - Which Way To Go?," *Maruti Techlabs*, Oct. 16, 2020. https://marutitech.com/traditional-testing-vs-agile-testing/ (accessed Jan. 31, 2022).
[2]A. Hodder, "Lean Testing," *Medium*, Nov. 06, 2018. https://medium.com/@AWGHodder/lean-testing-f900b5a7e82e (accessed Jan. 31, 2022).
[3]"How lean startup formula can be applied to mobile app development | AppFutura." https://www.appfutura.com/blog/how-lean-startup-formula-can-be-applied-to-mobile-app-development/ (accessed Jan. 31, 2022).