

## RE-RE-ASSIGNMENT 1

### PA 2552- Software Testing

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**Automated GUI Testing:** It is a kind of test practice that lets us automate manual testing for front-end graphical user interface. It lets us have **continuous feedback** whenever we make changes to the software product. Automated GUI testing is mainly used in software where GUI is important for the user to use the product. This helps us **deliver value to customer** by providing a GUI that is functioning well. Most automated GUI testing tools provide testers with simple commands to execute test cases easily. This helps testers to **keep it simple, respond to change** easily, also enables to **practice continuous improvement** since it is easy to write new test cases. Manual testing takes lots of time and effort of testers to do monotonous work. Automating testing lets testers enjoy the process of testing.

**Personally:** I think automated GUI testing is an excellent practice. It lets testers have a perspective of the users and design test cases in such a way. There are many good quality automated GUI testing tools available to execute those test cases easily. These also help us easily automate the tests and execute them. But it might be quite costly to make the perfect test suite that will not be affected by the changes in GUI while development. So, we might need to make several test suites quickly depending on the GUI, making testing cost effective. I think I need to learn better well when, where and how to use automated GUI testing properly since we may waste resources in pursuit of perfect test suite. Emil Alégroth et al. discussed several problems, challenges and limitations faced in GUI testing [1]. Thus, I need to learn more about automated GUI testing and the testing tools to overcome these issues to make testing cost-effective and efficient.

**Performance Testing:** It is practice used by testers to acquire **continuous feedback** of the performance quality of software when changes have been made. It helps ensure quality of the software to **deliver value to the customer**. Performance testing **focuses on the people** to deliver optimum performance of the system, it allows testers to identify the limitations of the performance of the system and **respond to changes** in the system accordingly. Whenever there are changes, there might be additional functionalities. So, there is a need **to practice continuous improvement** in performance testing for testers.

**Personally:** I think performance testing is very crucial for any software company to analyze the quality of their service and their current limitations. It allows them to have a plan for the future and the present. While doing performance testing, there are several functionalities to be considered. Choosing the wrong parameters for performance testing might lead to waste of resources and also missing key parameters will negatively affect the quality of the software. But choosing the appropriate parameters requires expertise for performance testing. Thus, I think it is important for me to learn about performance testing.

#### Reference:

- [1] E. Alégroth, R. Feldt, and L. Ryrholm, "Visual GUI testing in practice: challenges, problems and limitations," *Empir. Softw. Eng.*, vol. 20, no. 3, pp. 694–744, Jun. 2015.