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## **Why do we use test automation?**

- Every software product always has defects. And before releasing a product to market, we always try to handle as much error as possible. But these bugs can reappear, even if we use the best testing process. Any time we need to test our product, we need time, money, people and more resources to do these testing. By using test automation, it will save time (reduce the overall test execution time), money, and increase the effectiveness, efficiency and it also creates report documents for us...
- Eliminates the human error when doing the same process many time (repeatedly)
- We can test and see how our system react to these test (fail or pass)
- One more big benefit is we can reuse the test script for many version of one application
- Increase the scope of tests to identify bugs before releasing products to market.
- We will have the faster feedback because when automation testing, it will create report automatically
- We can test with multiple inputs by inserting data to the Data File folder and Katalon will automatically take the input and run the test case with every input.

## **When do we use test automation?**

- **Regression Testing:** Repeated testing of an already tested program, after modification, to discover any defects introduced or uncovered as a result of

the changes in the software being tested or in other related or unrelated software components.

- **Load Testing:** Automated testing is preferred for load testing which helps to determine a system's performance under real-life load conditions. This testing finds out how the system behaves when multiple users access it simultaneously.
- **Performance Testing:** In software, performance testing (also called Perf Testing) determines or validates the speed, scalability, and/or stability characteristics of the system or application under test.
- We will need to use automated testing when we want to run the same test case with multiple device (Chrome, Firefox... with web application)
- We also use automated testing when we complete a version of a program and before releasing, we use it to find mirror bugs because it's the efficient solution to find all the hiding bugs.