1. **Huỳnh Ngọc Sơn:**

Because:

* Because the software always has defects that even if we have checked it manually before, very carefully. Automated testing is the best way to increase the effectiveness, efficiency and scope of our software testing.
* Automated testing can increase the depth and scope of testing to help improve software quality. Use shared automated tests to spot issues quickly before submitting to QA. Executing repetitive tasks with automated software testing gives your team time to devote to more challenging and rewarding projects. Team members improve their skill sets and confidence, and pass those gains on to their organization.

When:

* When the cost is reasonable because automation tools are not cheap, so the project size needs to be large enough to match the cost. Furthermore, the test needs to have the necessary longevity for the cost to make sense as well.
* When you are using repetitive tests because a manual work is repeated often waste your team's valuable time and potentially lead to more errors due to lack of attention.
* When we don't have much time because we have to spend a lot of time on other equally important things
* When quality inevitably improves as automation eliminates the possibility of human error. For that reason, in some cases, quality can be significantly improved by using automated testing.
* When you need to run multiple tests at the same time, Manual Testing won't let you create the same test on multiple machines at the same time. Automated testing is required when you want to run the same test cases on multiple machines at the same time.

1. **Cao Nhật Đức**:

Because:

* Automation testing takes less time than corresponding manual testing.
* The testing team can be strategically deployed to tackle the tricky, case specific tests while the automation software can handle the repetitive, time-consuming tests that every software has to go through.
* This results in improved accuracy as automated tests perform the same steps precisely every time they are executed and create detailed reports
* Test automation alleviates testers’ frustrations and allows the test execution without user interaction while guaranteeing repeatability and accuracy. Instead, testers can now concentrate on more difficult test scenarios.
* The testing script in the software is reusable which has many subsequent benefits

When:

* Automated testing is very effective when applied to re-testing and regression testing. Or need to run a number of test cases in a short time. when testing a feature that requires simulation by multiple users. when testing every day iteratively or running background steps to test key stages

1. **Nguyễn Đăng Mạnh Tú:**

Because:

* Test automation will help increase the efficiency of software testing quickly, it saves us time and money.
* Test automation can help us execute a lot of different complex cases in each test, it provides coverage that other manual tests don't do.
* Test automation executes exactly the same steps every time they execute and always records detailed results
* Test automation that can continuously test and validate newly updated and developed features will help reduce feedback and testing cycles and get products to market quickly

When:

* When the testing needs of the team want to run the same test cases on multiple machines at the same time.
* When you are using repeated tests
* When we want to save time to spend time on more important parts
* When the quality will definitely improve

1. **Đoàn Hữu Lộc:**

Because:

* Automation testing saves time and money: Software tests have to be repeated often during development cycles to ensure quality. Every time source code is modified software tests should be repeated.
* Vastly increases your test coverage: Automated software testing can increase the depth and scope of tests to help improve software quality. Lengthy tests that are often avoided during manual testing can be run unattended.
* Testing improves accuracy: Even the most conscientious tester will make mistakes during monotonous manual testing. Automated tests perform the same steps precisely every time they are executed and never forget to record detailed results.
* Accomplish tasks that cannot be done by humans: If we want to execute load tests, performance tests, then automated testing is the only way.

When:

* When the number of inputs of a test case is too much, we should also consider the possibility of automated test execution.
* When we want to execute a performance test or load test, automated testing is almost the only option.
* The most frequent reason leading to the decision to use test automation is frequent need to execute regression tests.

1. **Nguyễn Hoàng Luân:**

Because:

* It takes less time and cost than manual testing.
* Manual testing requires programmers to repeat a lot of times, so the use of automation in the testing process helps programmers to be less tedious and work efficiency can be higher than traditional manual. .
* Helps increase the ability to find errors on a larger scale due to the large volume of automatic data. To cover almost the entire range of existing faults.

When:

* For cases that have to repeat a lot of times.
* Tests are tedious and difficult to do manually.
* Test cases against a relatively large data set that manually execute takes a lot of time and cost. But the effect is almost equivalent.