1. Lê Nguyễn Lan Vy - MSSV: 20127392

* Why do we need to use test automation?

Test automation is the best way to increase the effectiveness, efficiency and coverage of your software testing

* Automated Testing Saves Time and Money

Automated software testing can reduce the time to run repetitive tests from days to hours. A time savings that translates directly into cost savings.

* Vastly Increases Your Test Coverage

Test automation can easily execute thousands of different complex test cases during every test run providing coverage that is impossible with manual tests.

* Testing Improves Accuracy

Automated tests perform the same steps precisely every time they are executed and never forget to record detailed results.

* Automation Does What Manual Testing Cannot

Automated testing can simulate tens, hundreds or thousands of virtual users interacting with a network, software and web applications.

* Automated Testing Helps Developers and Testers

Tests can run automatically whenever source code changes are checked in and notify the team or the developer if they fail.

* And when do we need to use test automation?

When your testing needs grow to the point that you need to run multiple tests on different devices at the same time. You can run tests manually on different devices, as long as you have enough manual testers. However, if you want to test your system by running tests simultaneously, you need to automate your testing.

1. Đoàn Ánh Dương - MSSV:20127474

* Why is test automation being used?

Because test automation reduces the instances of human errors, generating consistent and reliable results every time. This means higher quality, reduced bug-fixing cost, lesser effort, and higher productivity for teams.

With many benefits of automated testing:

+Saves Time and Money

With test automation, you can run tests repeatedly at no additional cost. It is also faster

+Increases Test Coverage

With test automation, especially no-code, you can test applications of any size, end-to-end, with a few clicks of the buttons in a few minutes or hours. This enables you to test more features across heterogeneous applications and configurations: the result – is enhanced coverage and higher quality.

+Improves Accuracy

Test automation, when implemented accurately, removes your dependency on these parameters, delivering expected results every time. With test automation, you can ensure that your solution will execute the steps accurately without fail and report each step without bias.

+Helps Achieve Continuous Testing

With test automation, you can achieve continuous testing as it allows you to test applications rapidly.

* When do we need to use this test automation?

Automatic testing is required when you want to run the same test cases across multiple machines at the same time. Automation testing is also a good way to avoid human error in your testing.

1. Phùng Nghĩa Phúc - MSSV: 20127284

Question: Why and when do we use test automation?

Answer: Automated test cases help reduce the time and cost of testing. They can also help the team improve the efficiency of their work. A test case may involve multiple tasks that are repeated in order to increase the accuracy.

In most cases, test automation is used when the task is repetitive and time-consuming. It can also be used when the test case is based on data sets or when the execution process is difficult.

1. Nguyễn Thái Hiệp - MSSV: 20127496

* Why and when do we use test automation?

+Because test automation increases overall software developmet efficiency and allows for more robust tools to be build

There are test automation benifits:

* Faster Feedback Cycle

Test automation is especially useful because it helps you detect problems or bugs early on during the development phase, which increases the team’s efficiency.

* Team Saves Time

By automating your testing procedure, your team has to spend less time validating newly developed features. It also improves communication with other departments like marketing, design,..

* Reusability of Test Suite

The advantage is that you can easily hook up another project to your automated test suite.

Overall, you can easily replicate this knowledge to set up your test automation for a new project.

* Improved Accuracy

On the other side, automated tests can execute tests with 100-percent accuracy as they produce the same result every time you run them.

* Automated Testing Provides More Features

An automated test suite can help you with more features—for example, simulating thousands of virtual users interacting with your web application in order to see how the application behaves.

* Automatic testing is required when you want to run the same test cases across multiple machines at the same time.

1. Dương Quang Bình - 20127450

Why do we use test automation?

* Automated Testing Saves Time and Money : For each release of the software it may be tested on all supported operating systems and hardware configurations. Manually repeating these tests is costly and time consuming.
* Vastly Increases 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. They can even be run on multiple computers with different configurations.
* 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. Testers freed from repetitive manual tests have more time to create new automated software tests and deal with complex features.
* Even the largest software and QA departments cannot perform a controlled web application test with thousands of users. Automated testing can simulate tens, hundreds or thousands of virtual users interacting with a network, software and web applications.
* Shared automated tests can be used by developers to catch problems quickly before sending to QA. Tests can run automatically whenever source code changes are checked in and notify the team or the developer if they fail. Features like these save developers time and increase their confidence.

When do we use test automation?

We use test automation when :

* The test is repeated
* when we want to save time to focus on other content, help develop better software
* when you want to make sure the quality is improved. When humans check, there will be errors, affecting the quality of user experience. But when it comes to automated testing, it's better