**GROUP 17**

**Question: why and when do we use test automation?**

**Võ Duy Trường - 20120232**

Why:

* Reduce time required and total testing costs
* Some tests cannot be done manually
* Automation helps increase test coverage
* Manual testing can become tedious and error prone

When:

* High risk, business critical test case
* Test cases that are executed repeatedly
* Test cases that are very tedious or difficult to perform manually
* Test cases that are very tedious or difficult to perform manually
* Performance tests
* Performance tests

**Lê Trần Thiện Thắng - 20120188**

why:

* Saves Time and Money
* Higher Test Coverage
* Improved Accuracy
* Eliminate Human Error

when

* When the cost makes sense
* When you are using repetitive tests
* When time will be saved
* When quality is sure to be improved
* When tests are run frequently.
* When you need to run multiple tests at once

**Trần Minh Toàn - 20120215**

why:

* Detect problems or bugs early on during development phase.
* Spend less time on validation new developed feature
* Test Suite can be reuse for other use cases or other project
* More accuracy than manual testing (Manual testing opens up the opportunity for humans to make mistakes)

when:

* Want to cut costs: Need to buy automation tools and hire someone to write automation scripts but it can be reuse for other projects
* Having multiple repetitive software tests to do
* Ramping up software delivery speed

**Lê Thái Như Quỳnh - 20120175**

Why:

* Faster feedback cycle: detected problems or bugs early on during the development phase, which increases the team’s efficiency.
* Reusability of Test Suite: can easily hook up another project to your automated test suite.
* Reduced Business Expenses: save money as fewer resources are spent on testing your product.
* Better Insights: Automated software testing not only gives insights into the application but also shows you the memory contents, data tables, file contents, and other internal program states. This helps developers determine what’s gone wrong.

When:

* You need to save time to public your project to the market
* Need high test coverage
* Need Quickly Determine the Stability of Your Build
* Want to remove the repetitive element of manual testing

**Hoàng Thu Thủy - 20120382**

Why:

* Save time, effort and money.
* Increase the quantity and quality of the tests.
* High precision
* Execute large cases, which manual testing cannot do.
* Large-scale information gathering and easy data analysis.

When:

* Need to reduce project cost and time.
* The project is complex and cannot be tested manually.
* Tasks are repetitive for a long time.
* Important tasks, which require high accuracy and large number of tests.
* High frequency and number of tests
* Manual testing process does not work.