RPA Vs. Test Automation

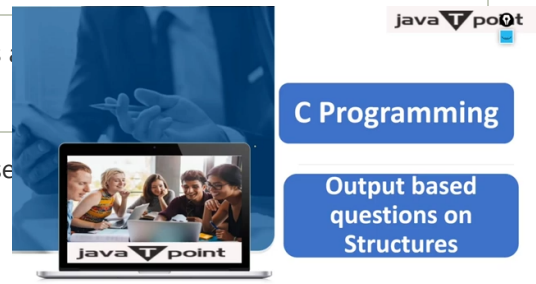
The terms **Test Automation** and Robotic Process Automation look similar as they both contain 'Automation' and offer the same features of reducing manual labor. But these two are different. Let's get started with the definitions:

Robotic Process Automation (RPA) is a software robot that can mimic human actions. RPA tools are used to design and deploy these software robots. These tools utilize pre-defined activities and business rules to autonomously execute a combination of tasks, transactions, and processes across software systems. RPA can deliver the desired result without human interaction.

Test Automation is a method in software testing that makes use of specialized tools to control the execution of tests. It further compares the actual results with the predicted ones. Test Automation is performed automatically with little or no interaction from the test engineer. It is an important stage of a development process that is used to add additional testing that may be difficult to perform manually.

Now, let's understand the differences between these two:

Test Automation	Robotic Process Automation
Test automation automates repetitive test cases.	RPA automates repetitive business processes.
Test automation can be applied only to the product and its features.	RPA can be applied to the product as well as other business processes.
Programming or coding knowledge is required to perform Test automation.	RPA provides a drag and drop feature to automate the tasks. Therefore, programming knowledge is not compulsory.
Test automation is implemented across different environments (i.e., QA, Production, Performance, UAT).	RPA only needs a single production environment.
Test automation can be used only by a particular set of users (i.e., Developer and tester).	All the individuals a
Test automation can be used with limited software example, Selenium only works is.	RPA can be use environments.



With the help of Test automation, only test cases can be automated.	RPA helps to automate tasks like data entry, loan processing, form-filling, etc.
Test automation helps in reducing the execution time.	RPA helps to minimise human workers.
Test automation works as a virtual assistant.	RPA works as a virtual workforce.
Test automation tools cannot be used for Robotic Process Automation.	RPA tools can be considered as testing tools at a basic level. However, these tools are not as good as test automation tools.
Test automation tools come with a constraint that they require software to run.	RPA can be applied to anything which is in a structured form. Hence, any testing tool exists in the market cannot be used as a RPA tool.
Test automation tools are intended to validate whether an IT application is performing as per the given specification.	RPA tools are expected to run on the business production environment to achieve business objectives.
Test automation can execute only what is coded in it.	Besides, many RPA tools have an AI engine that can process information like a human.
Some popular test automation tools are **"Selenium, HP - UFT/QTP, IBM - RFT, Appium, Jira,** etc.".	Some popular RPA tools are: **"Blueprism, Automation Anywhere, UiPath and NICE,** etc.".

← Prev Next →