The Ultimate Checklist for Selecting a Test Automation Tool

To keep up with faster release cycles, QA teams are turning to test automation tools to speed up their testing processes. When implemented successfully, testers can ensure both high-quality and high-quantity work that will support their companies' agile environment.

To better sift through the different tools on the market, here are some of the top questions you should ask when choosing a test automation tool. Keep in mind that no matter what you choose, no single test automation tool will satisfy all of your testing needs. When building your test automation technology stack, it is critical to set up specific goals for each tool you choose. Only then can you sufficiently determine whether or not that tool is right for your company.

We therefore recommend that you prioritize the issues that are most important to you while going through the checklist. We have allotted space to rank these test automation tool features accordingly in the "Priority" column.

	Vendor #1	Vendor #2	Vendor #3	Priority
Scope				
Types of test automation - Web / Mobile / Desktop				
Types of testing - Regression / Continuous / Load / Unit / Performance / API				
Types of testing methodologies - TDD / BDD / Agile / Waterfall / Scrum / Other				
What type of investment is expected beforehand for setting up an automation framework?				
Is there an on-premises version?				
Does this tool require any prior installation? Is it purely SaaS-based?				
On which coding language is the tool based?				

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Skills & Getting Started				
Does this tool require hiring people with coding skills?				
Are coding skills required for test creation? Or test modification?				
How long does it take to get started with the tool?				

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Test Creation & Modification				
What is the method of test creation? Visual / Record-and-Playback / BDD / Other				
How easy is it to create and modify tests?				
How much time does it take to create a standard ten-step test?				
How much time does it take to modify tests?				
Can multiple users work on the same test?				
Is it possible to use custom code as part of the test?				
Does the platform support "shift-left" testing?				
Is it possible to reuse previously created tests in future test scenarios?				

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Test Execution				
Does this tool offer a scheduling option for executing tests?				
How customizable is the tool's scheduling capabilities?				
What types of local resources are required for running tests?				
What integrations does this tool offer? Can it connect with a set-up CI/CD pipeline?				
Is it possible to execute tests in parallel across different browsers?				
Is it possible to export the code created?				

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Test Maintenance				
Does the tool include a self-healing mechanism?				
How accurate is this self-healing mechanism? (accuracy rate)				
In case a test breaks, how easy is it to locate the breakage reason and fix the test?				
What are the methods available to modify a test?				

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AI / Machine Learning Capabilities				
How does the tool use AI or ML in the test automation process (if relevant)?				
Does the company share validated stats for their tool's AI or ML capabilities?				
If so, what are the accuracy rates and misclassification rates of the tool's AI or ML technology?				

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Unique Capabilities				
Does this tool have these unique capabilities?				
• E-mail verification				
• Pop-up appearances				
• Data-driven testing				
• Versioning				
• Database validation				
• Defining or limiting a wait period				
• Testing iFrames & nested iFrames				
• Live editing & live debugging				
• Multi-platform support				
• Parallel executions				
• Reusing testing components				
• Random e-mail/password/number generator				
• Other (e.g. hover, test validation, etc.)				

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Reporting				
How does someone get alerted if a test breaks or there is an issue?				
What information is included in an alert?				
What is included in the reporting?				
How customizable is the tool's reporting?				

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Security				
What security certifications does this tool have (if any)?				
Does this tool comply with my company's security requirements?				
Is there an option to provision a VPN?				
What is the breakdown of user roles?				

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Support & Community				
What kind of support is available? Does the company offer a dedicated success manager?				
Is there a knowledge base to learn from?				
Is there a community knowledge base to take advantage of as well?				
Is there an active community?				
How can a new or current user benefit from the existing community?				

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Pricing				
What is included in the price of the tool? Consider the following:				
• Number of users				
• Number of test executions				
• Level of support				
• Integrations				
• Special features				
What is the best way to measure the ROI of this tool?				