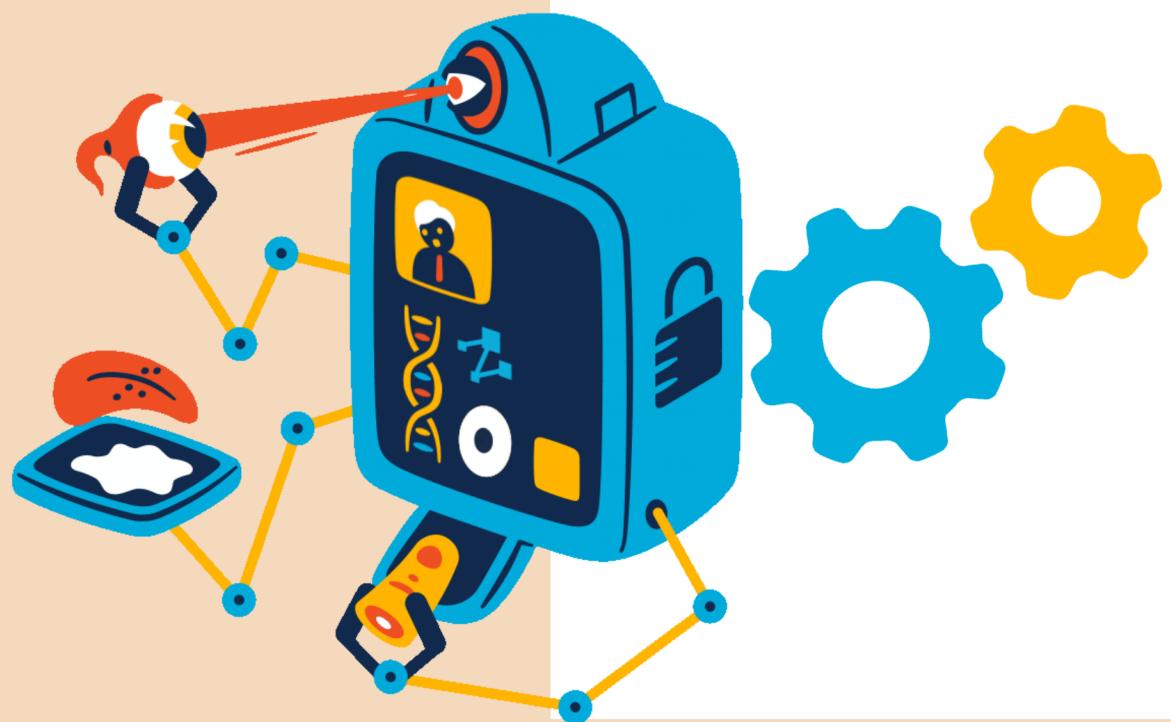


AUTOMATION TESTING BASICS



6

WHAT TO EXPECT



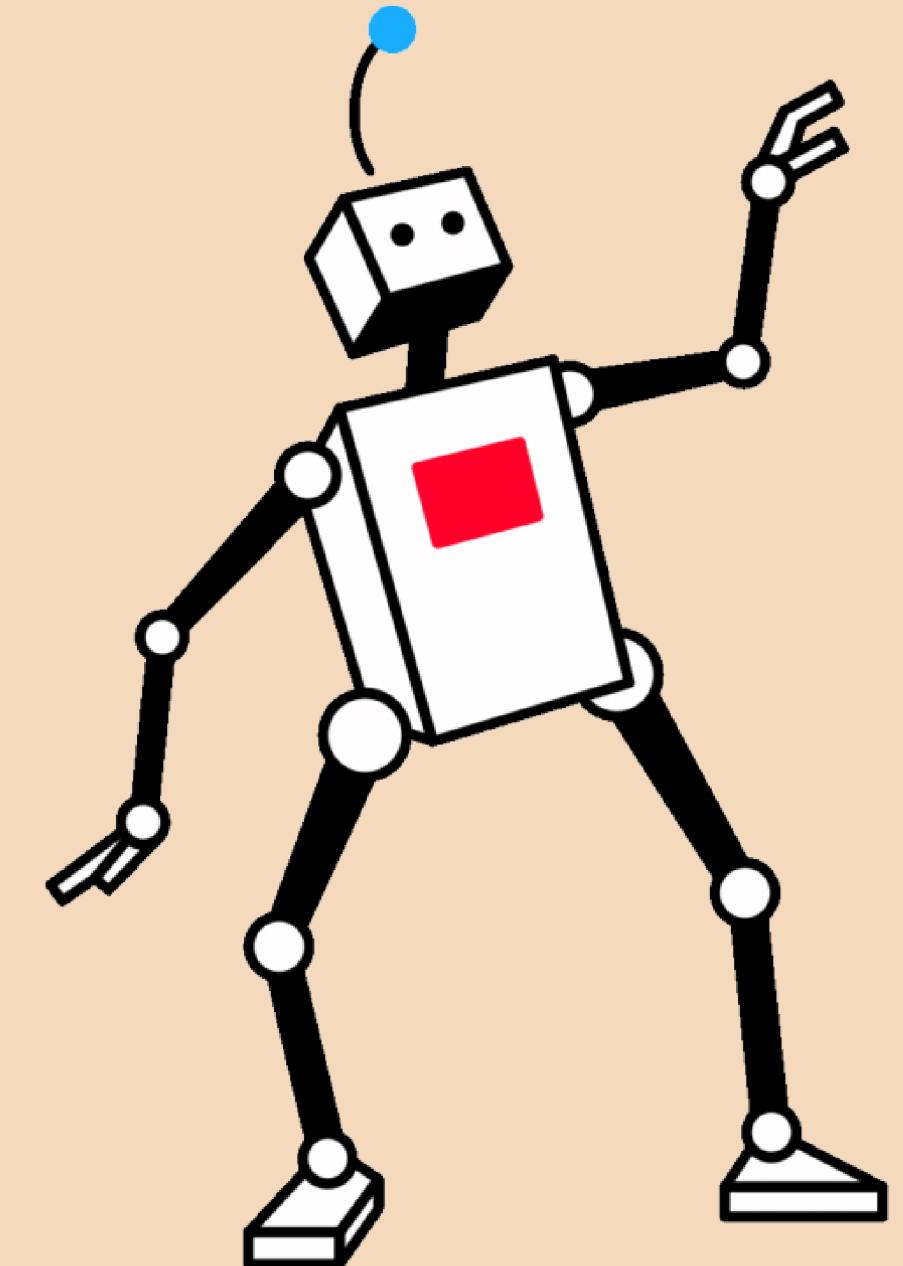
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Automation Testing - Intro

Imagine you have a magical robot friend named RoboTester.

RoboTester's job is to test computer programs and make sure they work perfectly, just like a superhero!

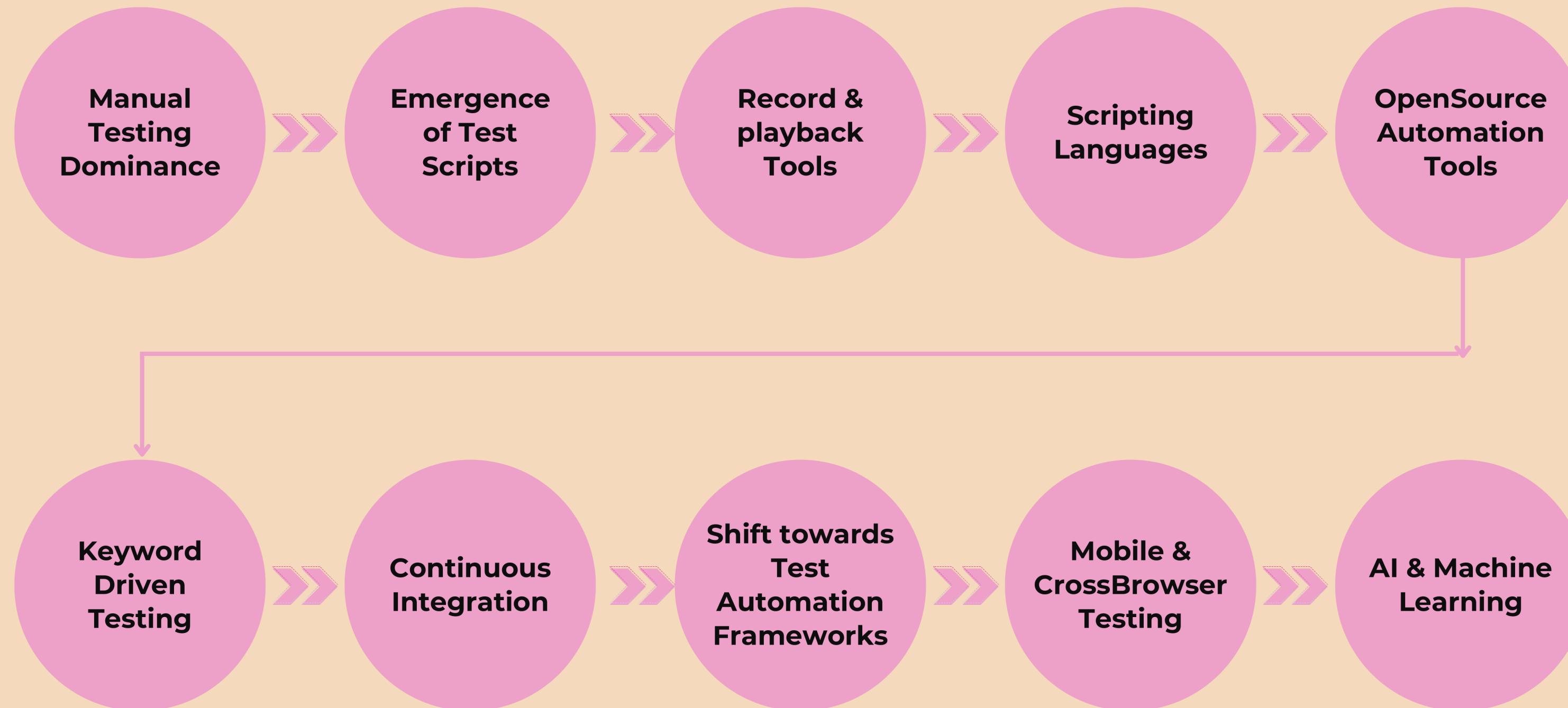
Now, think of RoboTester as your personal assistant for testing software. Instead of you doing the boring and repetitive task of clicking buttons and typing things on a computer all day, RoboTester does it for you.



Automation testing is like having your trusty robot sidekick who tirelessly tests software, ensures it works perfectly, and saves you from the boring and repetitive testing tasks. With RoboTester by your side, you're the superhero

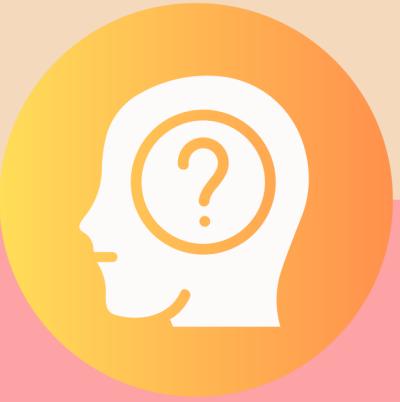
of software quality! 

Evolution of Automation Testing





Modern Automation Testing



Automation testing, a key component of 'shift left,' encompasses testing at multiple development phases, from unit to integration, with an emerging focus on 'shift right' testing for real-time production issue detection.

SHIFT LEFT AND SHIFT RIGHT TESTING



CI/CD practices are widely adopted, making automated testing an integral part of the software delivery pipeline. Tools like Jenkins, Travis CI, CircleCI, and GitLab CI are used for automating the testing and deployment process.

CONTINUOUS INTEGRATION/CONTINUOUS DEPLOYMENT (CI/CD)



Docker and Kubernetes are frequently used for creating test environments. Additionally, cloud-based testing services like AWS Device Farm, Bitbar, BrowserStack, and Sauce Labs provide scalable and diverse testing environments for automation.

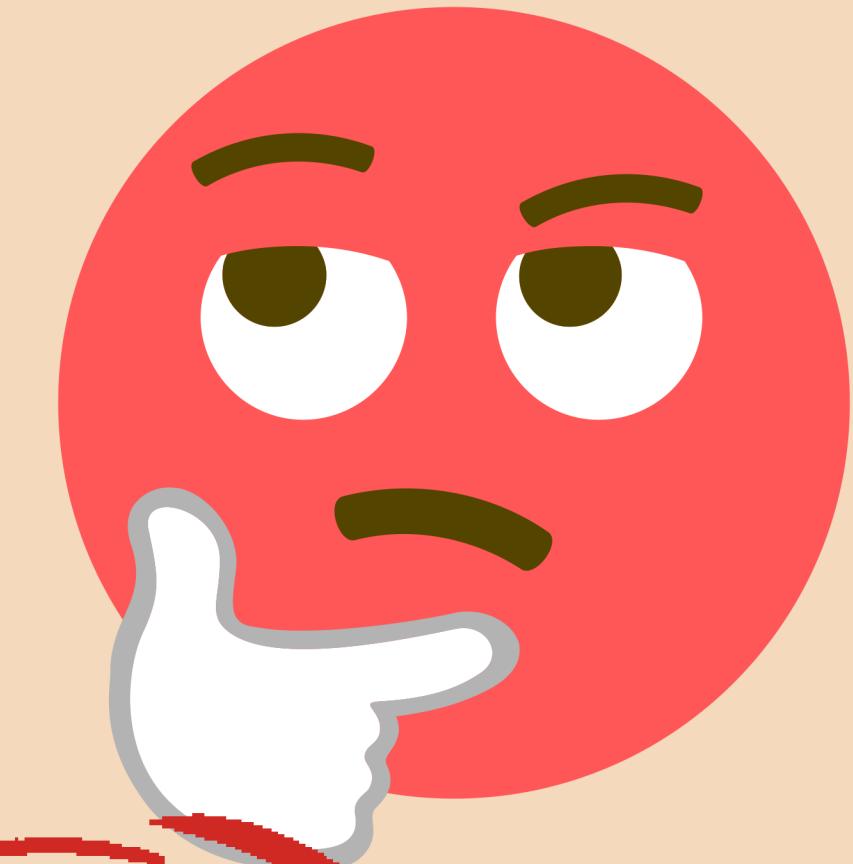
CONTAINERIZATION AND CLOUD TESTING



Artificial intelligence and machine learning are increasingly applied to automation testing to optimize test coverage, test maintenance, and test data generation. AI-powered test automation tools are capable of self-healing, automatically identifying and updating tests affected by application changes.

AI AND MACHINE LEARNING IN TESTING

What do we Automate ?

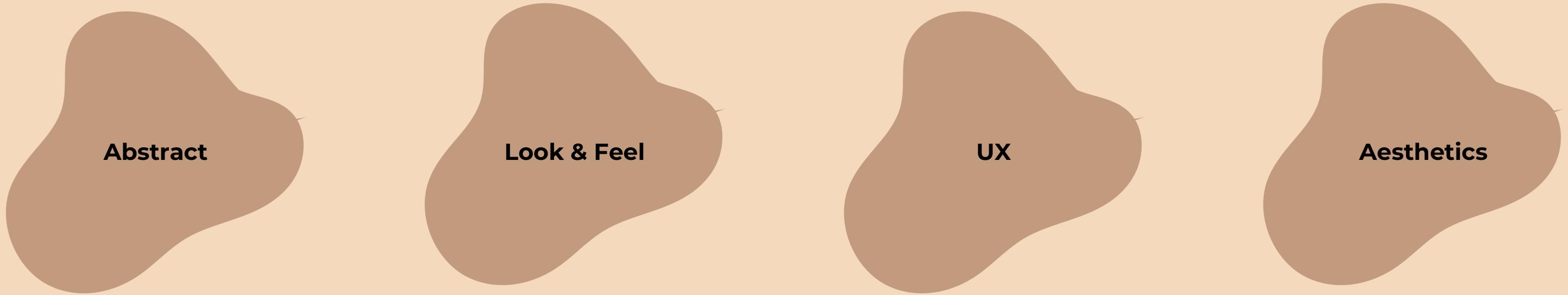


Test Execution of Test Cases

Choosing good candidates for Automation

Remember that not all tests are suitable for automation, and a balanced approach is often the best strategy. Careful planning and a clear understanding of your project's goals will help you select the right candidates for automation, improving the overall quality of your software.

What we shouldn't Automate

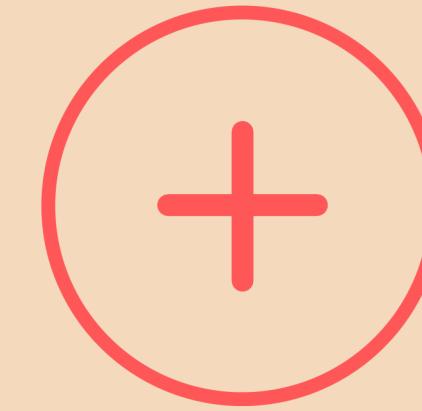


Example Test Case Description:

1. Open the web application and navigate to the homepage.
2. Manually inspect the layout, color schemes, fonts, and overall visual design.
3. Ensure that all images and graphics are visually appealing and of high quality.

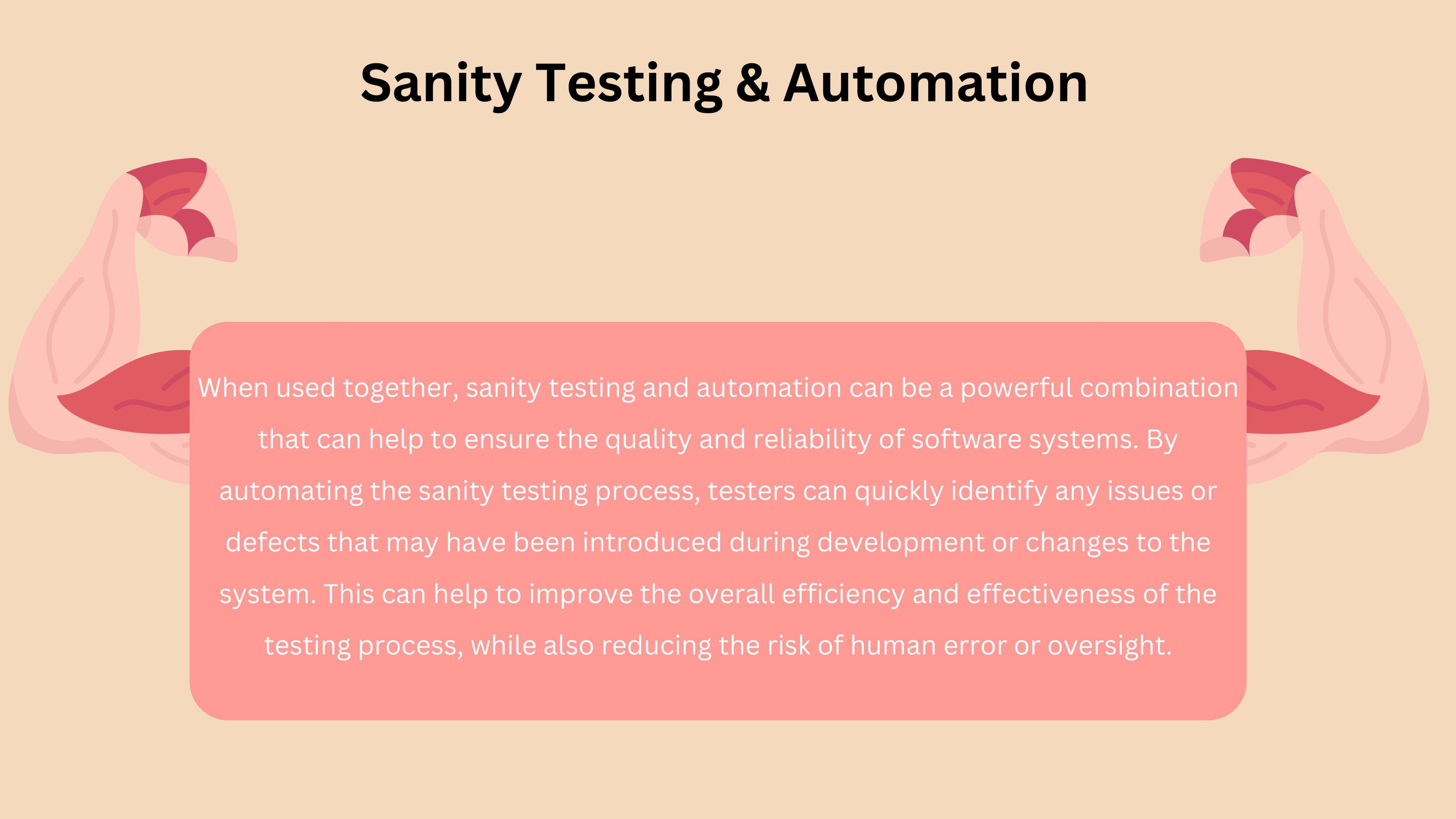
Sanity Testing & Automation

Sanity testing is an essential part of software testing that aims to evaluate the system's functionality and ensure that it meets the intended requirements. This type of testing is typically performed after the completion of a more extensive testing process, such as regression testing or integration testing.



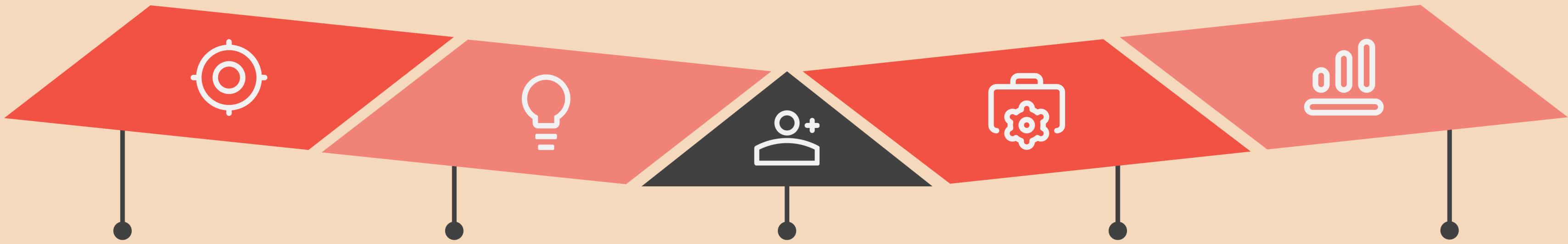
Automation, on the other hand, is the use of specialized software tools to execute tests automatically, without the need for human intervention. This approach to testing can help to reduce the time and effort required for testing, while also increasing the accuracy and consistency of the results.

Sanity Testing & Automation

A soft, pastel-colored background features a stylized illustration of a hand emerging from the right side, holding a single red rose with green leaves. The hand is partially hidden by a large, rounded red speech bubble that contains the text.

When used together, sanity testing and automation can be a powerful combination that can help to ensure the quality and reliability of software systems. By automating the sanity testing process, testers can quickly identify any issues or defects that may have been introduced during development or changes to the system. This can help to improve the overall efficiency and effectiveness of the testing process, while also reducing the risk of human error or oversight.

Automation Good Fits !



Automate Critical Test Scenarios

These core scenarios should be automated to ensure they continue to work as expected after each code change.

Regression Test Suites

These test suites should include a selection of automated test cases that cover the essential features and workflows of your application.

Parameterized Tests

Design your automation scripts to accept parameters so that you can quickly rerun the same tests with different inputs to cover various scenarios.

Environment Configuration

Automate the setup and configuration of the testing environment to ensure consistency between test runs.

Parallel Test Execution

To save time, run automated sanity tests in parallel on different environments or configurations if applicable.

Automation Benefits

Faster feedback

Automation allows you to execute sanity tests more quickly, helping your team identify critical issues early in the development cycle.



Consistency

Automated tests run the same scenarios consistently, reducing the risk of human error.



Frees up manual testers

Manual testers can focus on exploratory testing and more complex scenarios while automation handles the repetitive, essential tests.



Immediate integration with CI/CD

Automation seamlessly integrates into your CI/CD pipeline, providing continuous feedback on code changes.



Usual Automation Platforms



Web

Mobile

Desktop



“

See you in Next Video

