

How to test in Agile framework ?

Things QA need to do in Grooming session :

- QA, developers, and product owners work together throughout the sprint
- QA should highlight the gaps in the system and add suggestions or enhancement.
- QA should actively walkthrough the UI / UX design and add reviews on user perspective
- QA is involved in discussions about requirements to ensure t
- QA team should clearly quote their testing time required to create test plan , test design , test execution of the feature and Regression testing.

During Developement phase : QA should involve in the following process

Test Planning:

- Identify the scope of testing, objectives, resources, and timelines.
- Create a risk management to prioritize testing efforts.
- Identify automation opportunities.

Test Case Design:

- Based on requirements, create detailed test cases with all the coverage
- Always include test scenarios with the following
 - 1.Positive
 - 2.Negative
 - 3.Boundary
 - 4.Edge cases.
- Trace test cases back to requirements to ensure full coverage

Peer review :

- QA should send the test cases or test scenarios drafted to the lead or peer for the internal review
- After peer review , address the review comments and attach final Test cases to the respective User story for the execution

Test Environment Setup:

- Please make sure the environment is ready for the testing phase with all the possible configurations

Testing phase : QA actively perform in test execution

Test Execution:

- Perform smoke test to ensure stability of the build
- Execute manual and automated test cases [if applicable]
- Record the results of each test case
- Re-run tests after developers fix defects and close the logged defects.

Defect Management :

- Log defects in the defect tracking tool
- Track and manage defects using a defect tracking system
- Assign severity and priority to defects based on business impact.
- Ensure a clear communication flow between developers and testers.
- Retest after defect fixes to validate resolutions.

Once the assigned features or deliveables or tested and closed without any high priority defects in [Test environment] QA is ready for regression phase of testing.

Regression testing :

- Integration environment should be ready with all the configurations
- QA performs regression testing [Manual and automation] and verifies that existing functionality works as expected after changes have been made.

Once the Regression testing is done QA generates the Test report:

- Generate the summarised test execution reports of Regression testing , Performance testing , Security testing and Automation testing
- Communicate test results with stakeholders.
- Provide final sign-off when exit criteria are met

UAT :[Depends on the stakeholders and deliverable item]

- Allow end-users or stakeholders to test the application.
- Ensure that the product meets the expectations before going live.

Production testing:

- Perform smoke test in the production environment.
- Conduct performance and defect monitoring in the live environment.

When should test cases be written, and who should see them?

Usually test design activities will be initiated by the QA during the development phase of the sprint

QA will actively work on the following :

- Test scenario and test case creation in test management tools
- Incorporating the peer review comments.
- Updating the JIRA tickets on the test design completion
- Test case refactorization and optimization [if necessary]

Who should see them ?

- QA Team and SDET's
- Product owners
- Developers
- Stakeholders [if required]

How do you perform regression testing?

- Identify the areas to test based on the impact of the changes

Test suite creation

- Create the regression test suite with existing ,updated and new test cases.
- Create the automation test suite for repetitive and critical regression tests.

Run the Regression Tests with device specific [Mobile , Web ,

- Run manual regression suite and record the test results
- Run automation test script and record the test results

Analyse Test Results

- Review Failures: Analyse automation test failures carefully to determine whether they are genuine issues or false positives
- Debug and Log Issues: Work with developers to log and fix any bugs discovered during regression testing.

Rerun tests :

- After any bugs are fixed, rerun the failed tests to ensure that the software remains stable and no further issues are introduced.

Report Results :

- Document and report the test results to QA Lead , Product owners and provide insights on the stability and quality of the software post-changes.

How do you prioritise the test case ?

- Focus on test cases with priority to verify critical and high-risk business functions.
- Add tests that cover the code and modules where recent changes or bug fixes have been made.
- Add test cases that cover the most frequently used features or functionalities should be prioritised because any new issues in this area would affect a larger number of users.
- Add test cases that verify features directly impacting end-users or customers
- Review and adjust prioritisation after each cycle based on test outcomes.
- Optimise for automation where possible to expedite testing.

How do you decide what test cases to write and What should be included?

- The test case should always focus on the business requirements , functional and non-functional requirements.
- Think from the user's perspective and create test cases that reflect how users will actually interact with the product.
- Consider different test environments (browsers, operating systems, devices).
- Always try to add test case with preconditions , test data , priority
- Test case should always have these coverage
 - 1.Positive
 - 2.Negative
 - 3.Boundary
 - 4.Edge cases.