

A Quick Overview:

Checklist for Performing Regression Testing





Identify Scope of Regression Testing

Review Recent Changes: Focus on the new features, bug fixes, and any other modifications made since the last release.

Assess Impact: Determine which parts of the software might be affected by the recent changes to identify the scope of testing.



Update Test Plan

- Incorporate New Test Cases: Add test cases for any new features or changes.
- Remove Obsolete Tests: Eliminate tests that are no longer relevant due to the recent changes.
- Prioritize Test Cases: Rank test cases based on the impact of changes, critical functionality, and past defect hotspots.



Prepare the Test Environment

- Replicate Production Environment: Ensure the test environment closely mirrors the production environment to detect environmentspecific issues.
- Gather Test Data: Prepare or update the test data needed for regression testing, including data for new test cases.



Automate Where Possible

- Identify Test Cases for Automation: Choose repetitive, high-priority, and stable test cases that benefit most from automation.
- Update Automated Scripts: Revise existing automated test scripts to accommodate recent changes.
- Validate Automation Scripts: Ensure automated scripts work as expected in the updated test environment.





Execute Regression Tests

Manual Testing: Carry out manual testing for areas difficult to automate or needing human judgment.

Automated Testing: Run automated regression tests, focusing on critical areas affected by recent changes.

Monitor Test Execution: Track the progress of test execution, noting any failures or issues encountered.



Analyze Test Results

- Review Failures: Investigate and analyze any test failures to identify defects or issues introduced by recent changes.
- Document Findings: Record detailed findings, including steps to reproduce, screenshots, and logs, to facilitate issue resolution.



Prepare the Test Environment

- Replicate Production Environment: Ensure the test environment closely mirrors the production environment to detect environmentspecific issues.
- Gather Test Data: Prepare or update the test data needed for regression testing, including data for new test cases.



Communicate Findings

- Report to Development Team: Share detailed reports of any issues or defects with the development team for prompt action.
- Collaborate on Fixes: Work closely with developers to ensure that identified issues are understood and addressed.





Retest and Close Loop

Retest Fixed Issues: Once fixes are implemented, retest the affected areas to confirm that the issues have been resolved.

Regression Cycle: Depending on the extent of changes and fixes, consider another regression testing cycle to ensure comprehensive coverage.



Update Regression Test Suite

- Incorporate Lessons Learned: Update the regression test suite based on insights gained during testing, adding new test cases as necessary.
- Optimize for Future: Continually refine and optimize the regression testing process and test suite for efficiency and effectiveness in future cycles.



Prepare the Test Environment

- Replicate Production Environment: Ensure the test environment closely mirrors the production environment to detect environment-specific issues.
- Gather Test Data: Prepare or update the test data needed for regression testing, including data for new test cases.

