**Phases in STLC corresponding to SDLC**

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| **Phases in SDLC** | **Phases in STLC** |
| **Requirement Gathering** | **Requirement Analysis** |
| **Analysis** | **Test Planning** |
| **Design** | **Test Design** |
| **Coding** | **Environment Setup** |
| **Testing** | **Test Execution** |
| **Deployment** | **Test Closure** |

### Requirement Analysis

During this phase, feature requirements collected in the SDLC process are evaluated to identify testable aspects.These requirements can either be functional or non-functional. The ability to automate testing is also evaluated during this phase.

**Test Planning**

During this phase, the test strategy is outlined in a test plan document. This strategy includes tools needed, testing steps, and roles and responsibilities. Part of determining this strategy is a risk and cost analysis and an estimated timeline for testing.

**Test Case Development**

During this phase, test cases are created. Each case defines test inputs, procedures, execution conditions, and anticipated results. Test cases should be transparent, efficient, and adaptable. Once all test cases are created, test coverage should be 100%.

**Test Environment Setup**

During this phase, testing environments are configured and deployed. This phase may include a variety of testing tools, including TestComplete, Selenium, Appium, or Katalon Studio. Sometimes, this phase also includes setting up test servers. Once environments are deployed, smoke tests are performed to ensure that environments are working as expected with all intended functionality.

**Test Execution**

During this phase, features are tested in the deployed environment, using the established test cases. Expected test results are compared to actual and results are gathered to report back to development teams.

**Test Cycle Closure**

This is the last phase of the STLC, during which a test result report is prepared. This report should summarize the entire testing process and provide comparisons between expected results and actual. These comparisons include objectives met, time taken, total costs, test coverage, and any defects found.