**Test strategy**

Test strategy is a high level document which defines the approach for software testing. It is basically derived from the Business Requirement document. Test strategy is developed by project manager or business analyst. It is kind of static document which sets the standards for testing so not updated often and where we agree that you are going to perform

let’s say Functional, Smoke, Performance, Security, Automation Testing during that time period.

Environment Details, highlight the Risk Areas, It can include Test Data requirements and Test Estimate hours per each requirement and testers.

**What is test strategy?**

As the name suggests, test strategy means strategy employed to test a particular software application. In other words, a Test Strategy is an outline or approach to the way testing will be carried out in the software development life cycle. Its purpose is to define the exact process the testing team will follow to achieve the organizational objectives from a testing perspective.

**Test strategy approaches**

The different approaches to test strategy that are employed are-

1. **Analytical approach** – This approach is based on risk analysis based on the project’s requirements and different stakeholder’s input. Based on this risk analysis, a test strategy is developed to plan, design, and prioritize the testing efforts.
2. **Model-based approach** – This approach uses various statistical models for developing a test strategy.
3. **Consultative approach** – In this approach, a test strategy is developed based on consultation with technology or domain experts.
4. **Methodical approach** – This approach is simply based on using a pre-defined set of testing approaches that may relate to a particular type of application testing.
5. **Dynamic or Heuristic approach** – The [heuristic approach developed by James Basch](https://www.satisfice.com/download/heuristic-test-strategy-model) is based on the exploratory techniques instead of pre-planned.
6. **Standard-compliant approach** – With this approach the test strategy is prepared based on the industry standards and processes.

**What is a test strategy document?**

A test strategy document is a **high-level document describing the way testing will be carried out**. In this, we document the test objectives and set of guidelines for achieving those objectives. It is presented by the project manager to all the stakeholders in the testing process. It can have a scope of an entire organization or a particular project.

**Preparing a test strategy document**

Let’s discuss the different steps performed during preparation of a good test strategy document.

**Scope and overview** – Here, we define the project overview in brief along with the intended audience of the document. Also, the testing activities are defined along with their timelines.  
The person/stakeholders reviewing and approving the document are also mentioned in this section.

**Test Approach** – In this step, the complete testing process is defined along with the roles and responsibilities of each team member.  
Things like the type of testing to carry out, use of automation tools, etc, are also defined in this section.

**Test Environment** – In this step, we define the different testing environment used in the testing process. For example, there could be separate testing environment for different set of member/stakeholders.

**Tools** – Here, we can define the different tools used for different operations like – tools for test management, automated testing, performance testing, security testing, etc.

**Release Management** – In this section, a release management plan is defined that helps in maintaining an appropriate version history.

**Risks and Mitigations** – Here, the different risks associated with testing are defined along with their mitigation strategies.

**Review and Approvals** – The different activities sections are reviewed and signed-off by the different stakeholders.  
And the revisions made to the document are traced and mentioned at the beginning of the document.

**Test Strategy Document Template**

A test strategy document can contain the following fields-

* **Test Strategy Id** – An identifier of the test strategy document and its various versions.
* **Introduction** – A brief introduction to the purpose and scope of the document.
* **Standards to use** – The different standards or set of guidelines to be followed.
* **Risks and Mitigations** – The different risks associated with testing and their mitigation strategies.
* **Entry Criteria** – The set of pre-requisite that must be performed before testing can start.
* **Exit Criteria** – The criteria defining when the testing can be stopped.
* **Test design techniques** – The test design techniques to be used like – equivalence partitioning, boundary value analysis, etc.
* **Test environment** – The test environment specifications.
* **Configuration management of testware** – Specification of the right version of testware for testing.
* **Test process improvement** – The approaches to use for improving the test process.
* **Approvals** – The persons approving the test strategy document.