



NEWSLETTER

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How To Start With Test Estimation



What is test effort estimation?

Test effort estimation is a key activity in test planning. A well-thought effort estimate helps to rightly plan the testing phases, allocate the required resources and schedule the testing activities. Irrespective of the SDLC models that you have for your testing project, a certain level of effort estimations is needed. Test effort estimation is a key activity in test planning.

Test Estimation Technique

One of the widely used techniques for test estimation is the 'Work Breakdown structure'. The other common effort estimation techniques are '3-Point Software Test Estimation Technique', 'Functional point method' and 'Poker game technique' etc.

Work Breakdown structure

For a testing project, test activities at a high level can be divided into the following:

1. Requirement Analysis & Exploratory Testing

An application's requirements must be clearly understood before any testing can begin. A quick way to understand these is to review the mock screens/wireframes.

2. Preparation of test data

Test data preparation is an activity that involves setting up some pre-conditions in the application that are needed to write/execute a test case. This activity depends on the application prototype, if available. Depending on the size and complexity of an application, an effort of 1 to 2 weeks of time is needed for any tester to get a sense of the requirements.

3. Test Design Estimation

It is a process, which describes how testing should be done. It also includes creating test cases based on defined test conditions as well as preparing test data. The key activities involved in this process are:

(1) Identify a List of Test Scenarios

Mind maps can be used as tools to capture the collective thoughts on test scenarios. This is the basis for calculating test design effort estimations. Depending on the length and complexity of the application, this activity could take anywhere from a few days to a few weeks. The testing team could brainstorm together and list out the possible test scenarios in their mind maps.

(2) Writing Detailed Test Cases

Effort estimation for writing a detailed test case can be calculated based on the following parameters and categories:

· Number of test steps · Number of test verifications

The below example is just indicative and could vary across projects,

Category	Effort estimates for writing detailed test case
Test case having =<10 steps/verifications =	Sminutes
Test case having >10 & <20 steps — Moderate	10 minutes
Test case having >20 steps - Complex	20 minutes

The effort estimate for test design would be:

(# of simple test cases * 5 mins) + (# of moderate test cases * 10 mins) + (# of complex test cases * 20 mins) + Brainstorming effort for ideating test scenarios

4. Test Case Execution

Test execution is the process of executing the test cases that were identified and designed in the application, by comparing the expected and actual results. The activities involved in this task are:

- · Preparation of test data/test environment
- · Execute the test cases and mark test result

complexity of the application, tools available to set up the test data and could take anywhere from a few days to a week.

Features or characteristics of test data preparation tools are as follows:

























































