Test Strategy template - QA

By - **Pankaj Gupta**

XX May, 20XX

Table of Contents:

1. Scope and Overview

[What is the objective and scope of testing if it is performed under a well-defined testing strategy.]

Identify the requirement clearly and make sure that the tester knows what to Test.
Get all the requirement documents or Design and be cleared what is the scope of that particular release.

2. Business Issue

[*Here, you need to check the project budget, how much time is needed for the testing, how much total resources are needed etc. These issues should be addressed in advance before actual testing starts.*]

Here, discuss with the project manager and Team how much feature we are going to develop for that particular release and plan for resources and time accordingly.

3. Test Approach

[In this step, you need to check the testing type like performance testing, load testing, stress testing, or functional testing etc. Also, you need to decide whether the testing is done manually or it needs to be automated. In a few cases, we have to follow both approaches together.]

Go through Requirement/Design doc:

1. Get a clear understanding about what needs to be done for that particular sprint/Release.
2. Once the Requirement is cleared then proceed to prepare the Test documents.
3. If you have any requirement related confusion get it cleared from the Project Manager and concern team.

Prepare Test Cases

1. Write the Test Scenario and do self review

2. Get review done from other peers for Test Scenario
3. Once review is done, Start writing Test cases and do self review
    i. [*To refer Test cases template- Refer My courses*]
4. Get review done from other peers for Test cases

Test Execution

1. Prepare the test data or if any country specific data is required please get in touch with your Project manager and get the data at an early stage.
2. Execute all the Test cases in TestRail and update all the issues from time to time as per developer comments.

4. Test types

- ❏ **Mobile application testing (Android and iOS)**
- ❏ **API testing**
- ❏ **Web application testing**

Functional

1. **Unit testing** - The goal of unit testing is to segregate each part of the program and test that the individual parts are working correctly. This is done by developers.

2. **Smoke Testing** - also known as “Build Verification Testing”. The result of this testing is used to decide if a build is stable enough to proceed with further testing.

3. **Sanity Testing** - It is the surface level testing where a QA engineer verifies that all the menus, functions, commands available in the product and project are working fine.

4. **Integration testing** - It is a level of software testing where individual units are combined and tested as a group.

5. **System testing** - It is a black box testing technique performed to evaluate the complete system's compliance against specified requirements.

6. **Regression Testing** - It is defined as a type of software testing to confirm that a recent program or code change has not adversely affected existing features.

7. **User Acceptance testing** - It is defined as a type of testing performed by the Client to certify the system with respect to the requirements that was agreed upon. This testing happens in the final phase of testing before moving the software application to the Market or Production environment.

Once all the functionality is stable, QA has to start with Non- Functional Testing.

Non-Functional

1. **Compatibility Testing** - It is a type of Software testing to check whether your software is capable of running on different hardware, operating systems, applications, network environments or Mobile devices.

2. **Performance Testing** - It is the process of determining the speed, responsiveness and stability of a computer, network, software program or device under a workload.

3. **Security Testing** - It is a type of software testing that intends to uncover vulnerabilities of the system and determine that its data and resources are protected from possible intruders.

5. Roles and responsibilities

Roles	Responsibilities
Project manager	-Handling the entire project end to end and communicating with clients. -Managing team Dev+QA as per the requirement -Responsible for daily standup meeting, day to day activity and Sprint planning
Developers	-Builds and owns the systems to support various applications, products, and services -Solving large complex problems -Creating high-level requirements into interaction flows and artifacts, transforming them into beautiful, intuitive and functional user interfaces
Engineering Manager	-Consistently delivers with respect to team deliverables with respect to the parameters identified while ensuring team has

	clear visibility -Drive the focus of a team of experienced engineers, leading them to a common technical goal -Closely work with a cross-functional team of developers, Business, and quality analysts to specify, design, develop, test, and implement software -Work closely with the Development Manager and supervise the development team, delegate tasks, mentor, and encourage best practices in line with the execution plan identified
QA Manager	-Instilling best practices for test suite automation and frameworks and documentation, making sure designs meet requirements, and delivering high quality software on tight schedule -Plan, direct or coordinate quality assurance programs and formulate quality control policies
Dev-Ops Engineer	-Understand the needs and challenges of a client across operations and development -Partner to formulate solutions that support their business and technical strategies and goals
Product Solution Engineer	-Ensuring continuous improvement and evolution of Production Systems by making sure along with the engineering teams that certain activities are executed which helps to communicate and resolve incidents
QA	-Understanding end to end flow of requirement -Prepare Test Scenario after going through Requirement -Prepare Test Cases - In details document with steps -Responsible for peer review (Test cases Review) -Execute test cases in TestRail and raise bugs in Jira -Give demo to client

6. Environment requirements

Hardware

Get all the hardware requirements like devices and operating, if any dependency is there please do discuss with the respective manager at an early stage.

Software

Get all the required software installed to perform testing, if any dependency is there please do discuss with the respective manager at an early stage.

7. Testing tools

[Automation: If the software project needs automation testing then the script language, tools, reporting, code maintenance is planned in the test strategy]

Test management tool

TestRail- For writing the Test cases and Executing the Test Cases

Bug tracking tool

JIRA- For Bug Tracking

Automation tool

Selenium WebDriver- For UI Automation
RestAssured/Postman tool- For API Automation
Appium- For Mobile App Automation

8. Industry standards to follow

Testing models

Agile- Methodology : AGILE methodology is a practice that promotes continuous iteration of development and testing throughout the software development life cycle of the project. Both development and testing activities are concurrent unlike the Waterfall model.

Procedures

- Daily Stand ups
- Sprint planning - Estimation of Dev and QA
- Retrospective of sprints

9. Test deliverables

[Here, you will check which documents are needed by the testing team and how they would keep the records of testing cycles]

Release Notes

Release notes is a document, which is released as part of the final build that contains new enhancements that went in as part of that release and also the known issues of that build.

Test Cases

A test case describes an input, action, or event and an expected response, to determine if a feature of a software application is working correctly. A test case may contain particulars such as test case identifier, test case name, objective, test conditions/setup, input data requirements, steps, and expected results.

Test Execution Report

Test execution report is a document which contains a summary of test activities and final test results.

10. Defects Tracking

[This is the right time to decide on the tool for defect tracking and how will the testing team communicate with the development team. Also, you need to check how defects can be addressed at this point in the test strategy]

All the bugs should be reported via JIRA to the developer. Also link jira with TestRail Test cases.If we don’t have time we can use google sheet for sometimes to raise the bugs and share the same with the team.

11. Training

[In case, the tool is new or complex then team members should be given proper training. Also, you should define which type of training is needed for employees]

If any tool is new and if QA is not aware of that, do plan a KT session with the respective team and person and get the KT done.

12. Risks and mitigation

[It is not possible to identify all the risks before the project development but obvious risks can be avoided before they occur]

QA has to test all the edge cases or critical scenarios like money movements and all at an early stage of testing. Still if some minor issues are there, then comments should be added in Release notes as Known issues.
Mitigation: In mitigation, we take preventive measures to reduce the likelihood of the risk or to reduce the impact of the risk in case it occurs.

Version No	Prepared By/Reviewed By/Approved By	Description	Date
1	Pankaj Gupta	Initial Draft Prepared	/**/**

—---------- End —----------

Get Complete Software Testing Knowledge by enrolling in below courses.

Software Manual Testing
https://www.udemy.com/course/software-manual-testing-course/?referralCode=14CF21D04D3C99F3C14E

Software Testing Live Project
https://www.udemy.com/course/software-manual-testing-live-project/?referralCode=1F95EA84C42056B4B1D2

Complete SQL with Practicals
https://www.udemy.com/course/complete-sql-course-qadata-analyticsbusiness-intelligence/?referralCode=D8A52876E0D754934D05

Refer Next Page → Become Automation QA/SDET

Complete Automation QA / SDET Packages - Become Automation Engineer

Java - Selenium
https://www.udemy.com/course/selenium-webdriver-with-java-testng-maven-git-jenkins/?referralCode=50B844906A246649DFDB

Python - Selenium
https://www.udemy.com/course/selenium-using-python/?referralCode=3130F658A75C0F309314

Java - RestAssured : API Testing
https://www.udemy.com/course/api-webservices-automation-testing/?referralCode=B73B2600281FB8674B49

Python Request : API Testing
https://www.udemy.com/course/api-testing-with-python/?referralCode=C6FDD6F97830D9ABA1EA

GIT / Bitbucket for Daily SDET Job
https://www.udemy.com/course/learn-git-from-basic/?referralCode=EA46C26F3FDC939B1835

Learn Complete Java
https://www.udemy.com/course/java-for-beginner/?referralCode=706A7AAAB9849C8DC1F7

Learn Complete Locator with multiple Practicals to be expert in UI Automation Selenium & Appium
https://www.udemy.com/course/learn-element-locators-css-selector-and-xpath-from-scratch/?referralCode=524C2EE783215169E991