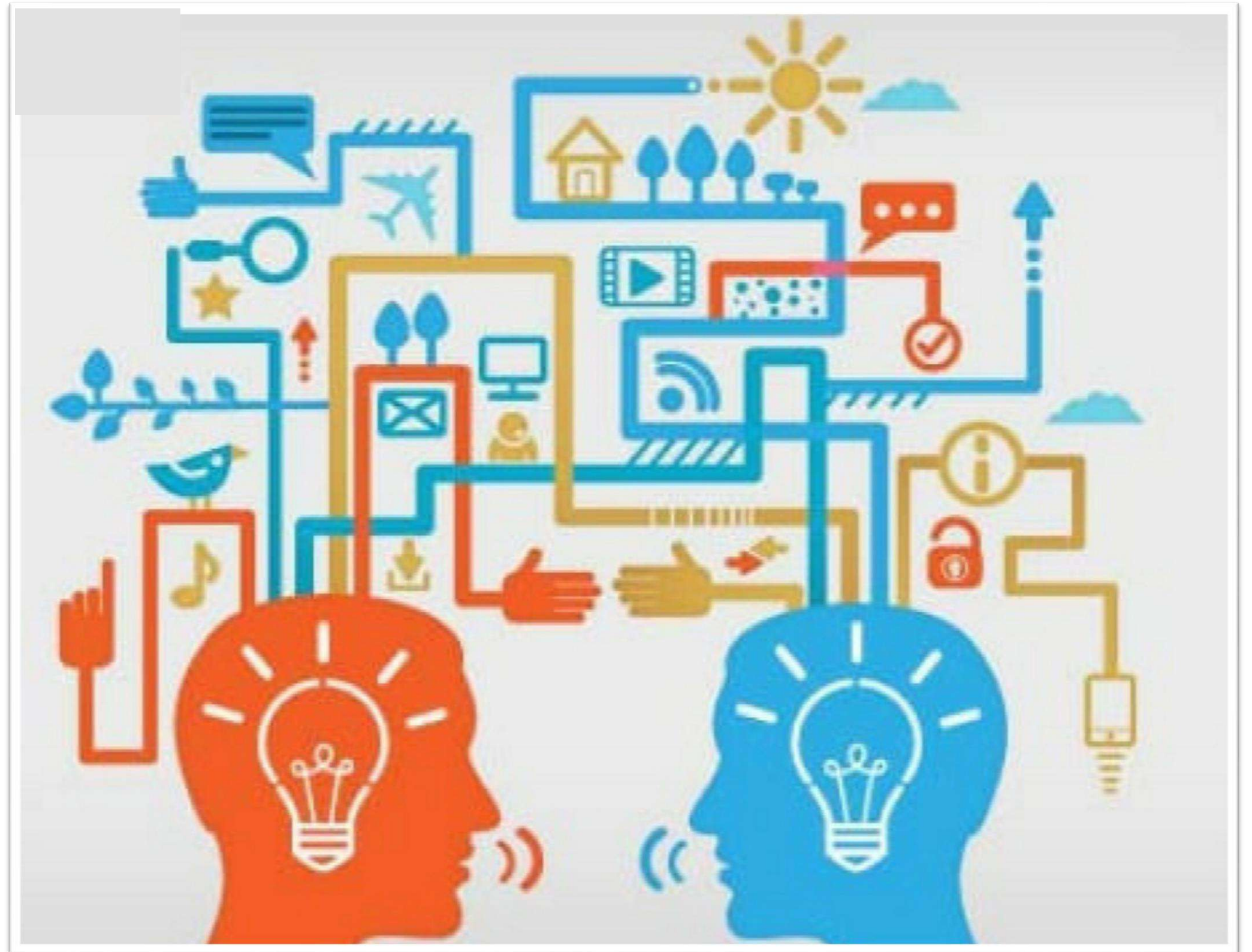




**DataArt**

# Plan

- Test Strategy vs Test Plan
- Test case
- Test suite
- Check lists



# Test Plan and Test Strategy

# Test Strategy



A **Test Strategy** is a plan for defining an approach to the Software Testing Life Cycle.

Scope	Test approach	Test Environment	Testing tools	Risks	Approvals
<ul style="list-style-type: none"><li>• Who will review and approve the document?</li><li>• Testing activities with timelines</li></ul>	<ul style="list-style-type: none"><li>• Process of testing</li><li>• Testing levels</li><li>• Roles and responsibilities</li><li>• Types of testing</li></ul>	<ul style="list-style-type: none"><li>• Number and setup envs</li><li>• Backup of test data</li></ul>	<ul style="list-style-type: none"><li>• Auto</li><li>• Test Management tools</li></ul>	<ul style="list-style-type: none"><li>• List all risks</li><li>• Plan to mitigate</li></ul>	<ul style="list-style-type: none"><li>• All reviewed</li><li>• All signed off</li><li>• Review changes traced</li></ul>

# Test Plan

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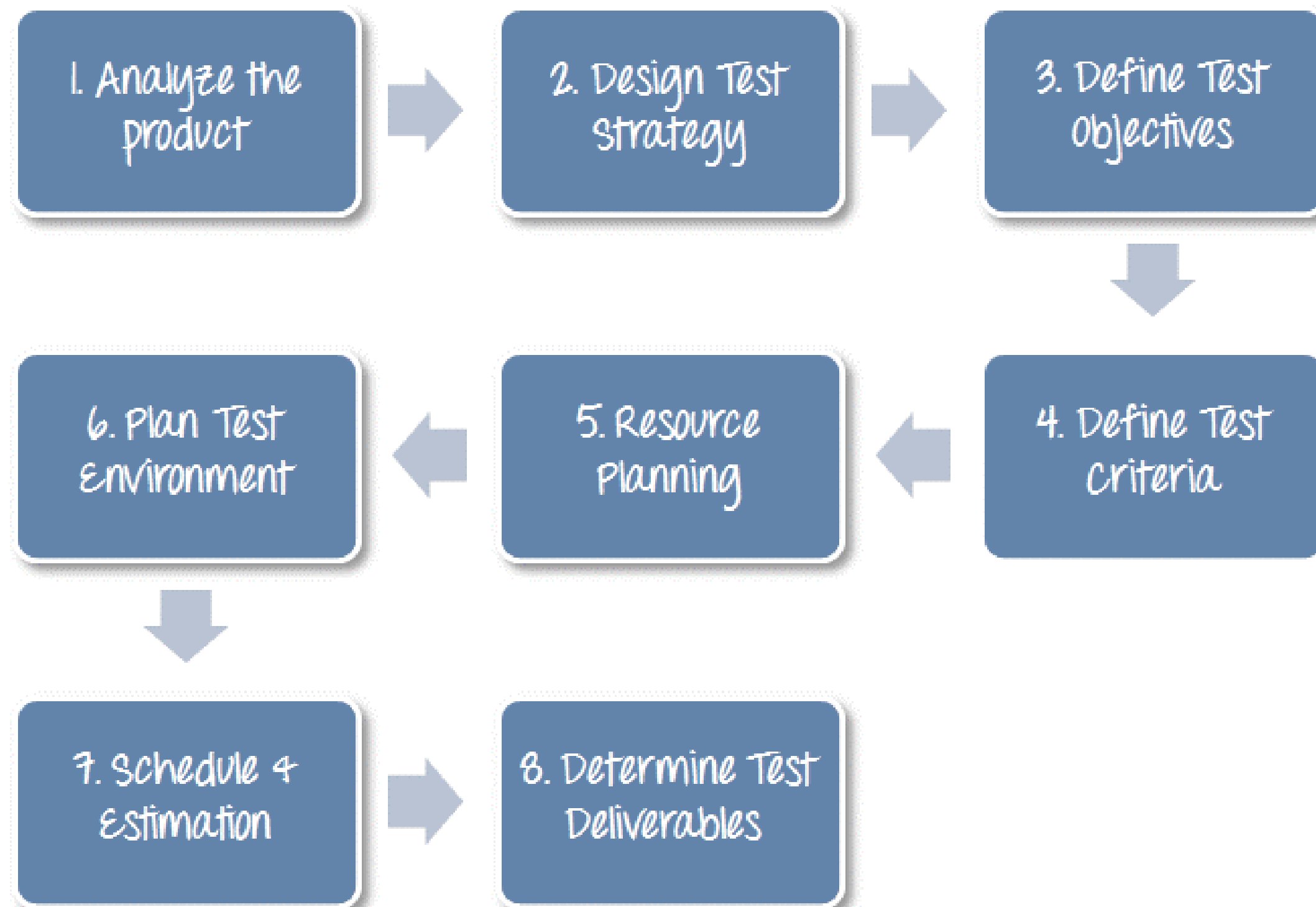
As per **ISTQB** : "Test Plan is a document describing the scope, approach, resources, and schedule of intended test activities."

## Types:

- Master Test Plan
- Test Plan (Detailed)
- Product Acceptance plan



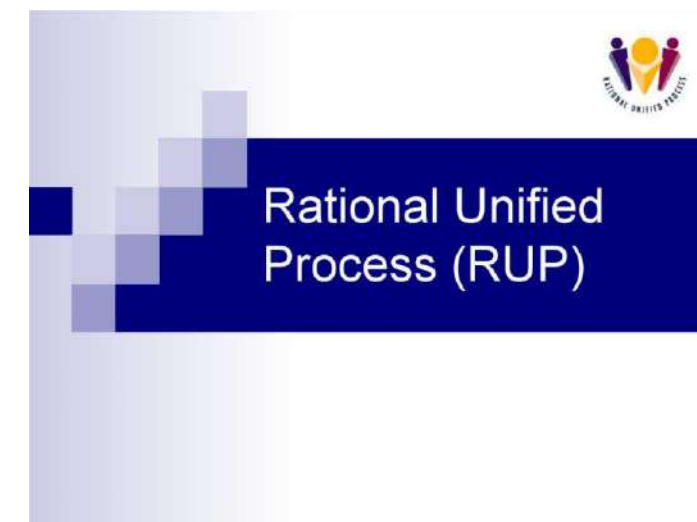
# How to write a Test Plan





# Sections in Test Plan

- Introduction
- Scope (What will be tested and what not )
- How it will be tested
- Who it will be tested
- When it will be started
- When it will be finished
- Project milestones
- Risks
- Deliverables
- Signatures





Test Plan



Test Strategy



# Test Plan VS Test Strategy



Test Plan	Test Strategy
It's a <b>detailed</b> document that objectives, schedule, estimation, deliverables, and resources required to perform testing for a software product	It's a <b>high-level</b> document with a set of guiding principles that determines the test design & regulates how the software testing process will be done.
A test plan exists <b>individually</b>	Test strategy <b>can be a section</b> of a test plan
Test plan <b>can change</b> ;	Test strategy <b>cannot be changed</b> ;
Test plan narrates about the <b>specification</b> ;	Test strategy narrates about the <b>general approaches</b>
It is defined at <b>project</b> level	It is set at <b>organization</b> level and can be used by multiple projects

# Test Plan Benefits

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- Help people like test team, developers, business managers, customers **understand** the details of testing.
- Test Plan **guides** our thinking.
- Important aspects like test estimation, scope, deliverables are **documented** and **approved** in Test Plan





# What is a Test case?

A set of preconditions, inputs, actions (where applicable), expected results and postconditions, developed based on test conditions.

Steps	Expected result	Actual result	TC Status
Do A1	Verify B1	As expected	Pass
Do A2	Verify B2	C1	Fail
Do A3	Verify B3	Can't execute	Blocked



# By Expected Result

---





# Test Case fields

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- Test Case ID (unique)
- Name / Title
- Priority
- Objective/ Test Scope
- Preconditions
- Test Steps
- Test Data
- Expected Result
- Author
- Labels
- Automation status
- Execution information
- Pass/Fail Statuses
- Review status
- Postconditions
- Comments

# Tips for test case writing

---

- Each Test Case must have only one objective
- Every Test Case must be complete
- Every test case must be repeatable and generate the same results
- Each Test Case should be simple and concise, with not more than 15 steps
- Don't make Assumptions while creating a test case
- Add all required information (DB scripts, tools, test files)
- Avoid dependencies and cross-links
- Avoid imperative mood



# TC example



**Task:** Test filter by category on site [www.example.com](http://www.example.com)

Steps	Expected Result	
Go to site <a href="http://www.example.com">www.example.com</a>	Site opens	
Open Filter	Filter categories available	
Select «Dress» > Press Enter	All dresses displayed	

# Pre and Post conditions.



Steps	Expected Result	
<b>Preconditions:</b> Create items with categories: <ul style="list-style-type: none"><li>- A «Dress»</li><li>- B «Shorts»</li><li>- C «Dress» «Shorts»</li><li>- D Without category</li></ul>	Items created. No errors	
Go to site <a href="http://www.example.com">www.example.com</a>	Site opens	
Open Filter	Filter categories displayed	
Select «Dress» > Press Enter	A, C Displayed B, D not displayed	
<b>Post Conditions:</b> Remove test items A,B,C,D		

# The Pros and Cons



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## The Pros:

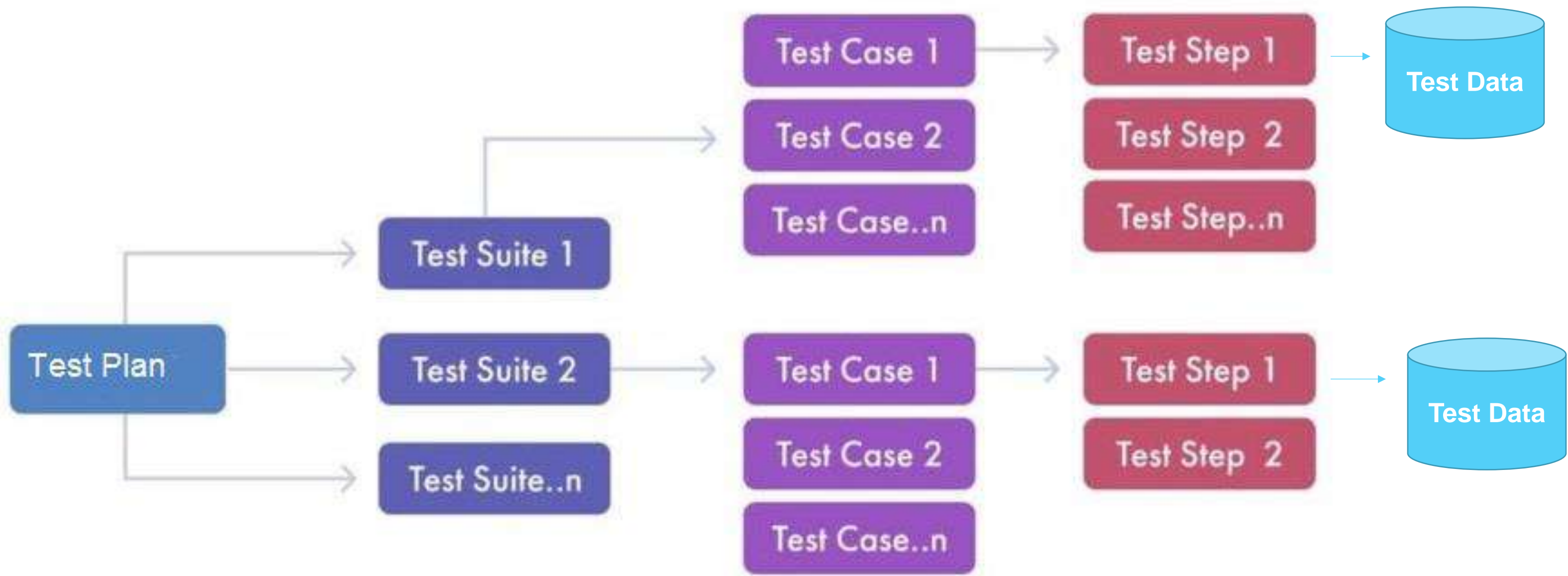
- Good test coverage
- Testing techniques implemented
- Reduced maintenance and software support costs.
- Reusable test cases.
- Confirmation that the software satisfies end-user requirements.
- Easy to automate
- Easy to execute
- Template

## The Cons:

- Pesticide paradox
- Not flexible
- Increased Test Cases updates and support costs.
- Copypaste errors.
- Big documentation amount
- Template



Test suite = A collection of test cases



# Test Management Tools

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- Web based
- Integrates with Jira, Mantis
- Use template
- Progress tracking
- Test execution results



# Examples



Jira Software

Dashboards ▾ Projects ▾ Issues ▾ Boards ▾ Tests

Create

Search

Sales Automation / Test Cases / SA-T323 (1.0)

Adding users

Back Save New Version 1.0 ...

Details Test Script Execution Traceability Attachments Comments History

Type: Step-by-Step ▾

Steps

CALL TO TEST

SA-T327 (1.0) Login

PARAMETER	INPUT TYPE	VALUE
Username	Use default value ▾	
Password	Use default value ▾	

▾ Hide steps

1

STEP

1.1

Input the username: {Username}

TEST DATA

None

EXPECTED RESULT

None

STEP

1.2

Input the password: {Password}

TEST DATA

None

EXPECTED RESULT

None

STEP

1.3

Click on the login button

TEST DATA

None

EXPECTED RESULT

Logged in successfully

STEP

Click to type a description

TEST DATA

Click to type the test data

EXPECTED RESULT

Click to type the expected result

Help & Support

Jira Software

Dashboards

Projects

Issues

Boards

Tests

Create

Search

Sales Automation

Tests

Plans

Cycles

Reports

FOLDERS

All test cases (18)

Contact management (4)

Lead management (3)

Opportunity management (2)

Procurement (4)

Sales forecasting (3)

+ New

P

Key

Name

SA-T11

Edit contacts

SA-T329

Setup Budget

SA-T330

Setup Chart of Accounts

SA-T325

Customize Purchase Order

SA-T10

Create contacts

SA-T20

Delete leads

SA-T14

Create Opportunity

SA-T68

Edit opportunity

SA-T22

Track the sales pipeline

SA-T19

Edit leads

SA-T21

Manage sales forecasting

SA-T323

Adding users

SA-T327

Login

SA-T74

Export contacts

SA-T324

Create Locations and Departments

SA-T73

Delete contacts

SA-T18

Create leads

SA-T331

Update an order

Status

APPROVED

APPROVED

APPROVED

APPROVED

APPROVED

APPROVED

IN REVIEW

IN REVIEW

IN REVIEW

AWAITING REVIEW

AWAITING REVIEW

AWAITING REVIEW

AWAITING REVIEW

AWAITING REVIEW

DRAFT

DRAFT

DRAFT

Approved By

Vitor Pelizza

Dee Howard

Dee Howard

Vitor Pelizza

Dee Howard

Dee Howard

V

2.0

1.0

1.0

1.0

11.0

1.0

2.0

1.0

2.0

1.0

1.0

1.0

1.0

1.0

2.0

1.0

1.0

Estimated

1h 30m

1h 0m

1h 0m

1h 0m

10m

4h 0m

30m

30m

4h 0m

45m

30m

1h 0m

30m

2h 30m

1h 0m

5m

2h 30m

R

1 - 18 of 18

Help & Support





Test Collab

Executions

View

Test Execution

Result: Failed

Success Factor: 45.45%

Time Spent: 1 min 4 sec

Test Cases Status

5 Passed45%

3 Fails27%

3 skipped27%

0 not executed

5 Passed

3 Fails

3 skipped

0 not executed

Execution summary

Test Cases

Total:11

Executed:11

Failed:3

Passed:5

Skipped:3

Pending:0

Executed (%):100%

Failed (%):27%

Passed (%):45%

Skipped (%):27%

Pending (%):0%

Defects reported: 1

Members

Created By: Abhimanyu G.

Assigned To:

Abhimanyu G. (11 test cases)

Requirements Management

Requirement management feature can be enabled/disabled as per project configuration

Test cases can be linked with one or more requirements

Users can use linked issue manager as their requirements management tool

Users can use external requirement management tool easily

Users can see visual traceability matrix

Users can filter test cases by requirements on execution page and manage page

Requirement links should be updated when requirement management source settings are changed

test case

Test Execution

View

Time tracker

Add

Assigned To

Result

Time Taken

Abhimanyu G.

Fail

5 sec

View

Abhimanyu G.

Skipped

19 sec

View

Abhimanyu G.

Skipped

1 sec

View

Abhimanyu G.

Skipped

1 sec

View

Abhimanyu G.

Pass

7 sec

View

Abhimanyu G.

Pass

11 sec

View

Abhimanyu G.

Fail

5 sec

View

Abhimanyu G.

Pass

3 sec

View

Abhimanyu G.

Pass

9 sec

View

Abhimanyu G.

Pass

2 sec

View

Abhimanyu G.

Fail

1 sec

View



# Checklist



# Checklist

Checklist – a list containing a number of necessary checks for any work.

What without How



Site "checklist.example"	Tester 1	Tester 2	Tester 3
	Firefox Browser 70.0.1	Google Chrome 78.0.3904.108	Opera 65.0.3467.42
Registration			
E-mail	Passed	Passed	No run
Social Media	Failed	Passed	Failed
Field validation	Passed	Passed	Passed
Authentication			
User is activated	Passed	Passed	Failed
User is not activated	Passed	Skipped	Passed
Password reset	Passed	No run	Passed
Field validation	Passed	Failed	Skipped
Profile			
Login reset	Passed	Passed	Failed
E-mail reset	Failed	Skipped	Passed
E-mail reset	Failed	Passed	Skipped
Field validation	Passed	Skipped	
Subscription	Failed	Passed	Passed
Delete account	No run	No run	No run

# The Pros and Cons

---



## Pros:

- No Pesticide paradox
- Less of time for creating and support
- Flexible
- All possible checks in one list
- Reusable
- Can store all execution history

## Cons:

- Automation impossible
- Need deep product knowledge to execute
- Uncertainty of test data
- No detalization

# How to create working Checklist

- One item = one check
- Requirements based
- Combine checks by categories /features
- Positive checks first inside each category
- Use your standards clear to all team members
- Detail the checklist depending on the task
- Combine the checklists into matrices
- Add test data examples if needed





# When to use

- Small project, short time period
- Cross browser testing
- Cross platform testing
- Smoke testing
- Ad-hoc testing
- GUI testing
- Performance testing
- DB testing
- Usability testing





Great! Questions time

