Test Case Template:

testcase	test case name	case	test steps			test	test	test	defect
id			step	expe cted	actual	case	status (P/F)	prority	severity
						S			

Sample Test Case:

HOME PAGE:

test URL: www.qatest.co.in/rail

Preconditions: Open Web browser and enter the given url in the address bar. Home page must be displayed. All test cases must be executed from this page.

Test	Test	test case		test steps		test	test status (P/F)	test	defect severity
case id	case name	desc	step	expected	actual	case status		prority	
Login01	Validate	To verify	enter login	an error		design		high	
	L ogin	that Login	name less	message					
		name on	than 3 chars	"Login					
		login page	(say a) and	not less					
		must be	password	than 3					
		greater	and click	character					
		than 3	Submit	s" must					
		characters	button	be					
				displayed					
			enter login	an error		design		high	
			name less	message					
			than 3 chars	"Login					
			(say ab) and	not less					
			password	than 3					
			and click	character					
			Submit	s" must					
			button	be					
				displayed					
			enter login	Login		design		high	
			name 3	success					
			chars (say	full or an					
			abc) and	error					
			password	message					
			and click	"Invalid					
			Submit	Login or					
			button	Passwor					
				d" must					
				be					
				displayed					

Login02	Validate Login	To verify that Login name on login page should not be greater than 10 characters	enter login name greater than 10 chars (say abcdefghijk) and password and click Submit button	an error message "Login not greater than 10 character s" must be displayed	design	high	
			enter login name less than 10 chars (say abcdef) and password and click Submit button	Login success full or an error message "Invalid Login or Passwor d" must be displayed	design	high	
Login03	Validate Login	To verify that Login name on login page does not take special characters	enter login name starting with specail chars (!hello) password and click Submit button	an error message "Special chars not allowed in login" must be displayed	design	high	

			enter login name ending with specail chars (hello\$) password and click Submit button	an error message "Special chars not allowed in login" must be displayed	design	high	
			enter login name with specail chars in middle(he&^ llo) password and click Submit button	an error message "Special chars not allowed in login" must be displayed	design	high	
Pwd01	Validate Passwor d	To verify that Password on login page must be greater than 6 characters	enter Password less than 6 chars (say a) and Login Name and click Submit button	an error message "Passwor d not less than 6 character s" must be displayed	design	high	

			enter Password 6 chars (say abcdef) and Login Name and click Submit button	Login success full or an error message "Invalid Login or Passwor d" must be	design	high	
Pwd02	Validate Passwor d	To verify that Password on login page must be less than 10 characters	enter Password greater than 10 chars (say a) and Login Name and click Submit button	displayed an error message "Passwor d not greater than 10 character s" must be displayed	design	high	
			enter Password less than 10 chars (say abcdefghi) and Login Name and click Submit button	Login success full or an error message "Invalid Login or Passwor d" must be displayed	design	high	
Pwd03	Validate Passwor d	To verify that Password on login page must	enter Password with special characters(s ay !@hi&*P)	Login success full or an error message	design	high	

		be allow special characters	Login Name and click Submit button	"Invalid Login or Passwor d" must be displayed			
Link01	Verify Hyperlin ks	To Verify the Hyper Links available at	Click Home Link	Home Page must be displayed	design	low	
		left side on login page working or not	Click Sign Up Link	Sign Up page must be displayed	design	low	
			Click New Users Link	New Users Registrati on Form must be displayed	design	low	
			Click Advertise Link	Page with Informati on and Tariff Plan for Advertise rs must be displayed	design	low	
			Click Contact Us Link	Contact Informati on page must be displayed	design	low	

			Click Terms Link	Terms Of the service page must be displayed	design	low
Flnk01	Verify Hyper links	To Verify the Hyper Links displayed at Footer on login page working or not	Click Home Link	Home Page must be displayed	design	low
			Click Sign Up Link	Contact Informati on page must be displayed	design	low
			Click Contact Us Link	Page with Informati on and Tariff Plan for Advertise rs must be displayed	design	low
			Click Advertise Link	Terms Of the service page must be displayed	design	low
			Click Terms Of Membership Link	Privacy Policy page must be displayed	design	low

			Click Privacy Policy Link	Privacy Policy page must be displayed	design	low	
н	Verify Hyper links	To Verify the Hyper Links displayed at Login Box on	Click NEW USERS Link located in login box	New Users Registrati on Form must be displayed	design	low	
		login page working or not	Click New Users(Blue Color) Link located in login box	New Users Registrati on Form must be displayed	design	low	
			Click Forget Password Link located in login box	Passwor d Retrieval Page must be displayed	design	mediu m	

Test cases for Railway Registration:

- 1. Check whether there is a train for your destination.
- 2. Check the availability of seats on the required date.
- 3. Check whether the available seats for required coach that is A/c or Sleeper coaches.

testcase id	test	test	test steps		test	test	test priority	defect	
	case name	case desc	step	expect ed	actual	case status	status (P/F)		severity

Test cases for Railway Registration:

- 1. Check whether there is a train for your destination.
- 2. Check the availability of seats on the required date.
- 3. Check whether the available seats for required coach that is A/c or Sleeper coaches.

test scenario: train search with all route stations

1. enter source and destination codes or source and

destination corresponding trains are displaying or not

2.enter train number and date source and destination with

all stations are displaying or not

scenario: check avaliablity of seats for required date

1. search seats for Ac ,sleeper ,seat

2.check upper middle ,lower births

3.ticket fare for corresponding criteria

booking:

book the tickets with corresponding criteria

by cash or card

any concetion for senior citizen fi applicable

scenario:

Print the ticket

same for cancelation of ticket

- 1. Check whether you have money.
- 2. Check the train is available & you have to go to the same destination.

3. Check working hrs of booking office

step1:verify there is a train available to the destination. step2:verify the seats are available on the particular date. step3:verify the seats available of the coaches like sitting r berth and check the fare of the particular system.

est scenario: train search with all route stations 1. enter source and destination codes or source and destination corresponding trains are displaying or not 2.enter train number and date source and destination with all stations are displaying or not scenario: check avaliablity of seats for required date 1. search seats for Ac , sleeper , seat 2.check upper middle ,lower births 3. ticket fare for corresponding criteria booking: book the tickets with corresponding criteria by cash or card any concetion for senior citizen fi applicable scenario: Print the ticket same for cancelation of ticket

WHAT IS EQUIVALENCE PARTITIONING?

Concepts: Equivalence partitioning is a method for deriving test cases. In this method, classes of input conditions called equivalence classes are identified such that each member of the class causes the same kind of processing and output to occur.

In this method, the tester identifies various equivalence classes for partitioning. A class is a set of input conditions that are is likely to be handled the same way by the system. If the system were to handle one case in the class erroneously, it would handle all cases erroneously.

WHY LEARN EQUIVALENCE PARTITIONING?

Equivalence partitioning drastically cuts down the number of test cases required to test a system reasonably. It is an attempt to get a good 'hit rate', to find the most errors with the smallest number

of test cases.

DESIGNING TEST CASES USING EQUIVALENCE PARTITIONING
To use equivalence partitioning, you will need to perform two steps

- Identify the equivalence classes
- Design test cases

STEP 1: IDENTIFY EQUIVALENCE CLASSES

Take each input condition described in the specification and derive at least two equivalence classes for it. One class represents the set of cases which satisfy the condition (the valid class) and one represents cases which do not (the invalid class)

Following are some general guidelines for identifying equivalence classes:
a) If the requirements state that a numeric value is input to the system
and must be within a range of values, identify one valid class inputs
which are within the valid range and two invalid equivalence classes
inputs which are too low and inputs which are too high. For example, if
an item in inventory can have a quantity of - 9999 to + 9999, identify
the following classes:

- 1. one valid class: (QTY is greater than or equal to -9999 and is less than or equal to 9999). This is written as (-9999 < = QTY < = 9999)
- 2. the invalid class (QTY is less than -9999), also written as (QTY < -9999)
- 3. the invalid class (QTY is greater than 9999) , also written as (QTY >9999)
- b) If the requirements state that the number of items input by the system at some point must lie within a certain range, specify one valid class where the number of inputs is within the valid range, one invalid class where there are too few inputs and one invalid class where there are, too many inputs.

For example, specifications state that a maximum of 4 purchase orders can be registered against anyone product. The equivalence classes are: the valid equivalence class: (number of purchase orders is greater than or

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equal to 1 and less than or equal to 4, also written as (1 < = no.
of purchase orders < = 4)
the invalid class (no. of purchase orders> 4)
the invalid class (no. of purchase orders < 1)
c) If the requirements state that a particular input item match one of a
set of values and each case will be dealt with the same way, identify a
valid class for values in the set and one invalid class representing
values outside of the set. For example, if the requirements state that a
valid province code is ON, QU, and NB, then identify:
the valid class code is one of ON, OU, NB
the invalid class code is not one of ON, OU, NB
d) If the requirements state that a particular input item match one of a
set of values and each case will be dealt with differently, identify a
valid equivalence class for each element and only one invalid class for
values outside the set. For example, if a discount code must be input
as P for preferred customer, R for standard reduced rate, or N
for none, and if each case is treated differently, identify
the valid class code = P
the valid class code = R
the valid class code = N
the invalid class code is not one of P, R, N
e) If you think any elements of an equivalence class will be handled
differently than the others, divide the equivalence class to create an
equivalence class with only these elements and an equivalence class
with none of these elements. For example, a bank account balance
may be from $0 up to $ 1,000,000, and balances $ 1,000 or over are not
subject to service charges. Identify:
the valid class: (\$ 0 < = balance < \$ 1,000)
                                                 i.e., balance is
between 0 and $ 1,000 - not including $ 1,000
the valid class: (\$ 1, 000 < = balance < = \$ 1,000,000 i.e., balance
is between $ 1,000 and $1,000,000
                                      inclusive
the invalid class: (balance < $ 0)
the invalid class: (balance> $ 1,000,000)
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A definition of Equivalence Partitioning from our software testing dictionary: **Equivalence Partitioning:** An approach where classes of inputs are categorized for product or function validation. This usually does not include combinations of input, but rather a single state value based by class. For

example, with a given function there may be several classes of input that may be used for positive testing. If function expects an integer and receives an integer as input, this would be considered as positive test assertion. On the other hand, if a character or any other input class other than integer is provided, this would be considered a negative test assertion or condition.