

Unit- III

BBT Test Case – Case Study

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Case Study-1

- Develop black box test cases using ECP & BVA to test the requirement- If student has score ≥ 75 , he will pass the exam, otherwise he will fail.(Total score is an integer)
- Solution –
- BVA- 74,75,76,0,-1,1,99,100,101
- ECP

Valid/Invalid Partition	Partition/Class	Expected Output
Valid Equivalence Class	Total score ≥ 75	Result- Pass
Valid Equivalence Class	Total score < 75	Result- Fail
Invalid Equivalence Class	Total score < 0 Total score =blank/NULL	Result – Error Message
Invalid Equivalence Class	Total score > 100	Result – Error Message

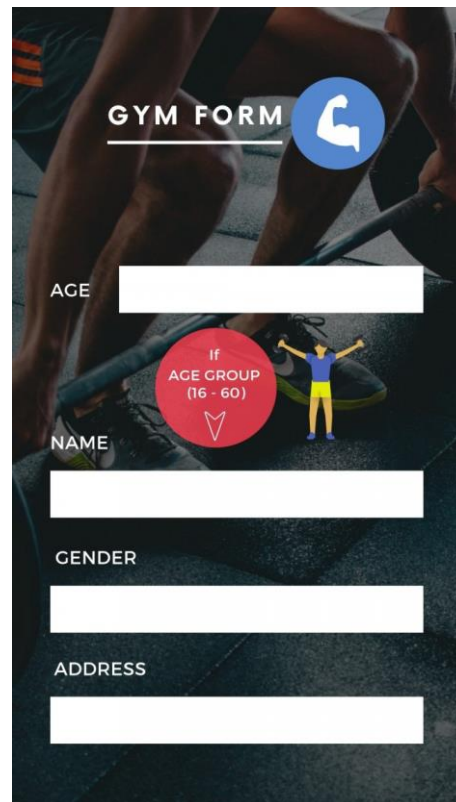
Case Study-1

- Test cases

Test case Id	Partition/ Class	Type of input	Test data	Expected Result	Status
BB_TC_001	Total score >=75	valid	75,76,99,100	Result- Pass	Pass
BB_TC_002	Total score<75	Valid	74,0,1	Result- Fail	Pass
BB_TC_003	Total score<0	Invalid	-1	Result – Error Message	Pass
BB_TC_004	Total score <0 Total score =blank/NULL	Invalid	NULL/ BLABK	Result – Error Message	Pass
BB_TC_005	Total score>100	Invalid	101	Result – Error Message	Pass

Case Study-2

- Develop test cases for input box age in following Gym registration form



The image shows a gym registration form overlaid on a background of a person's legs and feet in a gym setting. The form is titled "GYM FORM" with a blue circular icon containing a white muscle arm. Below the title, there are four input fields: "AGE", "NAME", "GENDER", and "ADDRESS". A red circular callout points to the "AGE" field with the text "If AGE GROUP (16 - 60)".

GYM FORM

AGE

NAME

GENDER

ADDRESS

If AGE GROUP (16 - 60)

Case study solution

- The first step of Boundary value analysis is to create Equivalence Partitioning, which would look like below.



- Now Concentrate on the Valid Partition, which ranges from 16-60.
- We have a 3 step approach to identify boundaries:
 - ☐ *Identify Exact Boundary Value of this partition Class – which is 16 and 60.*
 - ☐ *Get the Boundary value which is one less than the exact Boundary – which is 15 and 59.*
 - ☐ *Get the Boundary Value which is one more than the precise Boundary – which is 17 and 61.*
 - ☐ If we combine them all, we will get below combinations for Boundary Value for the Age Criteria.
 - ☐ *Valid Boundary Conditions : Age = 16, 17, 59, 60*
 - ☐ *Invalid Boundary Conditions : Age = 15, 61*

Expected output

- *If (age < = 17) Then Don't allow Gym Membership*
- *If (age > 60) Then Don't allow Gym Membership*
- *If (age >= 16 and age <= 60) Then allow Gym membership !*

BB Test cases

Test case Id	Partition/ Class	Type of input	Test data	Expected Result	Status
BB_TC_001	<i>(age>=16 and age <= 60</i>	Valid	16, 17, 59, 60	Membership allowed, Cursor move to next text field Name	Pass
BB_TC_002	<i>age < = 17</i>	Invalid	15	Error Message “ Gym membership not allowed”	Pass
BB_TC_003	<i>age > 60</i>	Invalid	61	Error Message “ Gym membership not allowed”	Pass