

Equivalence Class Partitioning:

Example on Equivalence Partitioning Test Case Design Technique:

Example 1:

Assume, we have to test a field which accepts Age 18 – 56

AGE *Accepts value 18 to 56

EQUIVALENCE PARTITIONING		
Invalid	Valid	Invalid
≤ 17	18-56	≥ 57

Valid Input: 18 – 56

Invalid Input: less than or equal to 17 (≤ 17), greater than or equal to 57 (≥ 57)

Valid Class: 18 – 56 = Pick any one input test data from 18 – 56

Invalid Class 1: ≤ 17 = Pick any one input test data less than or equal to 17

Invalid Class 2: ≥ 57 = Pick any one input test data greater than or equal to 57

We have one valid and two invalid conditions here.

Example 2:

Assume, we have to test a field which accepts a Mobile Number of ten digits.

Example 2:

Assume, we have to test a field which accepts a Mobile Number of ten digits.

MOBILE NUMBER *Must be 10 digits

EQUIVALENCE PARTITIONING		
Invalid	Valid	Invalid
987654321	9876543210	98765432109

Valid input: 10 digits

Invalid Input: 9 digits, 11 digits

Valid Class: Enter 10 digit mobile number = 9876543210

Invalid Class Enter mobile number which has less than 10 digits = 987654321

Invalid Class Enter mobile number which has more than 11 digits = 98765432109

Boundary Value Analysis:

Example on Boundary Value Analysis Test Case Design Technique:

Assume, we have to test a field which accepts Age 18 – 56

AGE *Accepts value 18 to 56

BOUNDARY VALUE ANALYSIS		
Invalid (min -1)	Valid (min, +min, -max, max)	Invalid (max +1)
17	18, 19, 55, 56	57

Minimum boundary value is 18

Maximum boundary value is 56

Valid Inputs: 18,19,55,56

Invalid Inputs: 17 and 57

Test case 1: Enter the value 17 (18-1) = Invalid

Test case 2: Enter the value 18 = Valid

Test case 3: Enter the value 19 (18+1) = Valid

Test case 4: Enter the value 55 (56-1) = Valid

Test case 5: Enter the value 56 = Valid

Test case 6: Enter the value 57 (56+1) =Invalid

Example 2:

Assume we have to test a text field (Name) which accepts the length between 6-12 characters.

Name *Accepts characters length (6 - 12)

BOUNDARY VALUE ANALYSIS		
Invalid (min -1)	Valid (min, +min, -max, max)	Invalid (max +1)
5 characters	6, 7, 11, 12 characters	13 characters

Minimum boundary value is 6

Maximum boundary value is 12

Valid text length is 6, 7, 11, 12

Invalid text length is 5, 13

Test case 1: Text length of 5 (min-1) = Invalid

Test case 2: Text length of exactly 6 (min) = Valid

Test case 3: Text length of 7 (min+1) = Valid

Test case 4: Text length of 11 (max-1) = Valid

Test case 5: Text length of exactly 12 (max) = Valid

Test case 6: Text length of 13 (max+1) = Invalid