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Assignment March 1

1) One of the fields on a form contains a text box which accepts numeric values in the range of 18 to 25. Identify the invalid Equivalence class.

- a) 17
- b) 19
- c) 24
- d) 21

a) 17

2) Input Box should accept the Number 1 to 10. Identify Equivalence partitioning and Boundary values for testing

Equivalence - $-\infty$ to 0, 1 to 10, 11 to $+\infty$

Boundary Value - 0,1,5,10,11

3) Why Equivalence & Boundary Analysis Testing is used?

Equivalence Partitioning is used to reduce the total number of test cases to a finite set of testable test cases, still covering maximum requirements.

Boundary value analysis is used to find the errors at **boundaries** of input domain rather than finding those errors in the center of input.

4) Write Test Cases For This Scenario:

If A Job Fails It Should Get Restarted Again. This Should Happen For Three Times. If It Fails again, then It should quit

- **Test Case Id:1**
Condition: If Job doesn't fail,
Expected: no need to restart, job is executed.
- **Test Case Id:2**
Condition: If Job fails for first time,
Expected: it should restart, job is executed.
- **Test Case Id:3**
Condition: If Job fails for second time,
Expected: it should restart, job is executed.
- **Test Case Id:4**
Condition: If Job fails for third time,
Expected: it should restart, job is executed.
- **Test Case Id:5**
Condition: If Job fails for fourth time,
Expected: it should quit, job is not executed.

5) Write The Test Case/scenario For A Login Page?

- **Test Case Id:1**
Condition: If both ID and Password fields are empty,
Expected: Login will be Failed - Shows Error message to fill empty fields.
- **Test Case Id:2**
Condition: If either ID or Password field is empty,
Expected: Login will be Failed - Shows Error message to fill empty field.
- **Test Case Id:3**
Condition:If both ID and Password fields are filled incorrectly,
Expected: Login will be Failed - Shows Error message to fill fields correctly.
- **Test Case Id:4**
Condition:If either ID or Password field is filled incorrectly,
Expected: Login will be Failed - Shows Error message to fill that particular field correctly.
- **Test Case Id:5**
Condition:If both ID and Password fields are correctly filled,
Expected: Login will be successful - Shows Next (Home) Page.

In All Above cases Login button should be clicked After filling the fields (or in first two case leaving empty respective fields).

6) What Are The Test Cases/scenario For Mouse? (To verify the functionalities of a mouse)

TestCaseld1.Condition:Connect to the computer/laptops

Expected:Mouse Working

TestCaseld2.Condition:Left click of the mouse

Expected:Select and execute

TestCaseld3.Condition:Right click of the mouse

Expected:Show options

TestCaseld4.Condition:.Verify the time duration between two left clicks, in order to consider it as double click

Expected:mouse working

TestCaseld5.Condition:verify if scroll is present at the top or not

Expected:Mouse working

TestCaseld5.Condition:Verify the speed of mouse pointer

Expected:Mouse working

TestCaseld7.Condition:Check the pressure required for clicking the mouse buttons

Expected:Mouse working

7) Write test cases/scenarios to verify the functionality of a printer?

TestCaseld1.Condition:Connect wire of the printer to the electric socket

Expected:Printer Working

TestCaseld2.Condition:Connect to a computer system .

Expected:Printer Working

TestCaseld3.Condition:Taking blank pages as an input resource

Expected:Printer Working

TestCaseld4.Condition:Availability for both coloured and blank and white ink.

Expected:Printer Working

TestCaseld5.Condition:Correct command from the computer.

Expected:Print Correct Document

TestCaseld5.Condition:Incorrect command from the computer.

Expected:Should not print

TestCaseld7.Condition:Only single print for single command

Expected:Printer Working

8) Write down test case/scenarios to list down possible steps to test a smart phone.

9) There is a text box which accepts numbers from 1-10. List down the test data which needs to be tested for Boundary value analysis.

0,1,5,10,11

10) Suppose you have a bank account that offers variable interest rates:

5% for the first \$1000 credit;

10% for the next \$1000;

And 15% for the rest.

If you wanted to check that the bank was handling your account correctly what valid input partitions might you use?

\$0 to \$1000 | \$1001 to \$2000 | \$2001 to so on

11) A mail order company charges \$2.95 postage for deliveries if the package weighs less than 2 kg, \$3.95 if the package weighs 2 kg or more but less than 5 kg, and \$5 for packages weighing 5 kg or more.

Generate a set of valid test cases using equivalence partitioning.

0 to 2.00kg | 2.01 to 5.00kg | 5.01 to so on

12) Boiling point of water is at 100 degrees Celsius. Determine the boundary values

99.99 degrees Celsius ,100 degrees Celsius, 100.01 degrees Celsius

13) Exam pass – for 40 marks; merit at 60 and above; and distinction at 80 and above. Determine the boundary values

39,40,59,60,79,80

14) Order numbers on a stock control system can range between 10000 and 99999 inclusive. Which of the following inputs might be a result of designing tests for only valid equivalence classes and valid boundaries:

- a) 1000, 5000, 99999
- b) 9999, 50000, 100000
- c) 10000, 50000, 99999
- d) 10000, 99999
- e) 9999, 10000, 50000, 99999, 100000

c) 10000, 50000, 99999

15) A program validates a numeric field as follows:

Values less than 10 are rejected, values between 10 and 21 are accepted, values greater than or equal to 22 are rejected. which of the following input values cover all of the equivalence partitions?

- a. 10,11,21
- b. 3,20,21
- c. 3,10,22
- d. 10,21,22

c. 3,10,22

16) Which test cases are written first: white boxes or black boxes?

black boxes test cases are written first.

17) Can you explain requirement traceability and its importance?

The Requirements Traceability Matrix (RTM) is a document that links requirements throughout the validation process.

Requirement traceability is important to ensure that all requirements defined for a system are tested in the test protocols.