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Bootcamp Assignment
Testing Concepts 2

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

Ans: a) 17

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

Equivalence Partitioning:

Invalid: [-infinity, 0], [11, infinity]

Valid: [1-10]

Boundary Values:

Invalid: 0, 11

Valid: 1, 2, ……… 9, 10

3) Why is Equivalence & Boundary Analysis Testing used?

Equivalence & Boundary Analysis are used to design test cases for validating a range of values for any given input domain

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

Valid: Fail <= 3

Invalid: Fail < 0, Fail >= 4

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

Condition	Possibility 1	Possibility 2	Possibility 3	Possibility 4
Login	T	T	F	F
Password	T	F	T	F
Result	H	E	E	E

H: Home page, E: Error message, T: condition satisfied, F: condition not satisfied

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

- Check if the mouse is an optical mouse or not.
- Verify that left-click and right-click buttons are working fine.
- Check if the double click is working fine.
- Verify the time duration between two left clicks, in order to consider it as a double click.
- Check if the scroller is present at the top or not.
- Verify the speed of the mouse pointer.
- Check the pressure required for clicking the mouse buttons.
- Verify the acceleration of the mouse pointer.
- Verify that clicking the button and dragging the mouse operation is working fine(drag and drop functionality).
- Check the dimension of the mouse, if it's suitable to grip and work.
- Verify that the mouse works in all the allowed surfaces.

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

1. Ensure that print screen is displayed on presing Ctrl+P key.
2. Ensure that print screen is displayed on clicking the 'Print' option in File menu.
3. Ensure the lay out of the print screen is displayed properly.
4. Ensure the user is able to select Portrait/Landscape orientation.
5. Ensure the user is able to set the print range.
6. Ensure all the buttons in the print screen are working properly.
7. Ensure the print preview works correctly.
8. Ensure the foreground and background color does not change.
9. Ensure the font size is same as displayed on the screen.
10. Ensure the texts and images are print properly.
11. Ensure the alignment and padding of the page.
12. Ensure the lists and tables print properly.
13. Ensure HTML forms and widgets print properly.
14. Ensure the full page is printed with out cropping the text.
15. Ensure the characters and paragraphs are printed properly.

16. Ensure the header and footer is printed properly.

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

- Check if the buttons are working fine.
- Check if the display is working fine
- Check if the touch response does not much time
- Check if the smartphone gets switched off when we long press power button or display a confirmation message
- Check if the screen refresh rate is working fine
- Check if switching to other application does not cause much delay
- Check if the rebooting system does not take much time
- Check if it is working properly while charging
- Check if it is charging with appropriate speed
- Check if the speaker and microphone is working fine

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.

Valid: 1, 2,...........9, 10

Invalid: 0, 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?

For less than $1000: (Principle * 0.05)

Between 1000 & 2000: (1000 * 0.05) + ((Principle - 1000) * 0.10)

Above 2000: (1000 * 0.05) + (2000 * 0.10) + ((Principal - 2000) * 0.15)

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.

If package < 2kg: $2.95

If 2kg <= package < 5kg: $3.95

If 5kg <= package: $5.00

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

99, 101

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

Determine the boundary values

If Marks < 40 : Fail

If Marks >= 40 && Marks <60 : Pass

If Marks >= 60 && Marks <80 : Merit

If Marks >= 80 : Distinction

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

Ans: e) 9999, 10000, 50000, 99999, 100000

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

Ans: c. 3,10,22

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

Ans: Black Box

17) Can you explain requirement traceability and its importance?

Requirement Traceability verifies that each functional requirement used in the development matches to those that were written in the test cases based on other artifacts. It ensures that the team has covered all the requirements in testing and no functionality is missed out or left untouched.