**Module 03**

1. **What is load testing?**

* Load Testing is to test the system behavior under normal workload conditions, and it is just testing or simulating with the actual workload.

1. **What is Stress Testing?**

* Stress testing is to test the system behavior under extreme conditions and is carried out till the system failure.

1. **Write a scenario of only Whatsapp chat messages.**

* Whatsapp chat scenario

1) Verify that the user can send messages to any individual selected from his contact list.

2) Verify that chet window contains all the chat lists with DP and name and last message preview of the other person with whom the chat was initiated.

3) Verify that clicking a chat in the chat list opens a new window containing all the chats received and sent with the other person.

4) Verify that the user can check the message delivered and read time for a message in the ‘message info’ section.

5) Verify that the user can share or receive contact with the other person.

6) Verify that the user can send and receive the message in group chats.

7) Verify that the user can send and receive images, audio, video, emoticons in the chat with individuals and groups.

8) Verify that the user can archive chats in an individual or group chat.

1. **Write a Scenario of Pen.**

* Negative test scenario of pen..

1) Verify the functionality of a pen when a user tries to write on unsupported surfaces like wood, plastic, steel, glass etc

2) Verify the functionality of a pen when the pen drops from some height facing the point on the smooth surface like bed.

3) Verify the text written by a pen is intact when we try to erase it with our hand or eraser.

4) Verify the text written by a pen is intact when the text gets wet.

* Positive test scenario of pen.

1) Verify how fast a user writes with the pen on various surfaces.

2) Verify if the pen will operate similarly even after extensive usage for hours without interruption.

3) Verify that the tip or nib of the pen hasn’t been damaged after a lengthy period of writing.

4) Verify how many characters a user can write with the full ink of a fountain pen or full refill of a ballpoint pen or gel pen.

1. **Write a Scenario of Pen Stand.**

* Negative test scenario of pen stand..

1) Verify that the length and the diameter of the pen are as per the specifications.

2) Check the color of the outer body of the pen. It should be as per the specifications.

3) Verify that the brand name or logo of the company creating the pen should be clearly visible.

* Positive test scenario of pen stand..

1) Verify the type of pen, whether it is a ballpoint pen, ink pen, or gel pen.

2) Verify that the user is able to write clearly over different types of papers.

3) Verify if the pen is with a cap or without a cap and verify the color of the ink of the pen.

1. **Write a Scenario of Door.**

* Scenario of Door…

1) Verify if the door is a single door or bi-folded door.

2) Verify that the material used in the door body and its parts is as per the specifications.

3) Verify that the dimensions of the doors are as per the specifications.

4) Verify if the door is a sliding door or rotating door.

5) Check the position, quality and strength of hinges.

6) Check the type of locks in the door.

7) Check the number of locks in the door interior side or exterior side.

8) Verify if the door makes noise when opened or closed.

1. **Write a Scenario of an ATM.**

1) Verify the ‘ATM Card Insertion Slot’ is as per the specification.

2) Verify the ATM machine accepts card and PIN details.

3) Verify the error message by inserting a card incorrectly.

4) Verify the error message by inserting an invalid card (Expired Card).

5) Verify the error message by entering an incorrect PIN.

6) Verify that the user is asked to enter the PIN after inserting a valid ATM Card.

7) Verify that PIN is encrypted.

8) Verify that there is an action like blocking of card occurs when the total no. of incorrect PIN attempts get surpassed.

9) Verify the user is allowed to do only one cash withdrawal transaction per PIN request.

10) Verify the machine logs out of the user session immediately after successful withdrawal.

11) Verify the message when there is no money in the ATM.

12) Verify the language selection functionality.

13) Verify the cash withdrawal functionality by entering some valid amount.

14) Verify the cash withdrawal functionality by entering an amount less than 100.

15) Verify the cash withdrawal functionality by entering an amount greater than the total available balance in the account.

16) Verify the cash withdrawal functionality by entering an amount greater than per day limit.

17) Verify the user is allowed to enter the amount again in case the amount entered is not valid. A proper message should be displayed.

18) Verify the ATM machine successfully takes out the money.

19) Verify the ATM machine takes out the balance printout after the withdrawal.

20) Verify the font of the text displayed in ATM screen.

21) Verify the text on the screen buttons visible clearly.

22) Verify the functionality of all the buttons on the keypad.

23) Verify the text on the buttons visible clearly.

24) Verify that the touch of the ATM screen is smooth and operational.

25) Verify the user is allowed to choose different account types like Savings, Current etc.

26) Verify the different combinations of operation and check if there will be an electricity loss in the middle of the operation. If there is an electricity loss in the middle of the transaction then the transaction should be marked as null and the amount shouldn’t be disclosed to others.

27) Verify the functionality of the cash dispenser.

28) Verify the functionality of the receipt printer.

29) Verify whether the printed data is correct or not in the receipt.

30) Verify how much time the system takes to log out.

1. **When to use Usability Testing?**

* The goal of usability testing is to understand how real users interact with your website and make changes based on the result.
* It is important to be sure that your app or website is easy to navigate and that tasks can be completed with ease otherwise people will leave and go to a competitor’s site.

1. **What is the procedure for GUI Testing?**

* Consequently GUI testing refers to testing the functions of an application that are version to a user.
* In the example of a calculator application, this would include verifying that the application responds correctly to events such as clicking on the number and function buttons.

1. **Write a scenario of Microwave Oven.**

1) Verify that the dimensions of the oven are as per the specification provided.

2) Verify that the oven’s material is optimal for its use as an oven and as per the specification.

3) Verify that the oven heats the food at the desired temperature properly.

4) Verify that the oven heats food at the desired temperature within a specified time duration.

5) Verify the ovens functioning with maximum attainable temperature.

6) Verify the ovens functioning with minimum attainable temperature.

7) Verify that the oven’s plate rotation is speed is optimal and not too high to spill the food kept over it.

8) Verify that the oven’s door gets closed properly.

9) Verify that the oven’s door opens smoothly.

10) Verify the battery requirement of the microwave oven and check that it functions smoothly at that power.

11) Verify that the text written over the oven’s body is clearly readable.

12) Verify that the digital display is clearly visible and functions correctly.

13) Verify that the temperature regulator is smooth to operate.

14) Verify that the temperature regulator works correctly.

15) Check the maximum capacity of the oven and test its functioning with that volume of food.

16) Check the oven's functionality with different kinds of food – solid, liquid.

17) Check the oven’s functionality with different food at different temperatures.

18) Verify the oven’s functionality with different kinds of container material.

19) Verify that the power cord of the oven is long enough.

20) Verify that the usage instruction or user manuals have clear instructions.

1. **Write a scenario of a Coffee vending Machine.**

1) Verify that the dimension of the coffee machine is as per the specification.

2) Verify that outer body, as well as inner part’s material, is as per the specification.

3) Verify that the machine’s body color as well brand is correctly visible and as per specification.

4) Verify the input mechanism for coffee ingredients-milk, water, coffee beans/powder, etc..

5) Verify that the quantity of hot water, milk, coffee powder per serving is correct

Verify the power/voltage requirements of the machine.

6) Verify the effect of suddenly switching off the machine or cutting the power. The machine should stop in that situation and in power resumption, the remaining coffee should not come out of the nozzle.

7) Verify that coffee should not leak when not in operation.

8) Verify the amount of coffee served in single-serving is as per specification.

9) Verify that the digital display displays correct information.

10) Check if the machine can be switched on and off using the power buttons.

11) Check for the indicator lights when the machine is switched on-off.

12) Verify that the functioning of all the buttons work properly when pressed.

13) Verify that each button has an image/text with it, indicating the task it performs.

14) Verify that complete quantity of coffee should get poured in a single operation, no residual coffee should be present in the nozzle.

15) Verify the mechanism to clean the system work correctly- foamer.

16) Verify that the coffee served has the same and correct temperature each time it is served by the machine.

17) Verify that the system should display an error when it runs out of ingredients.

18) Verify that pressing the coffee button multiple times leads to multiple servings of coffee.

19) Verify that there is the passage for residual/extra coffee in the machine

Verify that the machine should work correctly in different climatic, moistures and temperature conditions.

20) Verify that the machine should not make too much sound when in operation.

1. **Write a scenario of a chair.**

1) Verify that the chair is stable enough to take an average human load.

2) Check the material used in making the chair-wood, plastic etc..

3) Check if the chair’s legs are level to the floor.

4) Check the usability of the chair as an office chair, normal household chair.

5) Check if there is back support in the chair.

6) Check if there is support for hands in the chair.

7) Verify the paint’s type and color.

8) Verify if the chair’s material is brittle or not.

9) Check if the cushion is provided with a chair or not.

10) Check the condition when washed with water or the effect of water on the chair.

11) Verify that the dimension of the chair is as per the specifications.

12) Verify that the weight of the chair is as per the specifications.

13) Check the height of the chair’s seat from the floor.

1. **To Create Scenario (Positive & Negative).**

**1) facebook Chat on Mobile :-**

1. Check received messages counts should be displayed on ‘Facebook Message’ icon

2. Verify that user gets all received messages in his inbox

3. Verify that only ‘message contacts’ will display in left hand side of message box

4. Verify that profile picture display in left hand side of inbox is correct for each user

5. Verify that ‘Active’ users display with green dot in message box

6. Verify that unread messages are highlighted so that user can identify it

7. Check received messages counts should be displayed with Inbox in ‘Messages’ page

8. Verify that messages will get display in Inbox of ‘User1’ only when ‘sender’ is connected with user1 on Facebook

9. Verify that messages will get display in ‘Other’ tab of ‘User1’ if ‘sender’ is not connected with user1 on Facebook

11. Verify that user can search contacts in message box

12. Check behavior of chat box if we change network from Wi-Fi to LAN

13. Verify that user is able to navigate to old conversation or can view message history

14. Verify that user is able to send new message to friend selected from list present at left hand side

15. Verify that message get sent after clicking on enter button

16. Verify that copy, paste works in chat box or not

17. Verify that the User is able to send special characters in Chat or not.

18. Verify that the User is able to share hyperlinked URLs, Emails, or not.

19. Verify that how many words or characters can be sent at a time.

20. Verify that spell functionality works fine in chat box

21. Check if user enters message in textbox and click on refresh button without sending it

22. Verify that user is able to send smiley

23. Verify that user is able to send multiple smiles at a time

24. Verify that if user types smiles in letters then it will look like their icon or not

25. Verify that the User is able to share images

26. Verify that error message should get display after uploading image of unsupported type

27. Verify that the User is able to share videos

28. Verify that the User is able to share files

29. Verify error message should get display after uploading large size files

30. Verify that user is able to send messages in local languages

31. Verify that if user has typed any message and navigated to another tab without sending it then message should not get removed

32. Verify that user gets appropriate message if internet goes down while sending message

33. Verify that user is able to view that which device has been used to send a message.

34. Verify that user is able to delete sent message

35. Verify that user is able to delete multiple messages at a time

36. Verify that user is able to view his sent messages on different devices

37. Verify that ‘loader’ will get display if message sending takes time due to connection issues

38. Verify that the User is able to send messages to other offline Users.

39. Verify that the User is able to send messages request to other user who is not in contact list

40. Verify that user can send direct message to anyone from contact list

41. Log into Facebook more than 2 devices at a time and try to send messages>>Sent message lists and message contact list should get update or refresh on every device where has logged in

42. Type message in chat box and click on another menu>>should display warning message to user

42. Type message in chat box>>observe how much time it remain in chat box.

43. Verify that blocked contacts displaying chat box or not

44. Verify that unfriend contacts displaying chat box or not

45. Verify that deleted message contacts displaying chat box or not

**2) Gmail(Receiving mail) :-**

1. Verify that a newly received email is displayed as highlighted in the Inbox section.

2. Verify that a newly received email has correctly displayed sender email Id or name, mail subject and mail body(trimmed to a single line).

3. Verify that on clicking the newly received email, the user is navigated to email content.

4. Verify that the email contents are correctly displayed with the desired source formatting.

5. Verify that any attachments are attached to the email and are downloadable.

6. Verify that the attachments are scanned for viruses before download.

7. Verify that all the emails marked as read are not highlighted.

8. Verify that all the emails read as well as unread have a mail read time appended at

the end on the email list displayed in the inbox section.

9. Verify that count of unread emails is displayed alongside ‘Inbox’ text in the left sidebar of Gmail.

10. Verify that unread email count increases by one on receiving a new email.

11. Verify that unread email count decreases by one on reading an email ( marking an email as read).

12. Verify that email recipients in cc are visible to all users.

13. Verify that email recipients in bcc are not visible to the user.

14. Verify that all received emails get piled up in the ‘Inbox’ section and get deleted in cyclic fashion based on the size availability.

15. Verify that email can be received from non-Gmail email Ids like – yahoo, Hotmail etc..

**3) Online shopping to buy product (flipkart) :-**

1. Users should be able to add a product to the cart.

2. Item count should be incremented when the user adds the same product again.

3. Taxes should be applied according to the delivery location.

4. Users should be able to add items to the cart.

5. Users should be able to update items in the cart.

6. Checkout should happen successfully for the items added to the cart.

7. Shipping costs for different products added to the cart.

8. Coupons should be applied successfully to the cart.

9. Cart should retain the items even when the app is closed.

1. **Write a Scenario of Wrist Watch.**

1. Verify the type of watch – analog or digital.

2. In the case of an analog watch, check the correctness time displayed by the second, minute, and hour hand of the watch.

3. In the case of a digital watch, check if the digital display for hours, minutes, and seconds is correctly displayed.

4. Verify the material of the watch and its strap.

5. Check if the shape of the dial is as per specification.

6. Verify the dimension of the watch is as per the specification.

7. Verify the weight of the watch.

8. Check if the watch is waterproof or not.

9. Verify that the numbers in the dial are clearly visible or not.

10. Check if the watch is having a date and day display or not.

11. Verify the color of the text displayed in the watch – time, day, date, and other information.

12. Verify that the clock's time can be corrected using the key in case of an analog clock and buttons in case of a digital clock.

13. Check if the second hand of the watch makes a ticking sound or not.

14. Verify the brand of the watch and check if it's visible in the dial.

15. Check if the clock is having stopwatch, timers, and alarm functionality or not.

16. In the case of a digital watch, verify the format of the watch 12 hours or 24 hours.

17. Verify if the watch comes with any guarantee or warranty.

18. Verify if the dial has glass covering or plastic, check if the material is breakable or not.

19. Verify if the dial’s glass/plastic is resistant to minor scratches or not.

20. Check the battery requirement of the watch.

1. **Write a Scenario of Lift(Elevator).**

1. Verify the dimensions of the lift.

2. Verify the type of door of the lift is as per the specification.

3. Verify the type of metal used in the lift interior and exterior.

4. Verify the capacity of the lift in terms of the total weight.

5. Verify the buttons in the lift to close and open the door and numbers as per the number of floors.

6. Verify that lift moves to the particular floor as the button of the floor is clicked.

7. Verify that lift stops when up/down buttons at particular floor are pressed.

8. Verify if there is an emergency button to contact officials in case of any mishap.

9. Verify the performance of the floor – the time is taken to go to a floor.

10. Verify that in case of power failure, lift doesn’t free-fall and get halted in the particular floor.

11. Verify lifts working in case button to open the door is pressed before reaching the destination floor.

12. Verify that in case door is about to close and an object is placed between the doors if the doors sense the object and again open or not.

13. Verify the time duration for which door remain open by default.

14. Verify if lift interior is having proper air ventilation.

15. Verify lighting in the lift

16. Verify that at no point lifts door should open while in motion.

17. Verify that in case of power loss, there should be a backup mechanism to safely get into a floor or a backup power supply.

18. Verify that in case multiple floor number button is clicked, lift should stop at each floor

19. Verify that in case of capacity limit is reached users are prompted with warning alert- audio or visual.

20. Verify that inside lift users are prompted with current floor and direction information the lift is moving towards- audio or visual prompt.

1. **Write a Scenario of whatsapp Group (generate group).**

1. Group should have at least 2 or more members.

2. Once a group creates intimation has to happen to every participant.

3. Adding new participants till maximum number of participants.

4. Delete group/participant with only admin(only admin can change the group setting , adding participant,icon.status).

5. When the internet is not there, messages from participants are queued and once the internet comes back, each guy should be received.

6. Each participant can unmute ,and the message should go with encryption.

7. Send text,files from each and every one at the same time.

8. Search text,filters, attachment option.

9. Using special characters we can find multiple participants.

10. Providing smiles and different symbols for users to chat.