Software Testing Assignment

Module 3 (Context Based Testing)

1. What is load testing?
   - Its a performance testing to check system behavior under load.
   - Gradually increase the load on the application slowly then check the speed of the application.
   - This testing usually identifies –
     - The maximum operating capacity of an application
     - Determine whether current infrastructure is sufficient to run the application
     - Sustainability of application with respect to peak user load

2. What is stress Testing?
   - Stress testing is used to test the stability & reliability of the system.
   - Suddenly increase/decrease the load on the application and check the speed of the application.
   - Stress Testing is done to make sure that the system would not crash under crunch situations.
   - Types of Stress Testing
     - Application Stress Testing
     - Transactional Stress Testing
     - Systemic Stress Testing
     - Exploratory Stress Testing

3. Write a scenario of only Whatsapp chat messages
   - User can see all delivered and received messages.
   - User can see the read or send time of messages.
   - User can send and receive documents in the individual chatbox.
   - User can send and receive photos in an individual chatbox.
   - User can send recorded voice mail in an individual chatbox.
   - User can delete the entire chat history in the individual chatbox.
   - User is able to change the wallpaper.
   - Try to send more than 30 images at a time. (as it allow only 30 images at a time)
   - Try to send video having size > than the limited size.
   - send multiple message to multiple users and groups.

4. Write a Scenario of Pen
   - User can Write smoothly.
   - User can properly write on a variety of papers.
   - Verify the type of pen such as Ink pen, Ballpoint pen, Gel Pen etc.
   - Verify the consistency of the color of the pens ink.
   - Verify whether the pen is with cap or without cap.
   - Verify that the pen is not making any sound while writing.
   - Verify if any other refill fits in the pen or not.

5. Write a Scenario of Pen Stand
   - Verify capacity of pen stand in terms of number of pens.
   - Verify pen stand size and color
   - Verify the material of pen stand.
   - Verify its easily stand on place or not.
   - Verify its height in stand of pens length.
   - Verify its easy to use or not.
   - User can put it at any place.

6. Write a Scenario of Door
   - Verify the material of Door.
   - User can open it properly.
   - Verify security in terms of lock.
   - Verify lock work properly.
   - User can open lock with keys,
   - Verify Door size and colour.
   - User can pass through door easily.
   - Door height must be greater than Average human height.
   - User can lock door both sides inside and outside.

7. Write a Scenario of ATM
   - Verify that power backup should be present at ATM.
   - Verify that card reader should be present.
   - Verify that receipt printer should be present and working.
   - Verify that cash dispenser is working as expected.
   - Verify that the key pad should be working and covered.
   - Verify that buttons are displayed on screen of ATM machine.
   - Verify the font of text on the screen, it should be clearly visible.
   - Verify that how much time is taken in a transaction.
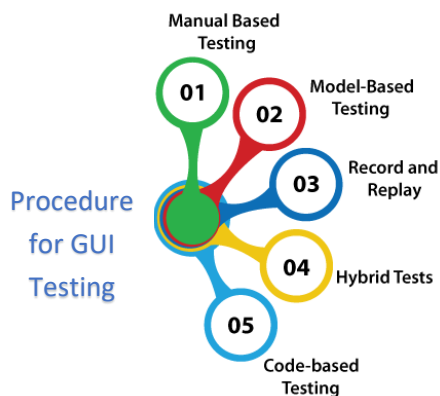   - Verify how much time is taken by system to logout user.

- o Verify that user is able to use card of other bank on the ATM.
- o Verify that message is displayed when the cash in ATM is finished.
- o Verify that correct message is displayed after the transaction.
- o Verify that user is presented with an option to select language of operation.
- o Verify that pin is displayed in masked format.

8. When to used Usability Testing?
   - o Usability testing is the practice of assessing the functionality and performance of your website or app by observing real users completing tasks on it.
   - o Usability testing lets you experience your site or app from the users' perspective so you can identify opportunities to improve the user experience.
   - o This testing is recommended during the initial design phase of SDLC, which gives more visibility on the expectations of the users.
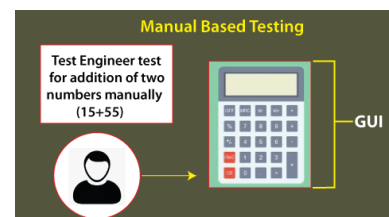
9. What is the procedure for GUI Testing?
   - o We have some unique procedure in order to execute the GUI testing, which are as follows:
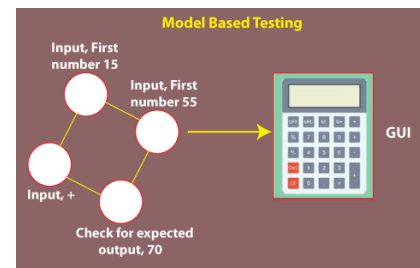

1) Manual Based Testing

   The first method of GUI testing is Manual based testing. The simplest way of executing the GUI testing is purely using the application manually.
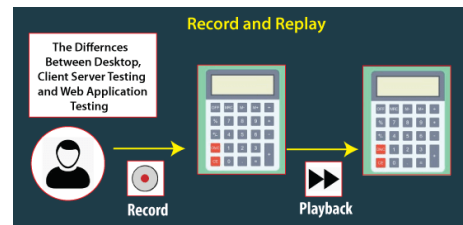
2) Model-Based Testing

The next approach of GUI testing is Model-based Testing as we knew that a model is a visual narrative of System performance, which helps us to understand and predict the system performance or activity.

The models are beneficial in order to develop a practical test case with the help of the system requirements.

3) Record and Replay

We can perform the GUI testing with the help of Automation tools, which can be completed in two types. Throughout the record part, the test steps are

encapsulated by the automation tool. And in the playback, these recorded test steps are implemented on the application under test

4) Hybrid Tests

The hybrid tests are the different approach in order to perform GUI testing at the current time. It is a beneficial technique for non-technical background users to develop a test case by recording their sessions. And after that, the user who is familiar with coding can further control these recorded tests technically.

5) Code-based Testing

Another method of performing Graphical user interface testing is Code-based testing. In order to develop test cases by using the code the GUI testing provides some GUI testing tools. To discover more difficult test scenarios, we can use the code-based testing approach.

10. Write a scenario of Microwave Owen
   o Verify that type of microwave oven like solo, grill, or convection.
   o Verify that the company name is properly displayed or not.
   o Verify that size of the microwave oven.
   o Verify that color of the microwave oven.
   o Verify that material of the microwave oven.
   o Verify that capacity of the microwave oven.
   o Verify that glass is transparent or not.
   o Verify that weight of the microwave oven.
   o Verify that dimensions of the microwave oven.
   o Verify that different kinds of containers

11. Write a scenario of Coffee vending Machine .
   o Verify user is able to make a right choice to take.
   o Verify user is able to press the right button for selection.
   o Verify user is able to cancel after selection.
   o Verify user is able to understand which button to press for coffee.
   o Verify user is able to place cup at correct place where coffee appears.
   o Verify user is able to get coffee even after making cancel.
   o Verify user is able to get coffee even after there is no powder in machine.
   o Verify user is able to get coffee even after not making right choice.
   o Verify user is able to get coffee even there is no water in machine.

12. Write a scenario of chair .
   o verify the legs of the chair .
   o verify that all leg of the chair on a plane surface is equal or not.
   o verify the chair backrest.
   o verify that the human ability to sit comfortably.
   o verify that the chair able to sustain the load as per requirement or not.
   o verify the material used in the making of the chair.
   o verify the sitting space in the chair.
   o verify that the chair has an armrest or not.
   o verify the colour of the chair as per specification.
   o verify the weight of the chair.
   o verify the height of the chair from the surface.

- o verify the type of chair.

13. To Create Scenario (Positive & Negative)
   1) Facebook Chat on Mobile
   - o Positive Scenario
     - Check received messages counts should be displayed on 'Facebook Message' icon
     - Verify that user gets all received messages in his inbox
     - Verify that only 'message contacts' will display in left hand side of message box
     - Verify that profile picture display in left hand side of inbox is correct for each user
     - Verify that 'Active' users display with green dot in message box
     - Verify that unread messages are highlighted so that user can identify it
     - Check received messages counts should be displayed with Inbox in 'Messages' page
     - Verify that user can search contacts in message box
     - Verify that user is able to navigate to old conversation or can view message history
     - Verify that user is able to send new message to friend.
     - Verify that message get sent after clicking on enter button
     - Verify that copy, paste works in chat box or not
     - Verify that the User is able to send special characters in Chat or not.
     - Verify that the User is able to share hyperlinked URLs, Emails, or not.
     - Verify that how many words or characters can be sent at a time.
     - Verify that spell functionality works fine in chat box
     - Verify that if user types smiles in letters then it will look like their icon or not
     - Verify that the User is able to share images
     - Verify that the User is able to share videos
     - Verify that the User is able to share files
     - Verify that user is able to send messages in local languages
     - Verify that user is able to delete sent message
     - Verify that user is able to delete multiple messages at a time
     - Verify that the User is able to send messages to other offline Users.
     - Verify that user can send direct message to anyone from contact list
     - Verify that blocked contacts displaying chat box or not
     - Verify that unfriend contacts displaying chat box or not

- Verify that deleted message contacts displaying chat box or not
- Verify that user is able to forward messages/images/videos from one user to another
- Verify that warning message gets display if user typed message in chat box and suddenly click on close button
- Verify that message contacts list will get display based on recent conversations

- Negative Scenario
  - Check if user enters message in textbox and click on refresh button without sending it
  - Verify error message should get display after uploading large size files
  - Verify that if user has typed any message and navigated to another tab without sending it then message should not get removed
  - Verify that the User is able to send messages request to other user who is not in contact list
  - Verify that user is not able to send blank message

2) Gmail (Receiving mail)
   - Verify that a newly received email is displayed as highlighted in the Inbox section.
   - Verify that a newly received email has correctly displayed sender email Id or name, mail subject and mail body(trimmed to a single line).
   - Verify that on clicking the newly received email, the user is navigated to email content.
   - Verify that the email contents are correctly displayed with the desired source formatting.
   - Verify that any attachments are attached to the email and are downloadable.
   - Verify that count of unread emails is displayed alongside 'Inbox' text in the left sidebar of Gmail.
   - Verify that unread email count increases by one on receiving a new email.
   - Verify that all received emails get piled up in the 'Inbox'
   - Verify that email can be received from non-Gmail email Ids like – yahoo, Hotmail etc.

3) Online shopping to buy product (flip kart)

- User navigation through all the pages of the application
- None of the links in the applications should be broken.
- Company logo, products, prices, and their description should be visible.
- Products should be listed category-wise on the application.
- Products should be displayed which match the search criteria.
- Relevant products should be listed on the top of the search results page.
- Filtering functionality should work properly i.e., correct products are filtered when the filter is applied.
- Ensure correct count of products is displayed on search and filter.
- Sorting should be working correctly on all the pages – the products are sorted based on the sort of option.
- The product count should remain the same even when sorting is applied.
- Users should be able to select the desired attributes of the product-on-product page such as size, color, etc.
- Adding a product to the cart should be possible
- Checking whether users can add a product to the wish list.
- Users should be able to buy the product which is added to the cart once the user is signed in.
- Customers shouldn't be able to add products to the cart when it is out of inventory.
- All the products which are added to the cart should be purchasable by the user.
- Verify error message is displayed on the UI when there is a limit on the products which can be purchased.
- Error message should be displayed on the UI when shipping is not available to the delivery location.
- All the payment methods should be displayed and all of the methods should be working correctly.
- Ensure email gets triggered to the email address or mobile number when a product is bought by the customer.
- Verify product price is correct along with shipping charges, VAT. VAT and shipping charges should be correctly applied.
- Confirm VAT varies based on the number of products in the cart.
- Verify all the payment methods are correctly working such as net banking, credit/debit card, and PayPal using dummy numbers for testing.

- Ensure payment is refunded to the customer when a product is cancelled based on payment id.
- Make sure the emails and invoices sent to the customer after a product is purchased by the user.
- Verify emails are sent to the customer when the payment is successfully refunded to the user.

14. Write a Scenario of Wrist Watch.
- Verify the wrist watch type - whether it is Analog wrist watch, Digital wrist watch or Smart wrist watch.
- Verify that watch shows the correct time or not on the basis of region.
- Check that user is able to set the time or change the time or not on a wrist watch.
- Check that user is also able to change the day on wrist watch if it is available.
- Check that all the parts of wrist watch are properly fitted or not.
- Verify that the Date, Time and other information in a wristwatch is properly visible to the user not.
- Verify the watch properly fit on the wrist or not.
- Check the design of wrist watch as per requirement or not.
- Verify if the watch is waterproof.
- Verify the colour, width, dial, and length of wrist watch as per CRS or not.
- Verify that the materials used for the wrist watch body are as per requirement or not.
- Verify the material used for wrist watch strap -Plastic , leather .etc
- Verify the wrist watch weight as per requirement or not.
- Verify the Logo and name of company showing properly or not on watch.

- Verify the functionality of the button of the watch working fine or not.

15. Write a Scenario of Lift (Elevator)
- verify the type of door of the lift is as per the specification.
- verify the buttons in the lift to close and open the door and numbers as per the number of floors.
- verify that the lift moves to the particular floor as the button of the floor is clicked.
- verify that lift stops when up/down buttons on a particular floor are pressed.

- verify if there is an emergency button to contact officials in case of emergency.
- verify the performance of the floor – the time is taken to go to a floor.
- verify that in case of power failure, the lift doesn't free-fall and get halted on the particular floor.
- verify lifts working in case the button to open the door is pressed before reaching the destination floor.
- verify that in case the door is about to close and an object is placed between the doors if the doors sense the object and again open or not.
- verify the time duration for which doors remain open by default.
- verify if the lift interior is having proper air ventilation.
- verify lighting in the lift.
- verify that at no point the lift door should open while in motion.
- verify that in case of power loss, there should be a backup mechanism to safely get into a floor or a backup power supply.
- verify that in case multiple floor number buttons are clicked, the lift should stop at each floor.
- verify that in case of capacity limit is reached users are prompted with a warning alert- audio/visual.
- verify that inside lift users are prompted with current floor and direction information the lift is moving towards- audio/visual prompt.
- verify that the lift comes to each floor by using the Up and Down arrow buttons.
- verify that go inside a lift, don't press any button, and see what happens
- To verify that don't close the doors and see what happens
- To verify that the play with the alarm and fan buttons inside a lift

16.   Write a Scenario of WhatsApp Group (generate group).

- Check an admin can add others as Admin.
- Check admin can remove from the group.
- Check admin can add users into the group.
- Check admin can restrict users.
- Check admin can remove others from admin.
- Check if the admin is able to add people
- Check if the admin able to add a max of 250 people in a group.
- Check the admin user able to add people with the invite link

- Check the admin is able to delete people and add them back to the group
- Check the admin user can able to delete people
- Check the admin user able to delete all people in the group
- Check the admin user can able to ban users.

17. Write a Scenario of Instagram (video call with chat).

- Check the call history of videos is available or not.
- Check the call history is displayed with the date and time.
- Check the call history is displayed with updated time.
- Check whether the search functionality is working properly or not.
- Check whether the video call log is removed from the call history or not.
- Check whether the video call log is blocked from the call history or not.
- Check the new video call log is working for the new video call.
- Check the user is able to call or receive WhatsApp video calls from the contact list.
- Check the Chat window that contains the entire chat list.
- Check the Chat window displays the contact numbers whose numbers are not saved on mobile.
- Check the Chat window displayed with all contacts with DP or without DP
- Check the Chat window is displayed on the group chat list.
- Check the Chat window displays the last updated chatting time.
- Check the Chat window displays the name of all contacts on the chat window.
- Check the clicking on one Chat contact then a new window should open with history.
- Check the user can see all delivered and received messages.
- Check the user can see the read or send time of messages.

18. Write a Scenario of WhatsApp payment
- Check the payment button availability
- Check the GUI (Spelling, Alignment, Color, Size) of the payment button.
- Check the availability of all fields.
- Check the navigation of payment.
- Check the GUI of the payment page.
- Check GUI of Validation alert.

- Check which payment card is using credit, or debit.
- Check without filling in details then click on Payment.
- Check by entering the invalid card detail then proceed to payment, it should not be successfully Proceed to payment.
- Check if each of the payment options is selectable.
- Check if each listed payment option opens the respective payment option as per specification.
- Check if the tab offers existing banks to be selected using the radio button for net banking transactions.
- Check if the tab offers options to select other banks than the listed ones with the radio button selection.
- Check if the tab offers all the leading banks from the country for net banking transactions.
- Check if the tab offers a net banking option for both local and international banks for transactions.
- Check if the net banking option has at least 8 banks for the transaction using the radio button selection inside the tab.
- Check if the selection of the radio button or the drop-down menu option takes us to net banking.