#### Assignment\_M2: Prepared by Sangeeta Prajapati

### 1. What is Exploratory Testing?

Ans. Exploratory Testing is a type of software testing in which the tester is free to select any possible methodology to test the software.

# 2. What is traceability matrix?

Ans. RTM stands for Requirement Traceability matrix. RTM maps all the requirements with the test cases. By using this document one can verify test cases cover all functionality of the application as per the requirements of the customer. The main purpose of the requirement traceability matrix is to verify that the all requirements of clients are covered in the test cases designed by the testers.

#### 3. What is Boundary value testing?

Ans. Boundary Value Analysis is based on testing the boundary values of valid and invalid partitions.

#### 4. What is Equivalence partitioning testing?

Ans. This Technique, input data are divided into the equivalent partitions that can be used to derive test cases-

- In this input data are divided into different equivalence data classes.
- It is applied when there is a range of input values

# 5. What is Integration testing?

Ans. Integration testing is the process of testing the interface between two software units or modules.

#### 6. What determines the level of risk?

Ans. Risk Based Testing (RBT) is a software testing type which is based on the probability of risk. It involves assessing the risk based on software complexity, criticality of business, frequency of use, possible areas with Defect etc. Risk based testing prioritizes testing of features and functions of the software application which are more impactful and likely to have defects.

Risk is the occurrence of an uncertain event with a positive or negative effect on the measurable success criteria of a project. It could be events that have occurred in the past or current events or something that could happen in the future. These uncertain events can have an impact on the cost, business, technical and quality targets of a project.

Risks can be positive or negative.

 Positive risks are referred to as opportunities and help in business sustainability. For example investing in a New project, Changing business processes, Developing new products.

• **Negative Risks** are referred to as threats and recommendations to minimize or eliminate them must be implemented for project success.

#### 7. What is Alpha testing?

Ans. Alpha Testing is a type of software testing performed to identify bugs before releasing the product to real users or to the public.

#### 8. What is beta testing?

Ans. Beta Testing is performed by "real users" of the software application in "real environment" and it can be considered as a form of external User Acceptance Testing. It is the final test before shipping a product to the customers. Direct feedback from customers is a major advantage of Beta Testing. This testing helps to test products in customer's environment.

#### 9. What is component testing?

Ans. Component testing is defined as a software testing type, in which the testing is performed on each individual component separately without integrating with other components.

#### 10. What is functional system testing?

Ans. Functional Testing is a type of software testing that validates the software system against the functional requirements/specifications. The purpose of Functional tests is to test each function of the software application, by providing appropriate input, verifying the output against the Functional requirements.

#### 11. What is Non-Functional Testing?

Ans. Non-Functional Testing is defined as a type of Software testing to check non-functional aspects (performance, usability, reliability, etc) of a software application. It is designed to test the readiness of a system as per nonfunctional parameters which are never addressed by functional testing.

#### 12. What is GUI Testing?

Ans. GUI Testing is a software testing type that checks the Graphical User Interface of the Software. The purpose of Graphical User Interface (GUI) Testing is to ensure the functionalities of software application work as per specifications by checking screens and controls like menus, buttons, icons, etc.

#### 13. What is Adhoc testing?

Ans. Ad hoc Testing is an informal or unstructured software testing type that aims to break the testing process in order to find possible defects or errors at an early possible stage.

# 14. What is load testing?

Ans. Load Testing is a non-functional software testing process in which the performance of software application is tested under a specific expected load. It determines how the software application behaves while being accessed by multiple users simultaneously.

#### 15. What is stress Testing?

Ans. Stress Testing is a type of software testing that verifies stability & reliability of software application.

#### 16. What is white box testing and list the types of white box testing?

Ans. White Box Testing is a testing technique in which software's internal structure, design, and coding are tested to verify input-output flow and improve design, usability, and security.

Types of White Box Testing

- 1. Path Testing
- 2. Loop Testing
- 3. Conditional Testing
- 4. Unit Testing
- 5. Mutation Testing
- 6. Integration Testing
- 7. Penetration Testing
- 8. Testing based on Memory Perspective
- 9. Test Performance of the Program

# 17. What is black box testing? What are the different black box testing

#### techniques? Ans.

Black Box Testing is a software testing method in which the functionalities of software applications are tested without having knowledge of internal code structure, implementation details and internal paths. Black Box Testing mainly focuses on input and output of software applications and it is entirely based on software requirements and specifications. It is also known as Behavioral Testing.

Black Box Testing Techniques

- Equivalence Class Partition (ECP)
- Boundary Value Analysis (BVA)
- Decision table
- State Transition
- Use case

#### 18. Mention what are the categories of

defects? Ans. 1. Error of Commission

- 2. Errors of Omissions
- 3. Error of Clarity

4. Error of Speed or Capacity

#### 19. Mention what Big bang testing is?

Ans. Big bang integration testing is a testing approach where all components or modules are integrated and tested as a single unit. This is done after all modules have been completed and before any system-level testing is performed.

# 20. What is the purpose of exit criteria?

Ans. Exit Criteria defines the items that must be completed before testing can be concluded.

# 21. When should "Regression Testing" be performed?

Ans. Regression testing is necessary after any feature (or application) enhancement, bug fix, or configuration changes.

### 22. What is 7 key principles? Explain in detail?

Ans. 1) Exhaustive testing is not possible: We should not use same type of data for testing every time.

- 2) Defect Clustering: If the same tests are repeated over and over again, eventually the same test cases will no longer find new bugs.
- 3) Pesticide Paradox: Repetitive use of the same pesticide mixes to eradicate insects during farming will over time lead to the insect's developing resistance to the pesticide Thereby ineffective of pesticides on insects. The same applies to software testing. If the same set of repetitive tests are conducted, the method will be useless for discovering new defects.

# 4) Testing shows a presence of defects

Hence, testing principle states that – Testing talks about the presence of defects and don't talk about the absence of defects. i.e. Software Testing reduces the probability of undiscovered defects remaining in the software but even if no defects are found, it is not a proof of correctness.

# 5) Absence of Error – fallacy

It is possible that software which is 99% bug-free is still unusable. This can be the case if the system is tested thoroughly for the wrong requirement.

#### 6) Early Testing

Early Testing – Testing should start as early as possible in the Software Development Life Cycle. So that any defects in the requirements or design phase are captured in early stages.

### 7) Testing is context dependent

Testing is context dependent which basically means that the way you test an e-commerce site will be different from the way you test a commercial off the shelf application.

#### 23. Difference between QA v/s QC v/s Tester

#### Ans.

Quality Assurance (QA)	Quality Control (QC)
It is a procedure that focuses on providing assurance that quality requested will be achieved	t It is a procedure that focuses on fulfilling the quality requested.
QA aims to prevent the defect	QC aims to identify and fix defects
It is a method to manage the quality- Verification	It is a method to verify the quality- Validation
It does not involve executing the program	It always involves executing a program
It's a Preventive technique	It's a Corrective technique

#### 24. Difference between Smoke and

# Sanity? Ans. Smoke testing -

- 1-The goal of smoke testing is to verify stability.
- 2-Software developers or testers perform smoke testing.
- 3-Smoke testing is a subset of acceptance testing.
- 4-Smoke testing is documented or scripted.
- 5-In smoke testing, the entire system is verified end to end .

#### Sanity testing -

- 1-The goal of sanity testing is to verify rationality.
- 2-Tester alone perform sanity testing.
- 3-Sanity testing is a subset of regression testing.
- 4-Sanity testing is not documented or scripted.
- 5-In sanity testing is the other hand, only a particular component of the system gets verified.

### 25. Difference between verification and

#### Validation Ans.

Verification	Validation
It includes checking documents, design, codes and programs.	It includes testing and validating the actual product.
Verification is the static testing.	Validation is the dynamic testing.

Verification	Validation
It does <i>not</i> include the execution of the code.	It includes the execution of the code.
Methods used in verification are reviews, walkthroughs, inspections and desk-checking.	Methods used in validation are Black Box Testing, White Box Testing and non- functional testing.
It checks whether the software conforms to specifications or not.	It checks whether the software meets the requirements and expectations of a customer or not.

# 26. Explain types of Performance testing.

Ans. 1. Load testing 2. Stress testing 3. Endurance testing 4. Spike testing 5. Volume testing 6. Scalability testing

# 27. What is Error, Defect, Bug and failure?

Ans. Bug: A bug refers to defects which means that the software product or the application is not working as per the adhered requirements set.

Defect: A Defect is a deviation between the actual and expected output.

Error: An Error is a mistake made in the code due to which compilation or execution fails.

Failure: Failure is the accumulation of several defects that ultimately lead to Software failure and results in the loss of information in critical modules thereby making the system unresponsive.

#### 28. Difference between Priority and Severity

#### ? Ans.

Priority	Severity
Defect Priority has defined the order in which the developer should resolve a defect	Defect Severity is defined as the degree of impact defect has on the operation of the product
Priority is associated with scheduling	Severity is associated with functionality or standar
Priority indicates how soon the bug should be fixed	Severity indicates the seriousness of the defect or functionality
Priority of defects is decided in consultation with the manager/client	QA engineer determines the severity level of the d
Priority is driven by business value	Severity is driven by functionality

# 29. What is Bug Life Cycle?

Ans. Defect Life Cycle or Bug Life Cycle in software testing is the specific set of states that

defect or bug goes through in its entire life. Explain the difference between Functional testing and NonFunctional testing ? Ans.

Functional	Non-functional testing	
Execution	It is performed before non-functional It is perfortesting.	rmed after the functional testing.
Focus area	It is based on customer's requirements. It focusses	s on customer's expectation.
Requirement	It is easy to define functionalIt is diffic requirements. functiona	cult to define the requirements for non-litesting.
Usage	Helps to validate the behavior of the Helps to application. application	•
Objective	Carried out to validate software actions. It is don software.	ne to validate the performance of the

What is the difference between the STLC and SDLC (Software Development Life Cycle) ? Ans.

Parameter	SDLC	STLC
Origin	Development Life Cycle	Testing Life Cycle
Objective	The main object of SDLC life cycle is to complete successful development of the software including testing and other phases	e The only objective of the STLC phase is
Requirement Gathering	In SDLC the business analyst gathers the requirements and create Development Plan	In STLC, the QA team analyze requirement documents like functional and non-functional documents and create System Test Plan
High & Low- Level Design	In SDLC, the development team creates the high and low-level design plans	e In STLC, the test analyst creates the Integration Test Plan
Coding	The real code is developed, and actual work takes place as per the design documents.	The testing team prepares the test environment and executes them
Maintenance	SDLC phase also includes post- deploymen supports and updates.	Testers, execute regression suits, usually automation scripts to check maintenance code deployed.

# 30. What is the difference between test scenarios, test cases, and test script?

Test Scenario	Test Case
i est scenario	lest case

A test scenario contains high-level documentation Test cases contain definite test steps, data, expected which describes an end to end functionality to be results for testing all the features of an application. tested.

It focuses on more "what to test" **than** "how to test". A complete emphasis on "what to test" **and** "how to test.".

Test scenarios are a one-liner. So, there is always the Test cases have defined a step, pre-requisites, expected possibility of ambiguity during the testing.

result, etc. Therefore, there is no ambiguity in this process.

Test scenarios are derived from test artifacts like BRS, Multiple Test case is mostly derived from test scenarios. Multiple Test case can be derived from a single Test Scenario

It helps in an agile way of testing the end to end It helps in exhaustive testing of an application functionality

Test scenarios are high-level actions. Test cases are low-level actions.

Test Case Test Script

<u>Test case</u> is a step by step procedure that is used to test an The test script is a set of instructions to test an application.

application automatically.

Test Cases are used for manual testing environment.

Test Script is used in the automation testing environment.

It is done manually.

It is done according to the scripting format.

The test case template includes Test ID, test data, test In the Test Script, we can use different procedure, actual and expected results, etc.

commands to develop a script.

# 31. Explain what Test Plan is? What is the information that should be covered?

Ans. A **Test Plan** is a detailed document that describes the test strategy, objectives, schedule, estimation, deliverables, and resources required to perform testing for a software product. You already know that making a **Test Plan** is the most important task of Test Management Process.

- 1. Analyze the product
- 2. Design the Test Strategy
- 3. Define the Test Objectives
- 4. Define Test Criteria
- 5. Resource Planning

- 6. Plan Test Environment
- 7. Schedule & Estimation
- 8. Determine Test Deliverables

# 32. To create HLR & TestCase of WebBased (WhatsAppweb, Instagram)?

#### Ans. 1. WhatsApp Web:

### Test Scenarios For WhatsApp Web

- Check whether the user can see the Scan code screen on the mobile phone.
- Check whether the QR code is scanned from WhatsApp web or not.
- Check whether the user can get a message for another WhatsApp session with details.
- Check whether the user can log out from all WhatsApp web or not.

#### Test Scenarios For Instagram:

- Verify that all the required elements are available or not on the login page (Username, Password, logo, signup link, etc.).
- Check that all the elements (username & password text box, Login Button, etc) are active or not.
- Check whether the user is able to log in or not by entering a valid (phone number, username, email) and password.
- Check that when the user tries to log in by entering an invalid (phone number, username, email) and an Invalid Password.
- Check that when the user is trying to log in by entering the valid (phone number, username, email) and invalid password.
- Check that when the user is trying to log in by entering the invalid (phone number, username, email) and valid password.
- Check that when the user is trying to log in by entering the valid (phone number, username, email) and without a password.
- Check that when the user is trying to log in without entering the (phone number, username, email) and password.
- Check that the login button is disabled by default or not.
- Check whether the login button gets enabled or not when the user enters a valid username and password.
- Check that the alert message shows or not when the user enters an invalid user id and password.
- Check whether alert messages are as per requirement or not.
- Check that label and placeholder are as per requirement or not.
- Check the other link available on the login page are clickable or not.
- Check that the available link on the login page redirects the user to the page or not when the user clicks on it.

# 33. Write a scenario of only Whatsapp chat messages?

Ans. A scenario of only Whatsapp chat messages:

- 1. verify that individual chat is open or not.
- 2. verify that select contact for chat is working or not.
- 3. verify that group chat is visible or not.
- 4. verify that users can archive chats in an individuals or group chat.
- 5. verify that user can send massage, emojis, audio call, video call, audio massage is working or not.
- 6. verify the user can attach document, camera, gallery, audio, location, payment, contact, poll working fine or not.
- 7. verify that when user click on profile photo user can able to see contact detail or not.
  - 8. verify that user click on 3 dots many option working fine or not.
- 9. verify that when user click on 3 dots option like view contact, media, links, and docs, search, mute notifications, disappearing messages, wallpaper, more options are working fine or not.
- 10. verify that when user click on camera then click photo and send to person is working fine or not.
  - 11. Verify the Chat window that contains the entire chat list.
  - 12. Verify the Chat window displayed with all contacts with DP or without DP
  - 13. Verify the Chat window is displayed on the group chat list.
  - 14. verify the Chat window displays the last updated chatting time.
- 15. Verify the Chat window displays the name of all contacts on the chat window.
- 16. Verify to click on one Chat contact, and then a new window should open with history.
  - 17. Verify the user can see all delivered and received messages.

#### 34. Write a Scenario of

Pen? Ans.

- 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.
- Check the weight of the pen. It should be as per the specifications. In case not mentioned in the specifications, the weight should not be too heavy to impact its smooth operation.
- 4. Verify if the pen is with a cap or without a cap.
- 5. Verify the color of the ink on the pen. Check the odor of the pen's ink on writing over a surface.

- 6. Verify the surfaces over which the pen is able to write smoothly apart from paper e.g. cardboard, rubber surface, etc.
- 7. Verify that the text written by the pen should have consistent ink flow without leaving any blob.
- 8. Check that the pen's ink should not leak in case it is tilted upside down.
- 9. Verify if the pen's ink should not leak at higher altitudes.
- 10. Verify if the text written by the pen is erasable or not.
- 11. Check the functioning of the pen by applying normal pressure during writing.
- 12. Verify the strength of the pen's outer body. It should not be easily breakable.
- 13. Verify that text written by pen should not get faded before a certain time as mentioned in the specification.
- 14. Check if the text written by the pen is waterproof or not.
- 15. Verify that the user is able to write normally by tilting the pen at a certain angle instead of keeping it straight while writing.
- 16. Check the grip of the pen, and whether it provides adequate friction for the user to comfortably grip the pen.
- 17. Verify if the pen can support multiple refills or not.
- 18. In the case of an ink pen, verify that the user is able to refill the pen with all the supported ink types.
- 19. For ink pens, verify that the mechanism to refill the pen is easy to operate.
- 20. In the case of a ballpoint pen, verify the size of the tip.

#### 35. Write a Scenario of Pen Stand?

- Ans. 1. Verify the material use for make pen stand.
- 2. Verify the user can choose the material type like wood or plastic for make a pen stand.
  - 3. Verify the user can able to choose the design of the pen stand.
  - 4. Verify the space for pen in pen stand.
  - 5. Verify the height and weight for pen for pen stand.
  - 6. Verify the useable for home, office or pen stand for study material.
  - 7. Verify the dimension for pen stand as per specification.
  - 8. Verify the how many pens come in pen stand.
  - 9. Verify the colour of the wood in pen stand.
  - 10. Verify the size of the pen stand.

#### 36. Write a Scenario of

#### Door? Ans.

- 1. Verify if the door is single door or bi-folded door
- 2. Check if the door opens inwards or outwards
- 3. Verify that the dimension of the doors are as per the specifications

- 4. Verify that the material used in the door body and its parts is as per the specifications
- 5. Verify that color of the door is as specified
- 6. Verify if the door is sliding door or rotating door
- 7. Check the position, quality and strength of hinges
- 8. Check the type of locks in the door
- 9. Check the number of locks in the door interior side or exterior side
- 10. Verify if the door is having peek-hole or not
- 11. Verify if the door is having stopper or not
- 12. Verify if the door closes automatically or not spring mechanism
- 13. Verify if the door makes noise when opened or closed
- 14. Check the door condition when used extensively with water
- 15. Check the door condition in different climatic conditions- temperature, humidity etc
- 16. Check the amount of force- pull or push required to open or close the door.

#### 37. Write a Scenario of

#### ATM? Ans.

- 1. Verify the type of ATM machine, if it has a touch screen, both keypad buttons only, or both.
- 2. Verify that on properly inserting a valid card different banking options appear on the screen.
- 3. Check that no option to continue and enter credentials is displayed to the user when the card is inserted incorrectly.
- 4. Verify that the touch of the ATM screen is smooth and operational.
- 5. Verify that the user is presented with the option to choose a language for further operations.
- 6. Check that the user is asked to enter a pin number before displaying any card/bank account detail.
- 7. Verify that there is a limited number of attempts up to which the user is allowed to enter the pin code.
- 8. Verify that if the total number of incorrect pin attempts gets surpassed then the user is not allowed to continue further. And operations like temporary blocking of the card, etc get initiated.
- 9. Check that the pin is displayed in masked form when entered.
- 10. Verify that the user is presented with different account type options like-saving, current, etc.
- 11. Verify that the user is allowed to get account details like available balance.
- 12. Verify that the user is only allowed to enter the amount in multiple

denominations as per the specifications.

- 13. Verify that the user is prompted to enter the amount again in case the amount entered is less than the minimum amount configured.
- 14. Check that the user cannot withdraw more amount than the total available balance and a proper message should be displayed.
- 15. Verify that the user is provided the option to get the transaction details in printed form.
- 16. Verify that the user's session timeout is maintained.
- 17. Check that the user is not allowed to exceed one transaction limit amount.
- 18. Verify that the user is not allowed to exceed the one-day transaction limit amount.
- 19. Verify that the user is allowed to do only one transaction per pin request.

# 38. When to used Usablity Testing?

Ans. **Usability Testing in software testing** is a type of testing, that is done from an end user's perspective to determine if the system is easily usable. Usability testing is generally the practice of testing how to easy a design is to use on a group of representative users. A very common mistake in usability testing is conducting a study too late in the design process If you wait until right before your product is released, you won't have the time or money to fix any issues – and you'll have wasted a lot of effort developing your product the wrong way.

This testing has a cycle wherein when -

- 1. the product is ready,
- 2. customers are asked to test it,
- 3. if found any further changes,
- 4. product (software) is returned to the development team with feedback to update the changes,
- 5. again the software had to run usability testing,
- 6. if there're no more changes required,
- 7. the software is launched in the market.

#### 39. What is the procedure for GUI Testing?

Ans. **GUI Testing** is a software testing type that checks the Graphical User Interface of the Software. The purpose of Graphical User Interface (GUI) Testing is to ensure the functionalities of software application work as per specifications by checking screens and controls like menus, buttons, icons, etc.

Procedure:

#### Manual Based Testing

Under this approach, graphical screens are checked manually by testers in conformance with the requirements stated in the business requirements document.

#### Record and Replay

GUI testing can be done using automation tools. This is done in 2 parts. During Record, test steps are captured by the automation tool. During playback, the recorded test steps are executed on the Application Under Test. Example of such tools – QTP.

#### Model Based Testing:

A model is a graphical description of a system's behavior. It helps us to understand and predict the system behavior. Models help in a generation of efficient test cases using the system requirements. The following needs to be considered for this model based testing:

- Build the model
- Determine Inputs for the model
- Calculate the expected output for the model
- Run the tests
- Compare the actual output with the expected output
- A decision on further action on the model

#### 40. Write a scenario of Microwave

#### Owen? Ans.

- 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 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 function's 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 oven's functionality with different kinds of food solid, liquid.
- 17. Check the oven's functionality with different food at different temperatures.

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

# 41. Write a scenario of Coffee vending Machine? Ans.

- 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
- 6. Verify the power/voltage requirements of the machine
- 7. 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 get come out of the nozzle.
- 8. Verify that coffee should not leak when not in operation
- 9. Verify the amount of coffee served in single-serving is as per specification
- 10. Verify that the digital display displays correct information
- 11. Check if the machine can be switched on and off using the power buttons
- 12. Check for the indicator lights when the machine is switched on-off
- 13. Verify that the functioning of all the buttons work properly when pressed
- 14. Verify that each button has an image/text with it, indicating the task it performs
- 15. Verify that complete quantity of coffee should get poured in a single operation, no residual coffee should be present in the nozzle
- 16. Verify the mechanism to clean the system work correctly- foamer
- 17. Verify that the coffee served has the same and correct temperature each time it is served by the machine
- 18. Verify that system should display an error when it runs out of ingredients
- 19. Verify that pressing the coffee button multiple times leads to multiple serving of coffee
- 20. Verify that there is the passage for residual/extra coffee in the machine

#### 42. Write a scenario of

### chair? Ans.

- 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 leg 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. Verify that the weight of the chair is as per the specifications
- 10. Check the height of the chair's seat from floor

#### 43. To Create Scenario (Positive & Negative)?

#### Ans. Positive scenario:

- Examples of positive test cases include verifying proper data output from a form submission, verifying a user can successfully log in to an application, or confirming that a payment transaction is successful.
- Positive test cases are essential for software quality assurance and help ensure that a system behaves as expected and produces the correct results when given valid input.
- Positive test cases are used to evaluate how a system or application will behave when given valid input, or under ideal conditions.
- These tests help to ensure that the application behaves as expected and that the user experience is satisfactory.
- Positive test cases should be written for all features and functions of an application and should include test cases for boundary values and edge cases.
- Positive test cases are generally written by a QA engineer or tester who has a deep understanding of the application or system being tested.
- The tester should have a clear understanding of the functionality and desired results, and should be familiar with the application's source code and design.

#### Negative scenario:

- Negative test cases are important because they can uncover errors that would otherwise remain undetected.
- Negative test cases are those tests that are designed to prove that a system does
  not work as expected when given invalid inputs. For example, a negative test
  case for a login system might be entering an incorrect username and password
  combination. This would ensure that the system does not authenticate a user
  who does not have the correct credentials.
- Negative test cases can also be used to check for unexpected behaviors. For example, a negative test case for a search engine might be to enter a query with an unexpected format. This would ensure that the system does not provide unexpected results when given unexpected input.
- Negative test cases are also important for ensuring that the system is secure.
- They can be used to test for input validation, authentication, authorization, access control, and other security measures. For

example, a negative test case for an authentication system might be entering an invalid username or password. This would ensure that the system does not authenticate a user who does not have the correct credentials.

# 44. Facebook Chat on Mobile / Gmail (Receving mail) / Online shopping to buy product (flipkart)

#### Ans. (1) Test scenario of chat on facebook:

- Check the message gets sent after clicking on the entering button
- Check copy, and paste works in the chatbox or not
- Check whether the user is able to send special characters in Chat or not.
- Check that the User is able to share hyperlinked URLs, Emails, or not.
- Check how many words or characters can be sent at a time.
- Check that spell functionality works fine in the chatbox
- Check if the user enters a message in the textbox and clicks on the refresh button without sending it
- Check that the user is able to send smiley
- Check that the user is able to send multiple smiles at a time
- Check that if the user types smile in letters then it will look like their icon or not
- Check that the User is able to share images
- Check that an error message should get displayed after uploading an image of an unsupported type
- Check that the User is able to share videos
- Check that the User is able to share files
- Check error message should get displayed after uploading large size files.
- Check that the user is able to delete the sent message.
- Check that the user is able to delete multiple messages at a time

# (2) Test scenario on Gmail (Receving 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. Test scenario Online shopping to buy product (flipkart):

- Check that on the product page, and a user can select the desired attribute of the product, e.g., size, color, etc.
- Check that user can add to the cart one or more products.
- Check that user can add products to the wish list.
- Check that users can buy products added to the cart after signing in to the application (or as per the website's functionality).
- Check that user can successfully buy more than one products that were added to his/her cart.
- Check that the limit to the number of products a user can buy is working correctly by displaying an error message and preventing the user from buying more than the threshold.
- Check the availability of products at desired locations.
- Check that the Cash on the Delivery option of payment is working fine.
- Verify that the different pre-paid methods of payment are working fine.
- Check that the product return functionality works fine.
- Check that the Cancel Order option is present.

#### 45. Write a Scenario of Wrist Watch

# ? Ans.

- 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 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. Verify the color of the text displayed in the watch time, day, date, and other information.
- 11. Verify that clock's time can be corrected using the key in case of an analog clock and buttons in case of a digital clock.
- 12. Check if the second hand of the watch makes ticking sound or not.
- 13. Verify if the brand of the watch and check if its visible in the dial.
- 14. Check if the clock is having stopwatch, timers, and alarm functionality or not.
- 15. In the case of a digital watch, verify the format of the watch 12 hours or 24 hours.
- 16. Verify if the watch comes with any guarantee or warranty.
- 17. Verify if the dial has glass covering or plastic, check if the material is breakable or not.
- 18. Verify if the dial's glass/plastic is resistant to minor scratches or not.
- 19. Check the battery requirement of the watch.

# 46. Write a Scenario of Lift(Elevator) Ans.

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

# 47. Write a Scenario of whatsapp Group (generate group)

#### Ans. A Scenario of whatsapp Group (generate group):

- Check if an admin can add others as Admin.
- Check admin can remove it from the group.
- Check admin can add users to the group.
- · Check admin can restrict users.
- Check admin can remove others from admin.
- Check if the admin can add people.
- Check if the admin can add 250 people to a group.
- Check the admin user able to add people with the invite link
- Check the admin can delete people and add them back to the group.
- Check if the admin user can able to delete people.
- Check the admin user able to delete all people in the group
- Check if the admin can change information/group name.
- Check if the admin can change the group image.
- Check every user can share information.
- Check admin can restrict people from sharing information.
- Users can share different media on WhatsApp, like photos, videos, documents, links, and simple text.
- Check if the person is removed from the group; then, that user will cant see the updates.
- If an individual user has posted something in a group, then that individual user will be able to delete the information on the group.
- Check the individual can see the text status read/seen by other group users.

# 48. Write a Scenario of instagram (video call with chat ) Ans. A Scenario of instagram (video call with chat ):

- Verify the during video call user can chat with the other one by minimize the video call.
- Verify the Camera should be available on the Mobile phone.
- Verify the Camera driver should be available and installed.
- Verify the Camera Icon should be available on the Mobile phone menu.
- Verify the availability of Led Flash in the Camera.
- Verify the availability of a Single Led Flash in the Camera.
- Verify the availability of a Dual Led Flash in the Camera.
- Verify the availability of Dual Cameras on Mobile phones.
- Verify the availability of a Torchlight Camera on a Mobile phone.
- Verify the availability Panorama feature in the Camera.
- Verify the availability of the Auto Focus feature in the Camera.
- Verify the availability of the Face Detection feature in the Camera.
- Verify the availability of the Timer feature in the Camera.
- Verify the Zoom X times in the Camera.
- Verify the availability of the Red Eye correction feature in the Camera.
- Verify the availability of Front and Rear Cameras on Mobile Phones.

• Verify the availability of the Front Camera with Flash on Mobile Phones.

49. Write a Scenario of Whatsapp payment? Ans. A Scenario of Whatsapp payment :

- 1. Verify that From within the app, tap on the **three-dot menu** icon in the upper right corner and look for the **Payments** option working or not.
- 2. Verify that setting up the payment and bank name is shown or not.
- 3. Verify that user can select bank name or not.
- 4. Verify that user bank is connected with user mobile number or not.
- 5. Verify that when user Open the chat window of the contact user trying to send or receive payments from is working or not.
- 6. verify that user can be able to switch tabs and choose to either send or receive money from the particular contact you've selected.
  - 7. Verify that user can able to enter the amount or not.
- 8. Verify that user can asked to authenticate your UPI PIN in case you're sending a payment or not.

# **50.** To create HLR & Testcase of Instagram , Facebook , Whatsapp Web Ans.

- I. HLR & Test case of Instagram login Page Link : https://github.com/sangita511/Assignment\_M2/blob/main/1.%20HL R%20Instagram%20Web%20Test%20cases\_M2.xlsx
- II. HLR & Test case of Facebook login Page Link: https://github.com/sangita511/Assignment\_M2/blob/main/2.%20HL R%20Facebook%20Test%20cases\_M2.xlsx
- III. HLR & Test case of WhatsApp Web login Page Link: https://github.com/sangita511/Assignment\_M2/blob/main/3.%20H LR%20Whatsapp%20Web%20Test%20cases\_M2.xlsx
- IV. Assignment M2(PDF)Link:

