

Assignment-2

1.What is Exploratory Testing?

- one of the factors leading to exploratory testing.

2.What is traceability matrix?

- Test conditions should be able to be linked back to their sources in the test basis, this is known as traceability.

3.What is Boundary value testing?

- Boundary value analysis is a methodology for designing test cases that concentrates software testing effort on cases near the limits of valid 0 and 1 ranges

4.What is Equivalence partitioning testing?

- Aim is to treat groups of inputs as equivalent and to select one representative input to test them all EP can be used for all Levels of Testing

5.What is Integration testing?

- Integration Testing is a level of the software testing process where individual units are combined and tested as a group.

6. What determines the level of risk?

- Risk – A factor that could result in future negative consequences; usually expressed as impact and likelihood
- Risks are of two types
 1. Project Risks
 2. Product Risk

7.What is Alpha testing?

- This is an internal test performed by the development team or designated testers. It focuses on identifying major functional issues and verifying that the software meets the initial requirements.
- Alpha Testing is done within the organization.

8.What is beta testing?

- This involves a group of external users, often the target audience, testing the software in their own environment. The goal is to identify usability issues, gather feedback, and ensure the software performs as expected in real-world scenarios. ->Beta Testing is done in the user's environment.

9.What is component testing?

- A minimal software item that can be tested in isolation. A unit is the smallest testable part of software it is called component testing. component testing called as a unit testing and it's done by developer.

10.What is functional system testing?

- Functional Testing: Testing based on an analysis of the specification of the functionality of a component or system.
- Specification – E.g. Requirements specification, Use Cases, Functional specification or maybe undocumented.
- Function – what the system does

11.What is Non-Functional Testing?

- Non-Functional Testing: Testing the attributes of a component or system that do not relate to functionality, e.g. reliability, efficiency, usability, interoperability, maintainability and portability.

12.What is GUI Testing?

- Graphical User Interface (GUI) testing is the process of testing the system's GUI of the System under Test. GUI testing involves checking the screens with the controls like menus, buttons, icons, and all types of bars – tool bar, menu bar, dialog boxes and windows etc.

13.What is Ad hoc testing?

- Adhoc testing is an informal testing type with an aim to break the system. Main aim of this testing is to find defects by random checking. Adhoc testing can be achieved with the testing technique called Error Guessing.

14.What is Load testing?

- Load testing gives confidence in the system & its reliability and performance
- Load Testing helps identify the bottlenecks in the system under heavy user stress scenarios before they happen in a production environment.

15.What is stress Testing?

- stress testing in software testing is like pushing a system to its absolute limit. It's about finding out how it handles extreme loads or unexpected situations, and whether it can recover gracefully or crash when pushed too hard.

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

- White Box Testing: Testing based on an analysis of the internal structure of the component or system. the testers require knowledge of how the software is implemented, how it works.it's also know as a glass box testing.

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

- Black-box testing: Testing, either functional or non-functional, without reference to the internal structure of the component or system.
- There are four specification-based or black-box technique:
 - Equivalence partitioning
 - Boundary value analysis
 - Decision tables
 - State transition testing
 - Use-case Testing
 - Other Black Box Testing

18.Mention what are the categories of defects?

- Defects are commonly categorized into three severity levels: critical, major, and minor

19.Mention what big bang testing is?

- In Big Bang integration testing all components or modules is integrated simultaneously, after which everything is tested as a whole. Big Bang testing has the advantage that everything is finished before integration testing starts.

20.What is the purpose of exit criteria?

- It is following

Exit criteria :

- Successful Testing of Integrated Application.
- Executed Test Cases are documented
- All High prioritized bugs fixed and closed
- Technical documents to be submitted followed by release Notes.

21.When should Regression Testing be performed?

- smoke and sanity testing end after that performed Regression Testing.

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

- Testing Shows Presence of Defects
- .Exhaustive Testing is impossible
- .Early Testing
- Defect Clustering
- The Pesticide Paradox
- Testing is context dependent
- Absence of Error Fallacy

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

Quality Assurance	Quality Control	Quality Control
Before development	After development	During testing
Process oriented activities.	Product oriented activities.	Product oriented activities.
process design, audits	Audits Verification, validation	Test case design

24.Difference between Smoke and Sanity?

Smoke Testing	Sanity testing
This testing is performed by the developers or testers	Sanity testing is usually performed by testers
Smoke testing is usually documented or scripted	Sanity testing is usually not documented and is unscripted
Smoke testing is a subset of Regression	Sanity testing is a subset of Acceptance

25.Difference between verification and Validation

Verification	Validation
Verification is a static, internal process focused on documents and designs.	validation is a dynamic, external process involving actual product testing.
verification Purpose Preventing errors	validation purpose Detecting errors.

26.Explain types of Performance testing.

➤ Types of Performance Testing

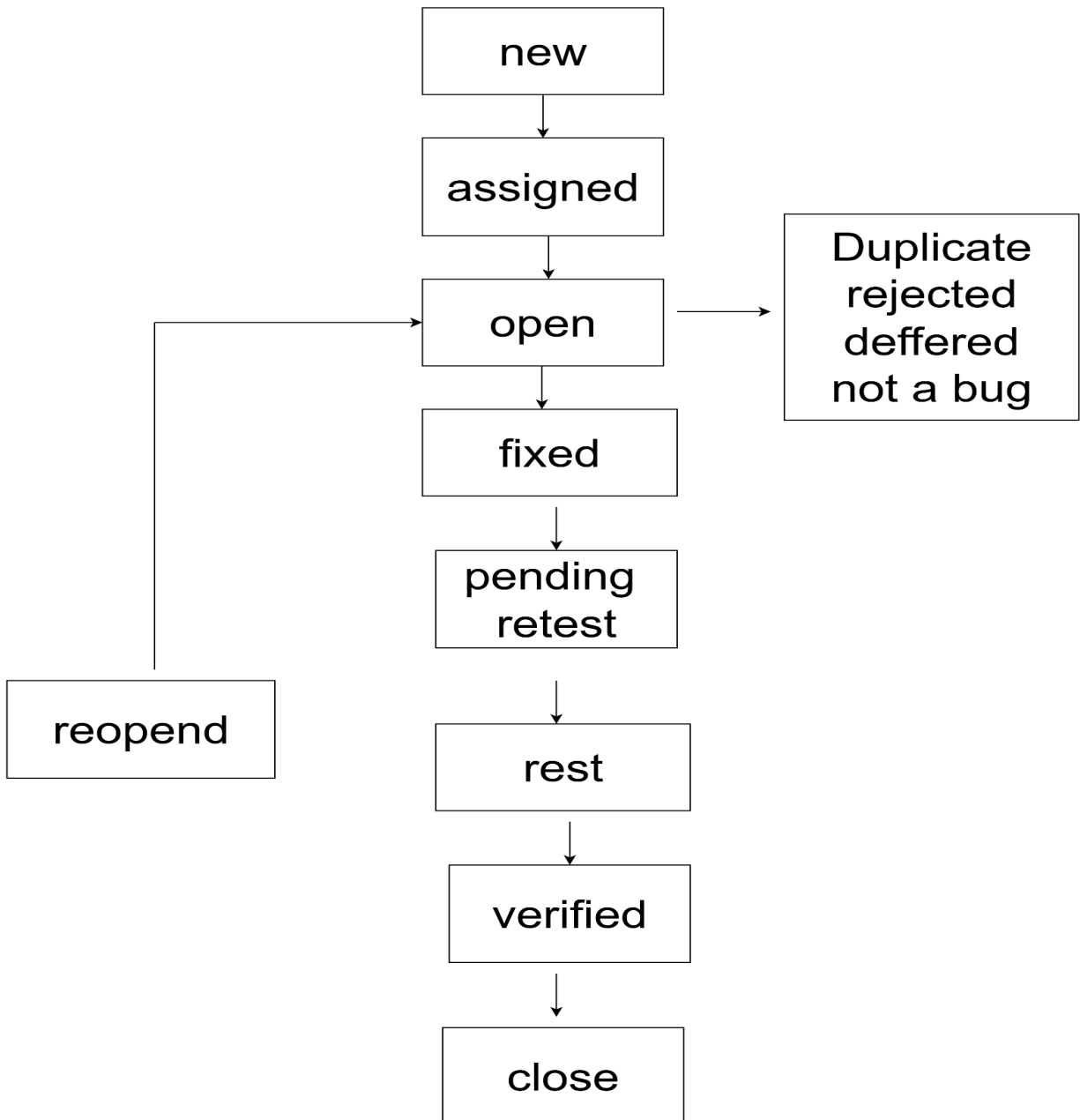
- Load testing
- Stress testing
- Endurance testing
- Spike testing • Volume testing • Scalability testing

28.Difference between Priority and Severity

Priority	Severity
priority indicates the order in which bugs should be fixed	severity describes the impact of a bug on the software's functionality
Assessed by Product managers, developers, or stakeholders	Assessed by Testing engineers or QA professionals

29.What is Bug Life Cycle?

Diagram



30.Explain the difference between Functional testing and NonFunctional testing?

- Functional testing and Non Functional testing different is as the following is as the following.

Functional testing	NonFunctional testing
Functional testing is executed first	Non functional testing should be performed after functional testing
Easy to do manual testing	Tough to do manual testing
Functional testing describes what the product does	product does Nonfunctional testing describes how good the product works
Types of Functional testing are <ul style="list-style-type: none">• Unit Testing• Smoke Testing• Sanity Testing• Integration Testing• White box testing• Black Box testing• User Acceptance testing• Regression Testing	Types of Nonfunctional testing are <ul style="list-style-type: none">• Performance Testing• Load Testing• Volume Testing• Stress Testing• Security Testing• Installation Testing• Penetration Testing• Compatibility Testing• Migration Testing

31. To create HLR & Testcase of

1 .Instagram only first page:

HLR:

Functionality Id	Functionality Name	Description
101	Check website Link	Website Opens Properly.
102	Check Tab Preview	Preview is Visible Properly.
104	check the Sign up link	check the Sign up link is clickable or not.

2) Facebook Login Page:

Functionality Id	Functionality Name	Description
101	Check website Link	Website Opens Properly.
102	check the first name field	It is property working
103	Check the surname	Surname is not number accept ans only character accept
104	check the date of birth field	Date formate day,month,year
105	check the gender field	Only number accept
106	Check gender	It is male nad female radio button only for one choice select

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

SDLC	STLC
SDLC is stands for Software Development Life Cycle	STLC is stands for Software Testing Life Cycle)
The overall process of creating and delivering software, including all phases from planning to deployment and maintenance.	The specific process of verifying and validating software quality through testing.
development, testing, deployment, and maintenance.	environment setup, test execution, and test closure.
To develop high-quality software that meets customer requirements.	To ensure the software is free of defects and meets quality standards before deployment
Responsibility Development team.	Responsibility Testing team

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

Test scenario:

- A Scenario is any functionality that can be tested. It is also called Test Condition, or Test Possibility.
- Test Scenario is 'What to be tested' ->Test scenario is nothing but test procedure. ->The scena

Test case:

- Test cases involve the set of steps, conditions and inputs which can be used while performing the testing tasks.
- Test Case is How to be tested

Test script:

- A test script in software testing is a set of instructions that will be performed on the system under test to test that the system functions as expected.
- There are various means for executing test scripts.
 - Manual Testing
 - Automation Testing

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

- Test Planning in STLC is a phase in which a Senior QA manager determines the test plan strategy along with efforts and cost estimates for the project.
- The Test Plan gets prepared and finalized in the same phase.
 - Activities in Requirement Phase Testing
- Preparation of test plan/strategy document for various types of testing
- Test tool selection
- Test effort estimation
- Resource planning and determining roles and responsibilities.
- Training requirement

35.What is priority?

1. Low
2. Medium
3. High
4. Critical

36.What is severity?

1. Major
2. Moderate
3. minor
4. cosmetic

37.Bug categories are...

- Performance: Slow performance, high resource usage.
- Security: Vulnerabilities, data breaches.
- Usability: User experience issues.
- Compatibility: Issues with hardware/software configurations.
- Localization: Issues with language or regional support.
- UI (User Interface): Issues with UI layout, design.
- Logic: Issues with business logic or algorithm.
- Error Handling: Issues with error messages or handling.

38.Advantage of Bugzilla .

1. Key features of Bugzilla includes
2. Advanced search capabilities
3. E-mail Notifications
4. Modify/file Bugs by e-mail
5. Time tracking
6. Strong security
7. Customization
8. Localization

39.Difference between priority and severity

Priority	Severity
priority indicates the order in which bugs should be fixed	severity describes the impact of a bug on the software's functionality
priority determines how quickly it should be addressed.	Severity assesses the bug's overall impact
Assessed by Product managers, developers, or stakeholders	Assessed by Testing engineers or QA professionals

40.What are the different Methodologies in Agile Development Model?

1) SCRUM :

- SCRUM is an agile development method which concentrates particularly on how to manage tasks within a team based development environment.
- Scrum is derived from activity that occurs during rugby match.
- In scrum there are three roles and their responsibilities are explained as

following:

1) Scrum Master: Master is responsible for setting up the team, sprint meeting and removes obstacles to progress.

2) Product owner: The Product Owner creates product backlog, prioritizes the backlog and is responsible for the delivery of the functionality at each iteration.

3) Scrum Team: Team manages its own work and organizes the work to complete the sprint or Cycle.

Scrum Roles:

-> There are three scrum roles which list is as the

following:

1) Product Owner

- Product Owner is the person who communicates with the clients understands their requirements.
- Product Owner is the responsible person from the company for software development.

2) Scrum Master

- Scrum Master is the person who handles the scrum meeting.

3) Scrum Team

- The team comprises of persons who work on the project. It can be developers, testers or designers.

2)KANBAN :

- Kanban is a very popular framework for development in the agile software development methodology.
- It provides a transparent way of visualizing the tasks and work capacity of a team.
- It mainly uses physical and digital boards to allow the team members to visualize the current state of the project they are working on.
- Kanban originated in Toyota in the 1940s.
- Kanban's meaning in Japanese is billboards.
- The Kanban board has columns and story cards.

41.Explain the difference between Authorization and Authentication in Web testing.What are the common problems faced in Web testing?

Authorization	Authentication
The process of verifying the identity of a user.	The process of verifying what access a user has.
Confirms who the user is.	Confirms what the user can do.
Login with username and password.	Admin users can delete data; regular users cannot.
First, during login or access attempt.	After authentication, when accessing resources.
Access is denied with a login error.	Access is denied with a or similar error

Common Problems Faced in Web Testing:

1. Broken Links
 - the link is wrong and incorrect.
2. Cross-Browser Compatibility Issues
 - some functionality can only work only specified browser.
3. Security Vulnerabilities
 - some application or web don't allow access all users.
4. Performance Issues
 - if internet connection speed is low then application performance is slow.
5. Poor Responsiveness
 - check the website is responsive or not.

42.To create HLR & TestCase of WebBased (WhatsApp web , Instagram)

1. WhatsApp Web

HLR:

Functionality id	Functionality name	Description
101	Check website link	Website open properly
102	Show QR code	It is working in QR code
102	check the internet	check the internet connection proper or not
103	check the camera	check the camera scan the QR code or not
104	check the page is responsive	109 page is responsive
105	check the step	verify and check the steps are correct or not
106	check the scanner	check if the successfully scan QR then login successfully or not
107	check the login with phone no link	it's redirect enter phone no page
108	check the download button	check it's clickable or not
109	check the get started link	heck it's clickable or not
110	check the user	check the user is already account on whatsapp
111	Check the whatsapp logout(using phone)	when user login after that user logout with his phone at that time whatsapp web is also log out

2) Instagram Web:

-> HLR :

Functionality Id	Id Functionality Name	Description
101	Check website Link	Website Opens Properly.
102	Check Tab Preview	Preview is Visible Properly.
103	check the email field	email field accept character number and special symbol
104	check the number field	number field accept unlimited character
105	check the page is responsive	login page is responsive
106	check password	verify the password is invalid and username is valid then show error message.
107	check the Grammer &spelling	check the login page inside all spelling are correct or not
108	check the hide button	it's proper work
109	check the apple store icon	it redirect the apple store to download the Instagram.

42.To create HLR and Testcase on this Links. <https://artoftesting.com/>

➤ **-HLR :**

Functionality Id	Functionality Name	Description
101	Check website Link	Website Opens Properly.
102	check Tab Preview	Preview is Visible Properly.
103	check the email field	email field accept character number and special symbol like .com,@
104	check the first name field	check the first name field
105	check the first name field	verify the first name field accept number character and special symbol also
106	check the page is responsive	login page is responsive
107	check the last name field	number field accept unlimited charcte
108	check the submit button	it's clickable or not
109	check the submit button	t's send the our message to the server
110	Check the page	check the spellings or correct or not
111	check the fields	check the all mandatory fields are

43.Write a scenario of only Whatsapp chat messages.

1. Verify that the sent message appears immediately in the chat window.
2. Verify that the recipient receives the message in real-time.
3. Verify that read receipts (blue ticks) appear when the message is read.
4. Verify that users can send emojis, stickers, and GIFs in chat messages.
5. Verify that users can receive and view text messages from contacts.
6. Verify that users can delete a message for themselves or everyone in the chat

7. Verify that users can forward a message to another contact or group.
8. Verify that users can reply to a specific message in the chat thread.
9. Verify that the chat scrolls automatically to show the latest message.
10. Verify that messages are not sent if there is no internet connection.
11. Verify that a message fails to send if the recipient has blocked the sender.
12. Verify that the app shows an error if the message fails due to server issues.

44. Write a Scenario of Pen.

1. verify and check the pen length as per specification.
2. verify and check the pen is ballpoint or gel pen.
3. verify and check the outer body of the pen.
4. verify and check the outer color of pen.
5. verify and check the brand name is visible or not.
6. verify that user is able to write clearly on different type of paper.
7. check the weigh of the pen.
8. verify the pen work properly on different type of paper(rough, smooth).
9. verify the pen is with cap or without cap.
10. verify the ink color of the pen.
11. verify the text written by pen is erasable or not.
12. verify the pen is waterproof or not.
13. verify and check the pen gravity.
14. Verify if the pen can support multiple refills or not.
15. check the strength of the outer body.
16. verify that the user is able to refill the pen with all the supported ink types.
17. check the how much pressure is required to write with the pen.

45. Write a Scenario of Pen Stand.

1. verify and check the pen stand as per specification.
2. verify and check the pen stand weight.
3. verify and check the pen stand is plastic ,wood or metal.
4. verify and check the pen stand design is as per the specification.
5. Verify that the pen stand can hold multiple pens without falling.
6. Verify that the pen stand is stable on a flat surface.
7. Verify that the pen stand can hold pens of different sizes and thickness.

8. Verify that the pen stand is made of non-breakable material
9. Verify that the pen stand design allows easy removal and placement of pens.
10. Verify that the pen stand can also hold other stationery items like pencils markers.
11. verify and check the color of the pen stand.
12. verify and check the pen stand how much space required.

46. Write a Scenario of Door.

1. verify and check the door as per specification.
2. verify and check the door weight is as per specification.
3. verify and check the door color is as per specification.
4. Verify that the door opens and closes smoothly without noise.
5. Verify that the door locks and unlocks properly with the correct key.
6. Verify that the door handle is easy to grip and operate.
7. Verify that the door closes completely without gaps.
8. Verify that the door does not shake when closed.
9. verify the door material is wood or Matel.
10. verify the door material is strong or not.
11. Check if the door opens inwards or outwards.
12. verify if the door is single door or bi-folded door.
13. Verify if the door is sliding door or rotating door.
14. check the quality and strength of the door.
15. Check the type of locks in the door.

47. Write a Scenario of ATM.

1. Verify that all the labels and text boxes, buttons, images, and links are present on the screen. Check the informative text written displayed on the screen is clearly visible and legible.
2. Verify that the application's UI is responsive i.e. it should adjust to different screen resolutions of ATM machines.
3. Verify that the size, color, and UI of the different objects are as per the specifications.
4. Verify the type of ATM machine, if it has a touch screen, both keypad buttons only, or both.
5. Verify that on properly inserting a valid card different banking options appear on the screen.
6. Verify that the ATM powers on and displays the welcome screen.
7. Verify that the ATM accepts a valid debit/credit card.
8. Verify that the touch of the ATM screen is smooth and operational
9. Verify that the user is presented with the option to choose a language for further operations. 11. check the user is asked to enter a pin number before display any card account details.
10. Verify that there is a limited number of attempts up to which the user is allowed to enter the pin code.

11. Check that the pin is displayed in masked form when entered.
12. Verify that the user is presented with different account type options like- saving, current, etc.
15. Verify that the user is allowed to get account details like available balance.
13. Verify that the ATM dispenses the correct amount of cash.
14. Verify that the ATM returns the card after the transaction is completed.

48. When to use Usability Testing?

- Usability testing is a technique used to evaluate a product or system by testing it with real users.
- The goal is to observe how easily and effectively users can complete tasks, identify any problems or confusion they face, and improve the overall user experience.

Use Usability Testing:

- During the design phase to validate prototypes and find design issues early.
- Before the final product launch to ensure the interface is intuitive and user friendly.
- When introducing new features to check if users can easily understand and use them.
- After a redesign to verify improvements or uncover new issues.
- When user feedback or complaints indicate usability problems.
- During beta testing to gather real user insights.
- To ensure compliance with accessibility and usability standards.
- To improve user satisfaction, reduce errors, and increase product adoption.

49. What is the procedure for GUI Testing?

- Check that the images have good clarity
- Check that the images are properly aligned
- Check the positioning of GUI elements for different screen resolution
- Check Font used in application is readable
- Check the alignment of the text is proper
- Check the Color of the font
- Check the warning messages are displayed properly
- Check the spelling

- check the header is proper aligned
- check the size ,position, height and width of the element.
- check the zoom in and zoom out properly

50. Write a scenario of Microwave Owen.

1. Verify that the Microwave Owen is as the specification.
2. Verify the Microwave Owen material is used.
3. Verify that the microwave oven powers on when connected to a power source.
4. Verify that the door closes properly and locks during operation.
5. Verify that the microwave starts cooking when the timer is set and the start button is pressed
6. Verify that the oven stops heating when the timer ends.
7. Verify that the light inside the oven turns on during operation.
8. Verify that the microwave heats food evenly at a given power level.
9. Verify that the pause/stop button works correctly during a cycle.
10. Verify that the display shows accurate time and settings.

51. Write a scenario of Coffee vending Machine.

1. Verify that the Coffee vending Machine is as the specification.
2. verify and check the outer body and internal part of the Coffee vending machine.
3. verify and check the color or the Coffee vending machine.
4. verify and check the brand and logo is present or not.
5. verify and check the brand and logo is display properly or not.
6. Verify the power requirements of the machine.
7. Verify that the digital display displays correct information.
8. Check if the machine can be switched on and off using the power buttons.
9. Check for the indicator lights when the machine is switched on-off.
10. Verify that the functioning of all the buttons work properly when pressed.
11. Verify that each button has an image/text with it, indicating the task it performs.
12. Verify that system should display an error when it runs out of ingredients.
13. Verify that pressing the coffee button multiple times leads to multiple serving of coffee.

52. Write a scenario of chair

1. Verify that the chair is as the specification.
2. verify and check the weight of the chair.
3. verify and check the color of the chair.
4. verify and check the weight of the chair.
5. verify and check the material of the chair is wood, plastic.
6. Check if the chair's leg are level to the floor.
7. Check the usability of the chair as an office chair, normal household chair.
8. Check if there is back support in the chair.

9. Check if there is support for hands in the chair.
10. Check if cushion is provided with chair or not.
11. check the chair material is brittle or not.
12. Check the condition when washed with water or effect of water on chair.
13. Check the height of the chair's seat from floor.
14. verify and check the easily can move one place to another .
15. verify and check the how much space is required to chair.

53.To Create Scenario (Positive & Negative)

1.Gmail (Receiving mail)

1. Verify that Gmail receives emails sent from another Gmail account.
2. Verify that Gmail receives emails sent from a different domain.
3. Verify that the received email appears in the "Inbox" folder.
4. Verify that the subject and content of the email are displayed correctly.
5. Verify that email attachments are received and accessible.
6. Verify that the timestamp of the received email is accurate.
7. Verify that the sender's name and email address are shown correctly.
8. Verify that email notifications are triggered when a new email is received.
9. Verify that Gmail does not receive an email if the sender's email address is invalid. Verify that Gmail does not receive spam emails in the Inbox.
10. Verify that Gmail does not receive the email if the network connection is down.

2.Online shopping to buy product (Flipkart)

1. Verify that a user can log in or not.
2. Verify that the product catalog is visible and products can be browsed or searched.
3. Verify that a user can add a product to the cart successfully.
4. Verify that the product details (name, image, price, stock, etc.) are displayed correctly. 5. Verify that the cart updates correctly when a product is added or removed.
5. Verify that the checkout process starts successfully from the cart.
6. Verify that a valid shipping address can be added/selected.
7. Verify that a user can select a valid payment method.
8. Verify that payment is processed and a confirmation message is shown.
9. Verify that an order confirmation email/SMS is sent after purchase.
10. Verify that the user cannot add a product to the cart if it is out of stock.
11. Verify that the system shows an error for invalid coupon codes.
12. Verify that the user cannot proceed to checkout with an empty cart.
13. Verify that the purchase fails if the payment method is invalid or fails.
14. Verify that the system does not allow checkout without a shipping address.

54.Write a Scenario of Wrist Watch.

- 1.

2. Verify that the wrist watch displays the correct time.
3. Verify that the date updates automatically at midnight.
4. Verify that the hands move accurately on an analog watch.
5. Verify that digital time is displayed in the correct 12/24-hour format.
6. Verify that the watch keeps accurate time over 24 hours.
7. Verify the material of the watch and its strap.
8. Check if the shape of the dial is as per specification.
9. Verify the dimension of the watch is as per the specification.
10. Verify the weight of the watch.
11. Check if the watch is waterproof or not.
12. Verify that the stopwatch or timer functions work correctly.
13. Verify that the numbers in the dial are clearly visible or not.
14. Check if the watch is having a date and day display or not.
15. Verify the color of the text displayed in the watch – time, day, date, and other information.
16. Verify if the brand of the watch and check if its visible in the dial.

55. Write a Scenario of Lift (Elevator)

1. Verify the design of the lift is as per the specification
2. Verify the type of door of the lift is as per the specification.
3. Verify the capacity of the lift in terms of the total weight.
4. Verify that the lift moves to the particular floor as the button of the floor is clicked.
5. verify the which material is used to made lift.
6. verify the door is automatic or manually.
7. verify all button are perfectly work or not.
8. verify light and fan in the lift.
9. Verify that in case the multiple floor number button is clicked, the lift should stop on each floor
10. verify the emergency button is available or not.
11. verify the emergency button is working or not.
12. verify open and close button is working properly or not.

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

- 1 Verify that a user can create a new WhatsApp group.
2. Verify that the group name can be set or not.
3. Verify that the group is created after adding at least one participant.
4. Verify that the group photo can be added during creation.
5. Verify that the group appears in the chat list after creation.
6. Verify that the creator is automatically made the group admin.
7. Verify that participants receive a notification when added to the group.

8. Verify that the group can include members from both phone contacts and invite links.
9. Verify that the newly created group allows sending and receiving messages.
10. verify that user can see how many person see his message.
11. verify that user can group videocall or not.
12. verify user can voice call or not.
13. verify other person change the Group icon or not.
14. verify other person can change the bio or not.

57. Write a Scenario of Whatsapp payment

1. verify that payment option is available or not.
2. verify that without internet connection user can use the payment option or not.
3. verify payment option is open or not.
4. verify that user link bank account to WhatsApp payment.
5. verify UPI setup complete or not.
6. verify user link valid phone number to bank account.
7. verify user can send money which user use WhatsApp payment option or not.
8. verify user can receive money from WhatsApp account or not .
9. verify that confirmation message display or not.
10. verify that amount is deduct from the sender account or not.
11. verify if user enter 3 time invalid PIN then user block account or not.