

Manual Testing:-

Software Testing → manual software testing we need to verify & validate & find defect.

- on real time the developer developed the application after that the application is properly working or not are one valid it.
- The application is quality or not we are one valid it.
- As a Tester we need proved quality product to the customer.
- (i) Before release application to the customer as a tester we need valid the application is properly working or not.
- (ii) They is quality product or not we are one valid it.

Manual Testing:-

- The application is properly working or not they are validates with human efforts.
- The manual Testing is completely human efforts no needs to install any software for the manual tester.

Automation Testing:-

- No needs to put any efforts on url or web page just we need to write some piece of code automatically browser will launch automatically URL is entered some data enter automatically click on search button.

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What is the testing:-

→ Testing one has types:-

- Validation
- Verification

(i) Validation:-

→ Before purchasing any laptop on the market we need gather some information on that.

→ which is best product on the market.

→ which is good configuration we need to validate.

→ Based on my budget which is good product on the market. That we call validation.

(ii) Verification:-

→ after purchasing the only product we need to validate my product is properly working or not. each and every thing we need verify. That we call verification.

e.g. laptop

→ changing

→ screen

→ mouse

etc

Why are we going to use the testing?

→ once the developer develop the application

the tester provide quality product to the customer.

→ The tester provide satisfied product to the customer

able to accept.

~~How~~ How do do the testing in real time?

→ Different types URL in real time.

Production URL → everyone able to use.

Dev URL → able to use only developer

② Staging URL → The test one using staging URL

→ mode → mode of archive.

→ Environment → environment of staging

Step-1

(i) Launch Browser

(ii) Enter the valid URL

(iii) Click on enter button

Step-2

→ need to valid every element it should displaying or not.

Step-3

→ The URL is stable or not

| | |
|--------|-------------------|
| 400 :- | Bad request |
| 401 | → Unauthorized |
| 403 :- | forbidden |
| 404 :- | Page not found |
| 501 | Server not access |

Step-4:-

→ Each and every element & property blanking or not.

Step-5:-

→ All elements spelling & comment or not

(GUI → Graphical user interface)

Step-6:-

→ Need to validate that & input box are edit box.

Step 7:-

We need to perform testing.

Step 8

How to validate application & quality are not

- alphabets
- Alph + Numeric
- Alph + Num + Special

Scenario :- what is to be tested.

Step by step.

→ Scenario is nothing but explain the application functionality
For be tested → what to test, single line scenario.

Test case

→ Test case is nothing but How do do the testing
reproduce.

e.g.

Scenario → login the Gmail app

test case is nothing but How do the testing.

(i) Enter the URL

(ii) enter the username

(iii) enter the password

iv. click on login button

Test case

→ check system behavior when

valid email id & password is entered

→ if invalid email & pass is valid.

→ if user password is working or not.

Defect:-

→ defect is nothing but the expected result and actual result.

→ The expected result and actual result both are same the result is pass.

→ The expected result and actual result both are different means the customer expected

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To the ^{Vendor} Passabrd page that is called defect.

Bug:-

- once you got the defect you need to inform to particular developer.
- developer did not accept the blindly they will verify that is real defect or not.
- when developer accept the defect that is we call bug.

Error:-

- Before sending the application to the testing department properly working or not.
- The developer verify the code, some the error.
- If some developer getting any error or any mismatch that is we call error.

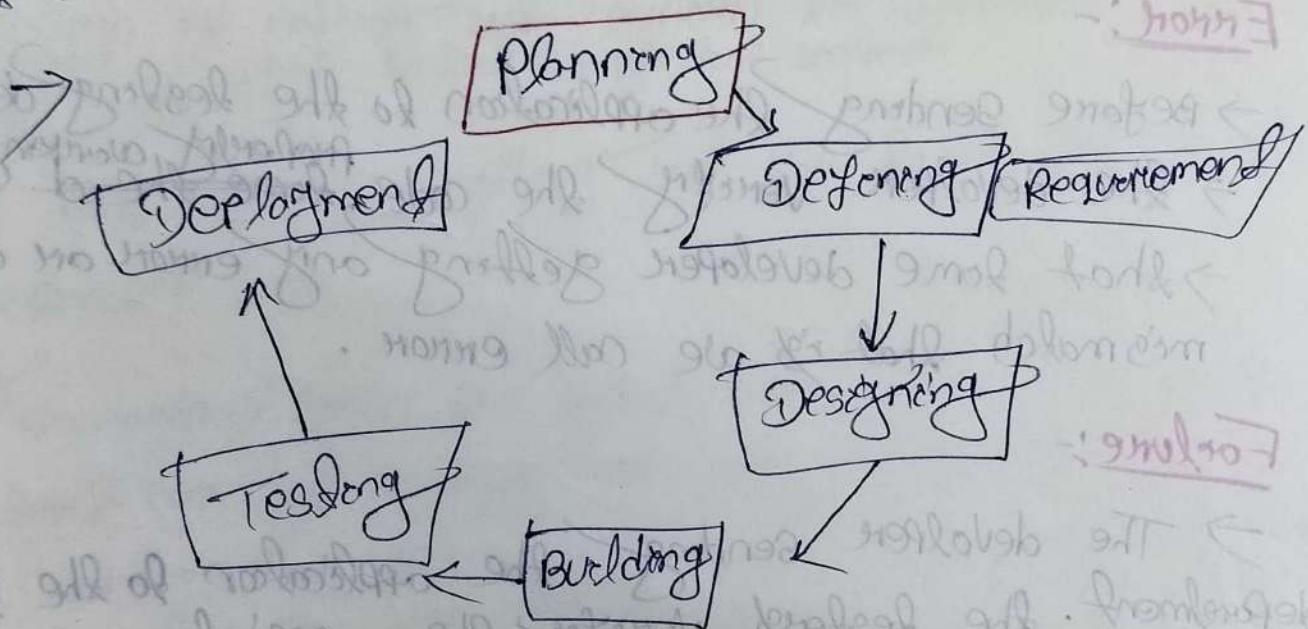
Failure:-

- The developer sending the application to the testing department. The testing verify the application functionality is properly working or not. If everything is fine they will send to the production people.
- They will validate everything is fine developer is fine tester is fine and production people will fine.
- Finally release the application to the customer.
- The customer verify the application is ~~properly working~~ not quality or not. something is not working customer inform to the company people are build is

Manual Testing

SDLC: (Software development life cycle)

- SDLC is a process used by the software industry to design, develop and test high quality softwares.
- SDLC aims to produce quality software that customer expectation, within times and cost.



SDLC consists of 6 phases :-

- (i) initial phase are Requirements phase
- (ii) Analysis phase
- (iii) Design Phase
- (iv) Coding Phase
- (v) Testing Phase
- (vi) Delivery and maintenance Phase

(1) Onital Phase or Requirements Phase:-

→ Business analyst gathers the requirement from customers and management manager will estimate the cost to complete the project. Once all initial phase completed the store ~~in FRS, URS, CRG, BRG, BDD, BP files folder~~

(2) Analysis Phase:-

→ Project manager and technical manager one, planning resources, study and environment study, requirement analysis. Once ~~Analysis Phase is completed store in SRS file~~
→ system requirement specification (SRS).

(3) Design Phase:-

→ chief architect (CA) one ~~design~~ ^{open SRS} divided whole project into low level design to high level design by module and sub module. Once design phase is completed we store ~~in TDD file~~ Technical Design Document (TDD) file.

(4) Coding Phase:-

→ Developers will develop the actual source code with TDD support. Once is ~~out.p. compl.~~ ^{open TDD file} in GCD.

(5) Testing Phase:-

→ The tester is verifying the application is qualified or not based on customer requirement.
→ If any defects found, those will be listed out send to BA.

| Test Case ID | Purpose | Precondition | Description | Expected Result | Actual Result | Result |
|--------------|---|--------------------|--|---|---|--------------|
| TC_01 | Verify premises bank user property manager | www.premisbank.com | 1. Enter valid URL 2. Click on Enter button | System should display premises bank user page | After clicking enter button, system shows premises bank user page | Pass/Success |
| TC_02 | Verify premises bank application admin able to login and logout | www.premisbank.com | 1. Enter valid URL 2. Click on Enter button 3. Enter valid login credentials 4. Enter valid admin password 5. Click on login button | System should display premises bank user page on a local host | After clicking enter button, system shows premises bank user page on a local host | Pass/Success |
| TC_03 | Verify premises bank employee able to login and logout | www.premisbank.com | 1. Enter valid URL 2. Click on Enter button 3. Enter valid employee login credentials 4. Enter valid admin password 5. Click on login button | System should display premises bank employee information | After clicking enter button, system shows premises bank employee information | Pass/Success |
| TC_04 | Verify premises bank employee able to login and logout as well as update their information | www.premisbank.com | 1. Enter valid URL 2. Click on Enter button 3. Enter valid employee login credentials 4. Enter valid admin password 5. Click on login button | System should display premises bank employee information | After clicking enter button, system shows premises bank employee information | Pass/Success |
| TC_05 | Verify premises bank employee able to login and logout as well as update their information and update their password | www.premisbank.com | 1. Enter valid URL 2. Click on Enter button 3. Enter valid employee login credentials 4. Enter valid admin password 5. Click on login button | System should display premises bank employee information | After clicking enter button, system shows premises bank employee information | Pass/Success |
| TC_06 | Verify premises bank employee able to login and logout as well as update their information and update their password and update their address | www.premisbank.com | 1. Enter valid URL 2. Click on Enter button 3. Enter valid employee login credentials 4. Enter valid admin password 5. Click on login button | System should display premises bank employee information | After clicking enter button, system shows premises bank employee information | Pass/Success |
| TC_07 | Verify premises bank employee able to login and logout as well as update their information and update their password and update their address and update their phone number | www.premisbank.com | 1. Enter valid URL 2. Click on Enter button 3. Enter valid employee login credentials 4. Enter valid admin password 5. Click on login button | System should display premises bank employee information | After clicking enter button, system shows premises bank employee information | Pass/Success |
| TC_08 | Verify premises bank employee able to login and logout as well as update their information and update their password and update their address and update their phone number and update their email id | www.premisbank.com | 1. Enter valid URL 2. Click on Enter button 3. Enter valid employee login credentials 4. Enter valid admin password 5. Click on login button | System should display premises bank employee information | After clicking enter button, system shows premises bank employee information | Pass/Success |
| TC_09 | Verify premises bank employee able to login and logout as well as update their information and update their password and update their address and update their phone number and update their email id and update their address | www.premisbank.com | 1. Enter valid URL 2. Click on Enter button 3. Enter valid employee login credentials 4. Enter valid admin password 5. Click on login button | System should display premises bank employee information | After clicking enter button, system shows premises bank employee information | Pass/Success |
| TC_10 | Verify premises bank employee able to login and logout as well as update their information and update their password and update their address and update their phone number and update their email id and update their address and update their address | www.premisbank.com | 1. Enter valid URL 2. Click on Enter button 3. Enter valid employee login credentials 4. Enter valid admin password 5. Click on login button | System should display premises bank employee information | After clicking enter button, system shows premises bank employee information | Pass/Success |

Test case:-

Do Placing are not
properly working or not

Black Box

Black box testing are need to
check app's functionality and
behaviour no look internal as
need verify only external.
→ go cont. by ~~ST~~ ~~ST~~ VBT

White:

white box testing are need to
check app's internal part and
~~design~~ functionality.

at correct developer, VBT, EBT

error:-

error of navigating bid
once we launch the app's URL
the navigate to the error
page like page not found
i.e called error.

A score of
Spiral

Testing methods or Techniques

- (i) Black box Testing
 - (ii) White box Testing
 - (iii) Grey box Testing
- (i) Black box Testing: → 2 types → functional
→ Black box testing nothing who will verify application functionality. That people one comes under testing. → it is done by Testers. no need to look internal.
- (ii) White box Testing:
→ White box testing nothing who will verify application coding part. That people comes under developers or programmers. → it is done by developer.
- (iii) Grey box Testing:
→ Grey box testing nothing who will do both black and white and white that people one comes under testing.
→ the mixture combined of black and white.

Levels of Testing:-

- (i) unit level Testing
- (ii) module level Testing
- (iii) integration level Testing
- (iv) system level Testing
- (v) User acceptance level Testing

- (i) unit level Testing: - 1st level test / Test end-to-end model
→ Before release the application to the customer the developer are smallest test that called unit testing.
→ unit level testing are done by developer.
→ unit level testing nothing but is properly working are not ~~the~~ by developer well test.
→ They is white box Testing.

(ii) module level Testing: - main/module :-

- which is involve more than application functionality that is we call module one main functionality
→ They is done by black box Testing.
→ small part of the application testing by feature

(iii) integration level Testing-

- ✓ It occurs after unit testing and before system testing.
→ once done the (all related) code.
→ They will push all the ^{control} code particular company.
→ Before integrate the company they will design on frame work.
→ once complete the frame they will integrate the code based on the customer requirement.
→ after integration they will verify the code is properly working or not.
→ if working fine they will send the application to system level.

→ is a type of software testing in which the different units, modules, or component of a software application are tested as a combined entity.

→ 3 types

- (i) Big-Bang testing / small system test
laptop, mouse, keyboard, printer etc component or module are tested one by one
- (ii) Top-down testing / Heirarchical
one combined tested as group
- (iii) Bottom-up testing / small system test
only login, mail box, delete mail one

(iv) System level Testing:

→ system level testing but which is integrate all elements properly working or not that of S.L.T.

(v) User acceptance level Testing:

→ once release the application to the customer with whatever we implemented the element of properly working or not.

The user accept the requirement that we call as U.A.T.

→ This is the final stage of testing after integrated and system testing.

Integration:

only 3 module of there login, mail box, delete mail

get is individually feed above unit test.

get is individually feed above mail box or login mail

combining one at login & mail box or login mail

one at delete any mail & mail box

under delete are not.

→ is a type of software testing in which the different units, modules, are component of a software application are tested as a combined entity.

→ 3 types

- (i) Big-Bang testing / small system laptop, mouse, keyboard, printer etc component or module are tested together.
- (ii) Top-down testing / first highest level module are combined tested as group.
- (iii) Bottom-up testing / small module like logon, mail box, delete mail are tested one by one.

(iv) System level Testing:

→ system level testing but which is integrated all elements properly working or not that of S.L.T.

(v) User acceptance level Testing:

→ once release the application to the customer with whatever we integrated the element of properly working or not.

The user accept the requirement that we call as U.A.T.

→ This is the final stage of testing after integrated and system testing.

Integration:

only 3 module is there logon, mail box, delete mail

get of individual test done unit test.

get of individual combining once at logon & mail box open or not

once at logon & mail box open or not

once at delete any mail or mail box

under delete are not.

Software Development

Process models (Testigmeshad)

SDPM:

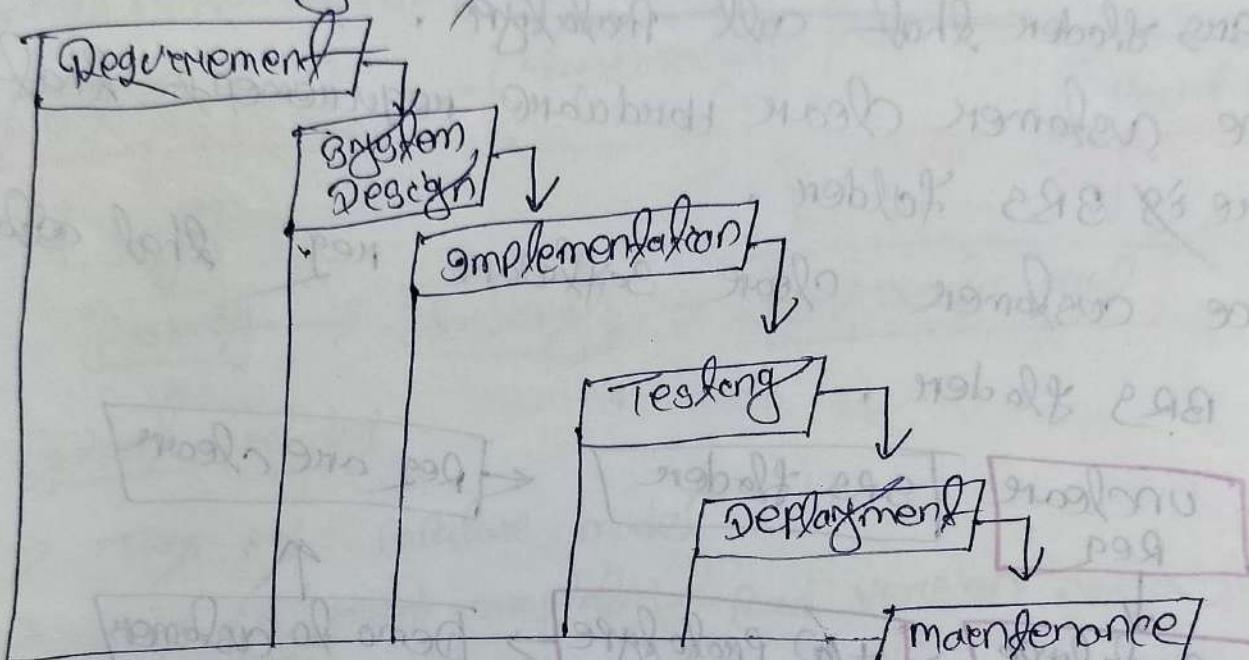
- If u want release the application to the customer we are going to use Software Development Process model.
- It is ~~soft~~ diff. types of models:
 - (1) Waterfall model or Sequential model
 - (2) Prototype model
 3. Evolutionary or incremental model
 4. Spiral model
 5. V-model
 6. Agile model

1. Waterfall model :-

- Waterfall model nothing but the customer provide some requirements.
- In this waterfall model we are going to release every 3 months. This is ~~lengthy~~ same.
- When we are using the waterfall model after completion of 3rd month, the customer provides any new requirement ~~middle of the project~~ ~~to company people~~ in this waterfall model ~~we are~~ we are unable to add the new requirement.
- If u add the new requirement you can share

→ In the Waterfall model each phase must be completed before the next phase can begin and there is no overlapping in the phases.

The following phases of the waterfall model:



2. Prototyping Model: most popular customer don't know exact requirement.

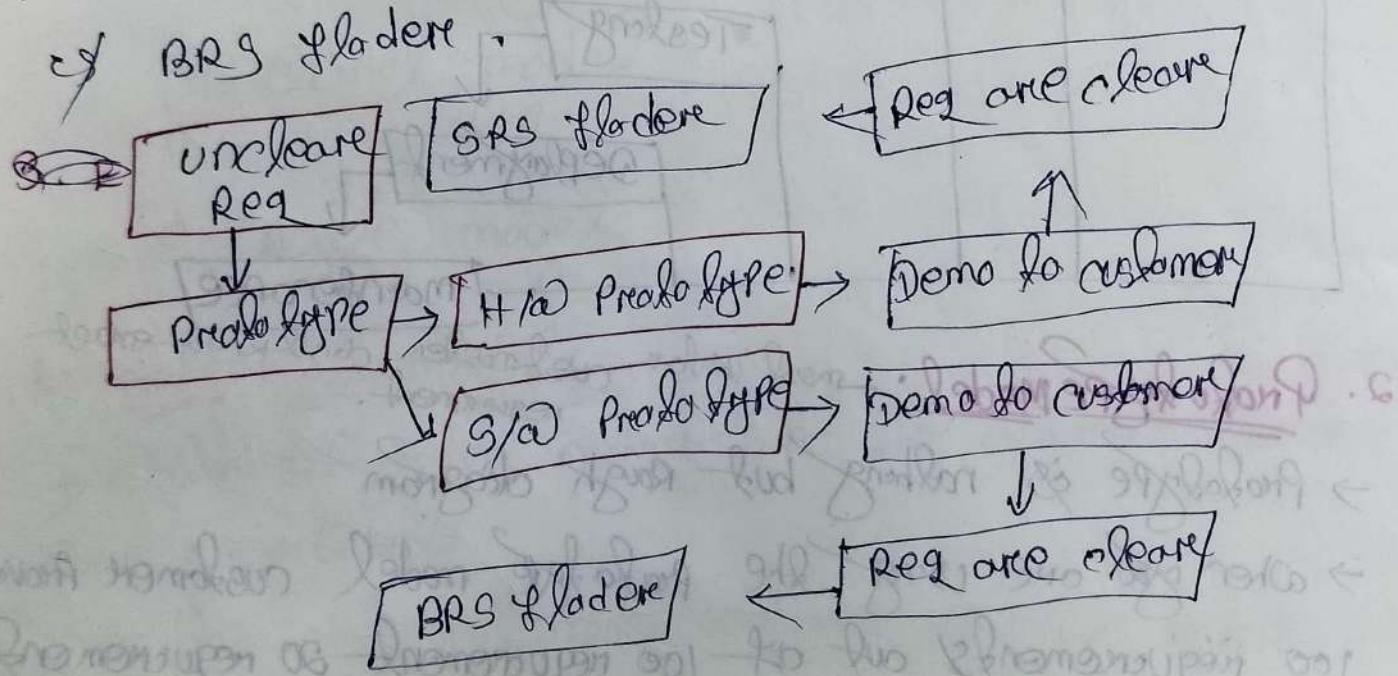
→ Prototyping is nothing but rough diagram

→ When you are using the prototyping model customer provides 100 requirements out of 100 requirement 20 requirement is not clear so requirement clear that some immediately the company people inform to the business analyst.

→ The business analyst having some knowledge that project he will explain to the employees.

→ If don't have any knowledge about that project requirement immediately the B.A draw a diagram that is rough

- Before go to customer B.A. divided ~~to~~ sys requirements. How many hardware req and how many software requirement.
- customer clear requirement ~~ask~~ to the B.A. that store in SRS folder that call ~~prototype~~.
- some customer clear hardware requirement that store in SRS folder.
- once customer clear software req. that come of BRS folder.



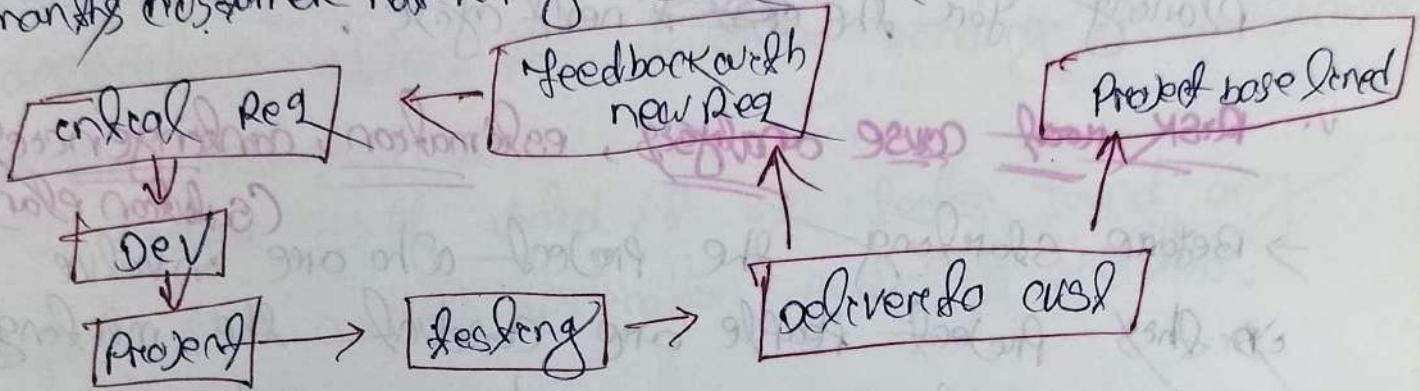
3. Evolutionary or incremental model :-

→ evolutionary model nothing but all have on real phase ~~where~~ the developer develop the project and ~~at~~ project is ready sending to testing department once testing is completed we are going realise to the project to the customer.

The customer is happy with project. She Shot on OnePlus.

→ The customer is not happy with Project customer provides some feedback with new requirement going to initial phase.

→ The customer Happy with Project 6 months and after 6 months customer not happy we are back to 0 months.



4. Spiral model:-

→ This is popular model.

→ This is ~~not~~ completely free version not a free source.

→ Completely security based model.

→ In this spiral model main disadvantage risk real cause analysis is not an easy task.

→ In this spiral model there are 4 stages.

i. Define the objectives

→ Define the objective is nothing but purpose of the project.

ii. Work analysis:

→ Once we got the requirement from customer we are analyzing what type of requirement we are going to release the customer. That is work analysis.

iii. constraints:

→ constraints is nothing but the customer will provide some instruction to the company people.

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iv. Refining and Planning for the next cycle:

→ The customer provides some requirements.

How many requirements is high level and How many requirements is low level they will call refining and planning for the ~~next~~ next cycle.

v. Risk root cause analysis, estimation, contingencies:-

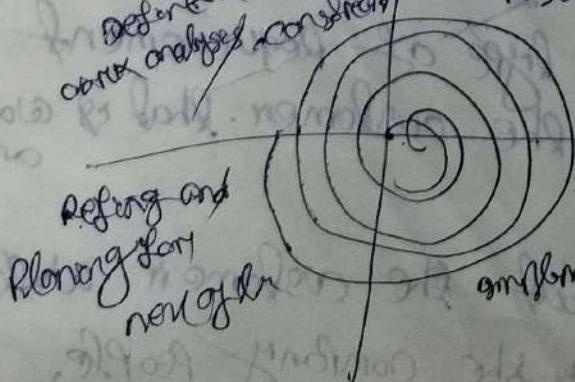
→ Before starting the project who are involved in this project people are conduct the meeting. In this project the main agenda in future are go to any risk what is solution for the plan. Start of all risk root cause analysis.

→ What type of are go risk in future we don't know so we are unable to estimate why because it's paid version not free source.

vi. Implementation :-

→ implementation is nothing but the developer before sending application to testing phase the developer implement the code. If everything is properly working or not the developer will complete.

Defects detected
Risk root cause analysis, estimate, solution plan
other analysis constraint



are can allow the req middle of the project.

if defects are found → update project

V- Model :-

- 2 phases are verification and validation
- if you want to release the application to the customer by using V-model. one develop the whole application. after the developer sending the application to the testing phase.
- Testers will verify & if testers found any defect the complete application pending is delivered.

6) Agile methodology :-

- Agile methodology nothing but it is very quick delivery.
- if u want release to customer with agile methodology within maximum we are 14 days.
 - 2 minimum we are 7 days.
- in this agile methodology if u want release to the customer we are going to use some technical terminology.

(1) Sprint :-

- Sprint is nothing but particular time management.
- if you want release application to the customer through Sprint.

(2) Scrum :-

→ Short on OnePlus but process,
Amita 😍

(Q) ~~What is process?~~

→ If you don't release the application to customer by agile methodology we are going to Scrum process.

→ In this Scrum there diff. roles of there.

i. Product owner

ii. Dev Team

iii. Scrum Team

iv. Scrum master

(Interview question - 12)

i. Product owner:-

→ Product owner like a business analyst.

→ In this agile methodology the Product owner gather user card or story card / story board and Product item from the customer he will share all user card in side of the Product backlog along.

~~Product owner~~ why we are use Product owner:

(Q) Why we are use Product owner?

→ If we want release application to customer by using agile methodology must have use agile role. Role is Product owner.

ii. Scrum Team & Dev Team:-

→ Who are involve this project the peoples are call Scrum team and Dev team.

(iii) Scrum master:-

→ The Scrum master he will explain the some rules.

(a) How do do Testing

(b) How to achieve the goal.

(c) How to provide quality product to the cust.

(iv) Scrum events: (Meeting)

There are diff. types of meeting everyday.

- (a) stand up meeting or sprint meeting or daily meeting
- (b) sprint planning meeting
- (c) sprint review meeting
- (d) retrospective meeting

(a) standup meeting:

→ if u work a project daily will meeting. The team lead
discuss what was completed yesterday
→ what you have to do today
→ what is plan tomorrow.

(b) sprint Planning:

→ before release the application to the customer we need some plan. ~~so~~ what is next sprint staff will call sprint planning meeting.

(c) sprint Review meeting:

→ Before release the application to the customer they will conduct one meeting that is review meeting

(d) what is discuss?

The application release date 4/feb and meeting will held on 1/feb. the team lead to me decides to test. Team lead ask 1st test what are review test we have complete 5 req and complete tomorrow.

(d) retrospective meeting:

→ on this meeting 2 types :-

1. what went ~~to~~ good
2. what went ~~to~~ wrong.

→ Before starting the testing our test

Shot on OnePlus should be ready or not

- If you want to do the testing you need to prepare everything & then we need to validate it.
- ↳ Based on that is what went to good.
- Before sending to customer everything working or not.
- Once we got the defect they will fix. *submit*
- ↳ Once few critical major defects found at the application behaviour properly working or not. That is all are one went to *accept*.

Types of Testing:-

There are different types

1. Build Acceptance Testing
2. Re Testing
3. Regression Testing
4. Static Testing
5. Dynamic Testing
6. GUI Testing
7. Smoke Testing
8. Sanitary Testing
9. Installation Testing
10. Desk Top Testing
11. Integration Testing
12. Usability Testing
13. Compatibility Testing

14. Privilege or Firewall Testing
15. End-end Testing
16. Port Testing
17. adhoc Testing
18. Spike/ load/ stress Testing
19. Exploratory Testing
20. monkey Testing
21. Gorilla Testing
22. Exhaustive Testing
23. Generation Testing
24. Security Testing

1. Build acceptance Testing:-

- The developer develop the application and developer sending the application to testing department.
 - Before starting the testing we need to do some basic testing.
 - i. checking URL is properly working or not.
 - ii. based on the customer expectation all the elements is properly displaying or not.
 - iii. once we launch the application URL the application is crash or not we validate.
 - iv. all database connection is properly working or not.
- all thing working properly we accept the acceptance testing
- after doing testing we need some basic testing

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Build acceptance Testing.

2. Re-Testing :-

→ Re-testing is nothing that we need to do one more time testing.

e.g. The tester found a defect and before inform to developer. The developer did not accept blindly. They will verify that defects is valid or not.

The developer get same issue that will test and again sending to tester and tester will verify that we call Re-testing.

3. Regression Testing :-

→ The regression Testing same like re-testing just little change.

→ once we got the defect we need to inform to developer. The dev did not accept blindly. He will verify that is real defect or not. He will fix the defect after development that sending to testing department as a tester we need to do the defect is fix or not.

→ once we got fix from developer we need to do valid if the element is properly working or not. as the same time we need to valid if existing functionality also working or not. any element is affected are not.

Build :- Build is nothing once project done or web application done by developer side after sending test i.e. create build.

4. Static Testing :- Before doing testing tester need to verify all the document.

→ Static is nothing but without human effort to document verification. all the requirement doc, Test case doc is property is there or not. That we call static testing.

5. Dynamic Testing :-

→ Dynamic is nothing but with human effort. The all document requirement we need to execute with human effort.

6. GUI Testing :- (Graphical mistake)

→ GUI Testing is nothing but onto the gui the build are need to validate in the application any graphical mistake there are not.

→ Graphical mistake is based on customer requirement every element & spelling is correct or not we are validating. → look & feel of an app' → validate design of app' { our size of icon, setting,

7. Smoke Testing :-

→ Smoke Testing is nothing but general health check up of build.

- i. Build Health check up
- ii. This done by Tester / developer
- iii. every new build need to do smoke
- iv. This is not a deep testing
- v. Build is stable or not ✓
- vi. what is application behaviour.
- vii. what is the before stability.

8. Sankey Testing:-

- i. This is done by tester.
- ii. This is deep testing.
- iii. This name of regression testing
- iv. What is application after stability.

9. Installation Testing:-

- Installation Testing is nothing but if you want to install any application in your own office laptop like some by asking some admin credentials. That we call installation testing.
- It is done by non functionality.

10. Desktop Testing:

- Desktop testing is nothing but once we install any software. The software related logo & should display on our desktop. Some time it not display then we search box. That we call desktop testing.

11. Integration Testing:-

Some previous page.

12. Usability Testing:-

- Usability testing is nothing but user friendly e.g. ~~one error~~ comes under non-functionality of black of testing once we enter username & password click on login button. Once we click login & get an error message people are understand error message that call usability testing don't understand error message that not usability testing.



13. Compatibility Testing:-

→ compatibility testing is nothing but before release the application to the customer we test software if compatible or not we are valid it in different types of operating system properly working or not that we call compatibility.

14. Privilege or Firewall Testing:-

→ Firewall Testing is nothing but I want to launch the application ~~must~~ have firewall. ~~so~~ now if we have privilege next we have able to communicate that we call Firewall Testing.

15. End to End Testing:-

→ End to end testing is nothing but before release the application to customer we need to validate starting to ending each and every flow is properly working or not. that we call end to end testing.

16. Port Testing:-

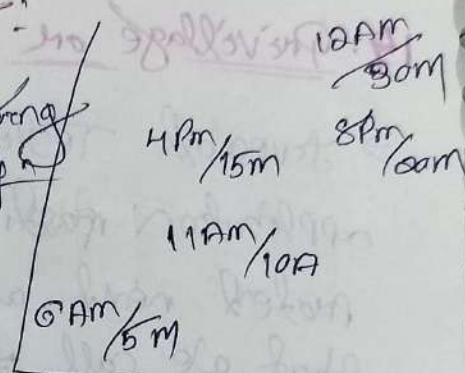
→ If we release to the customer once complete the whole application we are going demo to the customer. you're application files and all connection are check properly working or not and all port is working or not that we call Port Testing.

17. Adhoc Testing:-

→ Before release the application to customer - The customer will provide ~~any~~ new requirement in this time we no need follow testing approach just understand the requirement. How do the testing ~~analysis~~ that we call adhoc Testing.

18. Spike / Load / Stress Testing:-

→ spike is nothing but we are going to validate the appⁿ behaviour in diffⁿ time that call spike.



- we are going ~~spike~~ at a time enter the maximum value what is the appⁿ behaviour that call load.
- when we are using the appⁿ more than customer expectation what time the appⁿ behaviour is stress. i only 30m - using 30m@ross

19. Exploratory Testing:-

→ we don't requirement specification but we have some domain knowledge. Based on the domain knowledge we need to explore the my appⁿ.

ex) n, g → domain know
n → left
g → soon

Suppose we use a new company this company already develop the appⁿ with any bug, test case as need check the functionality.

20. monkey Testing:-

of u ~~use~~ alone to select random ~~function~~ ^{invald / invalid data} on our appⁿ what is appⁿ behaviour we are going to validate that is we call monkey Testing.
ex) opening appⁿ ~~WTF~~ ^{WTF}

21/ Gorilla Testing:- Before release app to market we need test monitoring. Gorilla testing is done by Amazon mobile. Not for some apps.

→ If u want to validate any element or link no. of items that is call gorilla testing. ex: amazon mobile. Not for some apps.

22. Exhaustive Testing:- If u want to check all possible base that

→ If u what do we check are app all possible base that & call exhaustive testing.

23. Generation Testing:-

→ If u want to apply any logic on the requirement that we call generation testing.

Ex → 100 Testcase → 3 defect (Exhaustive)
→ 50 Testcase → 3 defect (Generation)

24) Security Testing:-

→ This is done by non-functional testing
→ security testing is nothing but identify all the security loopholes.

→ The main concern of security testing protect the app's data from getting hacked.

25) Alpha Testing:-

→ alpha testing is done by company side.
→ Once we got the requirement the developer devlvr. the app after that developer sending to testing department.
Test for find that particular requirement exist in the same. This called alpha testing.

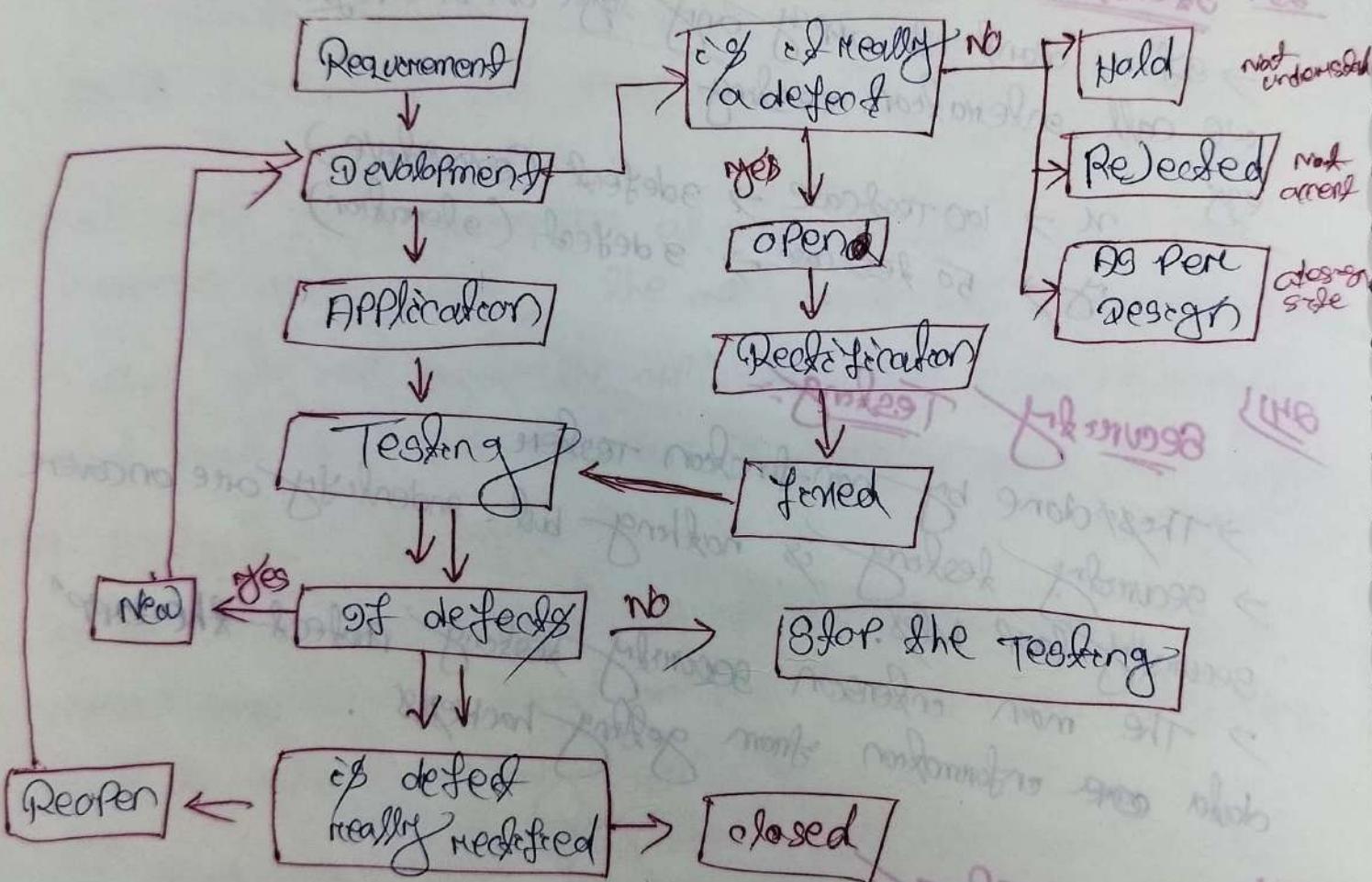


26.

Beta Testing:

- Beta Testing is done by customer side.
- once release the app to the customer . he will verify the app functionality that particular requirement is working or not that is call Beta Testing.

Bug Life Cycle:



Test Plan :-

1. all are all involve in test plan
2. This is project level.
3. This is Project to project diff.
4. Test ~~analyst~~ are able to change test plan.
5. This is carried out by test manager or team lead.

Test Plan is a document that defines scope, objective approach and of a software testing

Test Strategy :-

Test is set of guidelines that describe the test design and how to perform testing.

1. all are not involve in test strategy.
2. This is organization level.
3. a whole company need to follow one strategy.
4. are one unable to change test strategy.
5. This is carried out by Project manager.

Severity :-

- severity is nothing but seriousness of the defect
- There are diff severity
 - i. fatal → once we launch URL page is blank page.
 - ii. major → which is involve more than app's functionality
 - iii. minor → any particular element is not working
 - iv. suggestion → customer provide suggestion

Priority :-

0178

0198

- priority is nothing but which defect we need to fix immediately.

There are diff type of priority.

1. Critical → URL is not working
2. High → inside app's main functionality not working
3. Medium → any element not support

Shot on OnePlus

Amita 😍 loco ➡ spelling mistake.

Test Plan :-

1. All are all involve in test plan.
2. This is project level.
3. This is Project to project diff.
4. Testers are able to change test plan.
5. This is carried out by test manager or team lead.

Test Plan is a document that defines scope, objective approach and of a software testing.

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Priority :-

DATE

21/08

- Ser Priority is nothing but which defect we need to fix immediately.

There are diff type of priority.

- i. Critical → URL is not working.
- ii. High → inside app's main functionality not working.

Medium → any element not support.

Low → spelling mistake.

Shot on OnePlus

Amita 😍

~~en~~ of prioritizing and severity:

once we launch a ~~application~~ application the application logo spelling mistake and sign in not working which defect for immediate ~~and~~ ~~critical~~ sign in are apply blame page and logo ~~is~~ ~~low~~ ~~Priority~~ ~~High~~ ~~severity~~ ~~more~~ ~~logs~~.

So ~~sign in low priority~~

logo ~~is~~ ~~low~~ ~~Priority~~ sign in ~~High~~ ~~severity~~.

Entry Criteria

- Before doing the testing the testing related prerequisite is there or not are valid.
- Based on customer requirement each and every requirement covered or not are need valid.
- Based on scenario every test case are covered or are valid.

Exit Criteria :-

- Before exit the appⁿ we need to validate what is appⁿ behaviour, critical behaviour that is called ~~exit~~ ~~criteria~~.

SPC

How do develops the application.

STC

How do the Testing

Quality Assurance (QA)

QA stand some ~~for~~ assurance to do
1. QA main aim is prevent the defect.

2. QA having one technique.
i.e. How to manage the quality.

3. QA ~~one~~ people not involve in execution but everyone responsible to QA people.

4. The QA is planned process.

Quality Control (QC)

QC full form assure from
1. QC main aim of improve and identify the defect.

2. QC having one technique.
i.e. How to verify the quality.

3. QC people are involve in execution time but only responsible to QA people.

4. QC is in action process.

Software Testing Life cycle:

→ How to do the testing.

There are different types:-

1. Test Planning

2. Test Development

3. Test execution

4. Result analysis

5. Bug Tracking

6. Retesting

7. Closed out.

1. Test Planning:

→ if you want do the testing on our app we need to some planning (document).

→ on this document what type of content are we going to store to provide on test planning

i. How to do the testing

ii. How to achieve the goal on quality.

iii. If u want to do testing what type of software are we going to use.

iv. If u want do the testing what type of testing we need to use on this application.

v. If u want do the testing which requirement we are test you need check.

vi. If u want do the testing that related all scenarios are covered or not.

Content of test plan:

There are 2 types document,

(i) object

(ii) Reference document.

(i) object:-

object is nothing but purpose

we of want do the testing on this project

what type of plan we are going to apply.

(i) Reference Document:

→ on this manual testing we are going call diff names.
e.g. SRS, BRS, FRS, URS, BDD, BT

Coverage of Testing:-

There are 2 types.

- (i) Feature to be Testing.
- (ii) Feature not to be Testing

(i) Feature to be Testing:-

→ once we get the requirement which requirement we are able to test through manual i.e. call feature to be testing.

e.g. out of 100 req., 80 req. is feature to be testing
20 req. is feature not to be testing.

(ii) Feature not to be Testing:

→ which requirement we are unable test through manual.

i.e. call feature not to be testing.

e.g. automation testing.

Test Design Techniques:

There are diff types

1. BVA (Boundary value analysis)
2. ECP (Equivalence class partition)
3. ST (State Transition)
4. DT (Decision Table)

- (1) BVA (Boundary value analysis)
- once we get reqⁿ from the customer as a test case we need to follow the testing approach.
- based on customer requirement we need to choose which is the best suitable technique of analysis based on the reqⁿ.
- in this design technique the BVA is best suitable ex: The username & password should accept 6-10 range only.

| | | | | | |
|----|------|------|----|------|------|
| lb | lb+1 | lb-1 | ub | ub+1 | ub-1 |
| 6 | 7 | 5 | 10 | 11 | 9 |

Resource Planning:-

- Resource planning nothing but once we get reqⁿ from product owner (user cases).
- Before providing to team members as a team lead we need to analyze if possible to deliver on not with the given time.

Scheduling :- Scheduling :

- scheduling nothing but we need to complete task within the time only.

| on/off | Start date | End date | manpower | 50-90% |
|----------|------------|----------|-----------|------------------------|
| invalid | valid | invalid | invalid | valid |
| ≤ 5 | 0 digit | > 7 | ≤ 50 | $50-90 \Rightarrow 90$ |
| | | | | |

invalid valid invalid invalid valid invalid
 ≤ 5 0 digit > 7 ≤ 50 $50-90 \Rightarrow 90$

Staffing and Training:-

(T8) recruitment slide (9)

- go and do the automation testing on the app. The company people hiring the automation tester for the project.

Training:-

Training is nothing but already some manual ~~before~~ test cases are there. The company people don't hiring the automation tester.

They will provide some training for manual testing

(2) ECP (Equivalence Class Partition)

graphical representation of valid & invalid.

- once we get reqⁿ from customer we need to follow the testing approach.

Testing approach:-

- we need to read carefully multiple time once we get reqⁿ.
- after understanding the reqⁿ we need analysis
- for this reqⁿ how many scenarios we are able covered.
- Before doing the testing we need some plan.
- every area related test cases are covered or not are needed to validate.

- Based on customer reqⁿ which is the best suitable technique we need to analyze.

- The customer is provided different types of reqⁿ before we are unable to estimate. ex/ mobile [] / 10 digit
valid invalid

- ex/ The username & password id should be alphanumeric. 5-15, 21-25.

Based the above reqⁿ the best suitable technique is ECP.

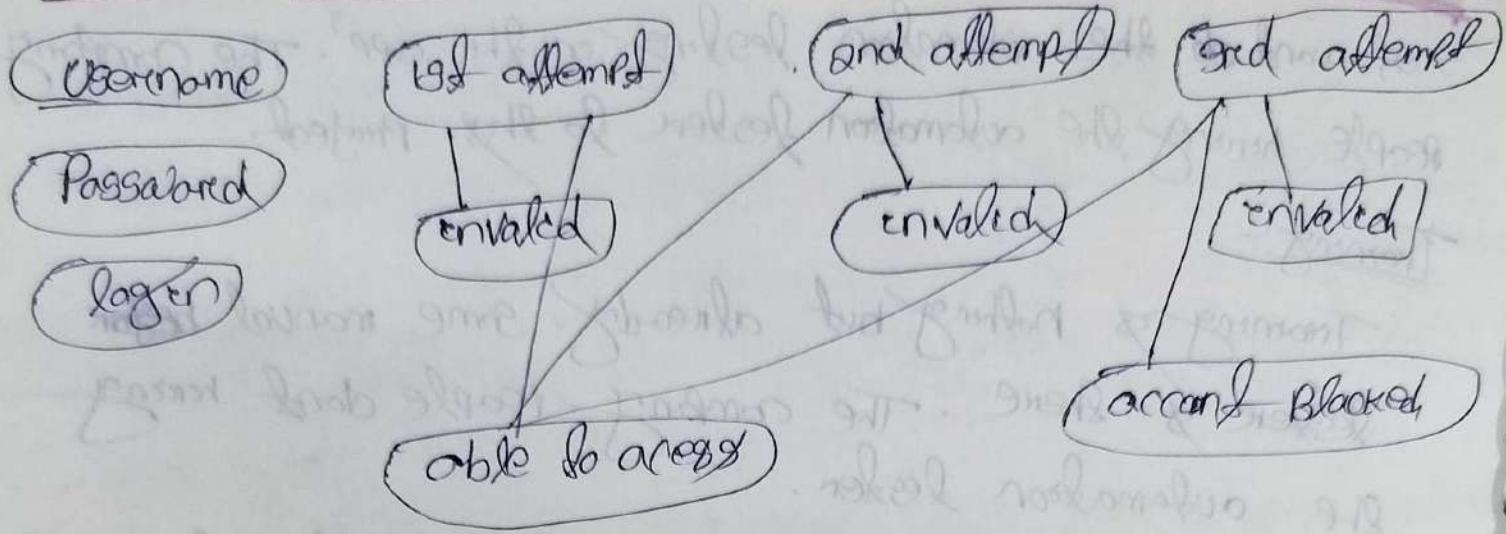
invalid data

0-4 → 2 / 10-20 → 2

Shot on OnePlus

Amita 😊 → 23/01/25 → 23

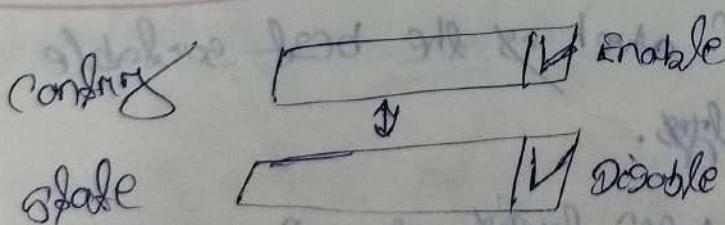
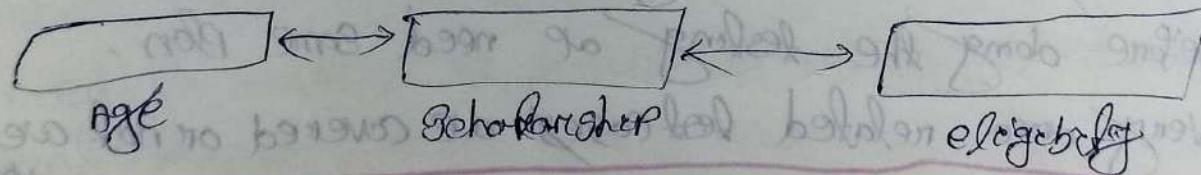
③ State Transition (ST) :-



→ If you want to validate the only Banking domain (Login page) or insurance related domain we need to apply state transition.

→ Once we got reqⁿ for this technique we need to apply 1st positive testing after that we need to do state transition technique.

Decision Table (DT)



→ Once the customer provide any reqⁿ we need to choose best technique for this reqⁿ.

→ We have 2 dropdown, config, state,

→ When we are select the config the state comes under

Note:-

one we got the negⁿ before applying decision table technique on this negⁿ we need to do negative testing.

→ we need click on state dropdown no. of times.

after that we get one BPPU i.e. alert, close.

→ we need to click on alert button it's work some time.
after that what is state dropdown behaviour.

(5) Error Guessing (EG):

This is done only by people who are there
I don't have domain knowledge. They people
having domain knowledge they can able find
out that error but because,

→ without any negⁿ specification who are having experience,
domain knowledge that people able to find the error in
this application.

e.g. we need to force to e-commerce. (i) Amazon

q. flipkart

→ when enter any lend in flipkart search bar the
customer entered it should display that related ten
down. Here it should not display only lend the domain
knowledge people are able to find out this issue or error.

(6) Test Development:

- : MTC (ii)

2 types of test development.

i. RTM :- Requirement Tracable matrix.

ii. DTM : Defect Tracable matrix.

(i) RTM:-

→ Before release the appⁿ to customer we need to
create RTM document.

→ if we want create the RTM doc. we need create base
on the Negⁿ doc. & Test case doc.

→ Based on Reqⁿ doc. and Test Casesⁿ doc. each and every Reqⁿ related scenarios are covered or not we need to trace.

→ Here we are going to create 4 columns.

| <u>Reqno.</u> | <u>Req description</u> | <u>Testcase No.</u> | <u>Test description</u> |
|---------------|------------------------|---------------------|-------------------------|
|---------------|------------------------|---------------------|-------------------------|

Reqno: - The Reqⁿ no. like a version no.

We need to take from Reqⁿ doc.

Req desc

→ Req desc is nothing but end customer Reqⁿ.
we need to take from Reqⁿ doc.

Testcase no.

This is we need take from Test case doc.

Test case desc:

They are " " " from " " " .

(ii) DTM:-

→ When we one release appⁿ so rush. On this appⁿ how many defects we found all defect related information we need to provide on side of the DTM.

→ Here we need to create 5 columns.

| <u>Defect no.</u> | <u>Defect desc.</u> | <u>System Result</u> | <u>Severity</u> | <u>Testcase</u> |
|-------------------|---------------------|----------------------|-----------------|-----------------|
|-------------------|---------------------|----------------------|-----------------|-----------------|

Defect No., defect desc:-

on these 2 columns we need to provide how we got the defect stat information.

Testcase no., Testcase Desc:-

These we need to take from test case doc.

Note:-

→ when we are execute the test case we got the defect. The defect related testcase we need to provide inside of the DTM doc.

(3) Test Execution:-

→ once we got the regⁿ doc. from the cust. we need to create the scenarios based on the Regⁿ.
→ Based on the scenarios we need to create the test cases.
→ Before execute the testcases each & every Regⁿ related scenario we covered are not we need to verify.

Then everything covered we can start execution.

(4) Result Analysis:-

→ once execution is completed we need to validate based on testcase doc. How many testcases are pass & how many testcases are fail we need to analysis i.e Result analysis.

(5) Bug Tracking:-

→ once execution is completed we got a result out of some testcases we got some testcases fail.

→ The failed testcases related information are need to track the defect to particular developer. i.e call Bug tracking



(6) Reporting:-

- once we book the defect we need to provide the defect related info defects to our team lead.
- Then team lead he will validate whether the defect will booked or not and assigning name concerned or not they will validate all defect related information.

(7) closed out:-

- Before release the appⁿ to customer we need create closed document.
- on this doc. That particular appⁿ all evidence are need to store in side of the doc.
 - e.g) Test cases link, defect screenshots, Zera link & all defect related information.

Manual Testing Terminology:-

Release:-

- once product is ready we need to release appⁿ to customer straight screen voice i.e release.

Delivery:-

- once whole appⁿ is ready we need to delivery the appⁿ to customer i.e delivery.

Slippage:-

- we need to take some extra time complete the task C. we are unable to complete the task within some we need take some slippage.

Latent defect:

→ once we release the app to customer the customer find any defect called latent defect.

Defect age:

The same gap bet' defect open time & close time.

Test bed:-

The combination of test suite & the combination of test environment.

Test suite:-

combination of different types of test cases.

Prototype:-

Prototype is nothing but rough diagram, when we get unclear req'n then we need to create rough diagram.

checkin:-

if you want upload any abc, any screenshot, from abc's we need to use checkin.

checkout:-

if you want download any abc from repository we need use checkout.

Version control:-

→ The customer getting any update on this app that some will inform to company people. Here the people will update and modify the version.

B. Role of construction :-

construction is nothing but special type of method whose name same as class name.

- constructor is the main purpose initialize the object.
- if want to execute ~~the~~ we need to create a object for class and then main method automatically constructor will run

Verification :-

- Before testing we need to check document, designing and coding based on customer reqⁿ.
- we are ~~developing~~ checking the right product or not. based customer reqⁿ.
- no need execute only we need to review, walkthrough and inspection.
- verification is also known as static Testing.
- it's before validation.

Validation :-

- validation is nothing but we need to check software product is ~~not~~ working or not based on customer reqⁿ.
- we need to check actual result based on entered result.
- we execute the code. and check the functionality is working or not.
- functional like unit testing, integration, system, etc
- it is also called dynamic Testing.

- ~~Q1~~ Q1) Gmail login page.
→ Verification we need to check, all spelling correct, colors & everything & details are not just verify.
→ Validation we need to check login button working or not. one can enter username, password.

~~Q2~~ Q2) Bug laptop

Smoke Testing:

verify critical functionality
generally health checkup.

- it's both tester & dev
- build & stable enough
- before submit

any web app link not working send to dev
this is smoke test

Sanity Testing

- verify new functionality,
→ tester.
- sanity & verify particular component.
- narrow range
→ offsite site

Developers add new search icon in dashboard. we need to once we need to check existing functionality is working

Ad hoc Testing:

once get build ~~from developer~~ we no need follow
& only testing approach, test case plan.

without any plan we randomly testing i.e. call ad hoc testing.

open amazon enter URL

Randomly choose any element &
we are using spoof browser like chrome, firefox and
login both application both browser - one password change on chrome
and it should be navigate login page
and a strong full page.

Functional Testing:

'Non Functional'

- It is a type of Software Testing which is used to verify the functionality of the software application.
- ~~based~~ working are not based on requirement.
- Functional Testing each function tested by giving some value and determine out put. and verify the actual result Based on expected result.
- Functional Testing also called Black box Testing.
- Functional Testing also called Black box Testing because it focuses on functional.
- There following types
 - System Testing
 - Regression
 - ReTesting
 - Smoke
 - Sanity
 - Integration
 - Load testing
 - etc

Non-functional Testing:

- non-functional Testing type of software testing which is used to test off behaviour, reliability, load, stress and performance of the software.
- non-functional never test before function testing.
- non-functional also important because it's role on customer satisfaction.
- only // amazon and game store game many time
 - only // load testing
 - only // stress

Waterfall model

different shelf real, analysis, design, coding. every next phase started before previous phase complete.

V-model

Same as waterfall each phase must be complete before.

General

longer project

How to install the Zera?

Once launch the browser we need to enter zera download and click on enter button.

→ we need chose zera software generate link.
→ click on download button once we click on download

→ click on download button once we click on download.

then navigate to the update zera software page.
→ we need to click on get started.

→ we need to click on get started navigate to the download

zera software home page.

→ we need to choose operating system then click on check box and click on submit button then automatically zera software will download.

How to launch the Zera Software?

Once installation is completed. we need to enter zera window search click on enter button. then zera software (Tomcat server) will launch.

→ after 5 min we need to enter the below URL
~~http://~~, http://localhost:8080

→ we need to enter zera user credentials whatever are created to install time.

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Amita 😍

1. Waterfall model

different start req', analysis, design, coding. every next phase start before previous phase complete.

Waterfall V-model

Same as waterfall each phase must be complete before.

General
longer project

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→ How to launch the Zera Software?

once installation is completed. we need to enter zera website search click on enter button. then zera software (Tomcat server) will launch.

→ after 5 min we need to enter the below URL

~~http://~~, http://localhost:8080

→ we need to enter zera user credentials whatever are created in zera home .
→ once we click on login button navigate to zera dashboard

- Here in the ~~new~~ Home Page we have diff bar of there.
- we need to choose Project Tab click on create project then navigate to the Project template page.
- Here we need to choose Scrum and click on create.
- Then navigate to the Project details Home Page. we need to provide Project Protocol (Project KPI) then click on create Project.
- once click on Project create navigate to backlog home page under backlog we need to create issues.
- once we create issues we need to drag and drop inside of the first sprint.
- once drop the issues we need to click on start sprint.
- once we click on started sprint here we need to verify sprint information. The duration is mandatory and click on started. Three bar is there. To do, in progress, done. on side of first bar we need provide requirements. The sprint is in progress almost is completed then we need to drag & drop the backlog in progress stage.
- we are already reach sprint deadline or Target then we need to take review meeting in this we discuss about
 - 1. any blockers.
 - 2. Any challenges.
 - 3. need any support
- Sprint everything is going fine we able to release to customer then we need to drag & drop from in progress to done.
- after that we need click on complete sprint.

How to log the defect to particular developer:

→ If we want to log the defect to developer we need to use below fields.

1. Project: once we click on create button the project key automatically will update.

2. Issue Type: - There are diff issue of drop box.

(a) Epic: - This is main major req (Big req)

(b) Story: - These req (Epic) are need to divide story wise.

(c) Task: - In this story we have diff Task so there is no need to click on particular task.

(d) Bug: - When we are execute the task (Testing) we get any mismatch that is bug.

Note: The bug is nothing but one or more defects the developer accept the defect we need call bug.

3. Summary: ex. Amazon all module button → Epic

Amazon sub all module → Story

In sub module Alexa → Task

In sub module Alexa is not working → Bug (Defect)

3. Summary:

In this summary we need to provide short message.

4. Description:

→ Reproduce step: - 1. Enter valid URL & valid pass, 3. Click on enter

→ observe: system should display invalid user name & password

→ Expected Result: my system navigate to login home page.

5. ~~Friends~~ ~~two boxes~~ ~~one both~~ ~~will see all two boxes~~
on this create issue we choose extended friend.

6. ReAssigner: → who are inform to developer i.e. call ReAssigner (Teste)

7. Assignee To: we need inform particular developer name in this field.

8. one at ~~time~~ provide all the field we need to click on create button.

→ Then automatically issue has created.

→ The developer also get ~~regarding~~ this issue.

JIRA:

1. What is Jira?

→ Jira is a software testing tool developed by an Australian company, i.e. Atlassian.

→ Jira is a bug tracking tool used to track issues and bugs related to pure software and ^{process based on} agile project management.

→ Jira comes from the word Gorilla. The Japanese word Godzilla.

2. Explain Jira work flow?

→ Jira work flow is a set of statuses and transition that an issue moves through during its life cycle, and it's reflects a process within organization.

→ To Do → when developer create the issue and assign to particular developer i.e. start working on it.

→ ~~In Progress~~ on Progress: - developer start working on the issue

and ~~some days~~ ~~not~~ had some on Progress -

→ Done: - developer after that sending to developer → Done, developer offere that sending to developer → Done & fixed

Shot on Oneplus

3. What are the issue types that are created and tracked

via Jérôme → 3. Tynnes zero project:

→ 1. Jema come : → issue most in dental care

- Task: → The task is a work that needs to be completed.
- Sub task: → sub task of a piece of work which needs to be done to complete a task.

2. Jura Goffaare :-

→ Bug: → A big problem that exists in the functionality of product. / we execute task that some mismatch.

→ EPC :- The ~~is~~ ~~big~~ requirement that needs to be broken into small ~~glances~~ : API,

→ Task :-

→ Sub Task

→ **Song**:— The song is smallest unit of about one min. which divided song into.

3. Jere Genive Degk!

4. How to ~~stay~~ create an eSIP.

→ click on file + button to create an issue.

→ Then issue type

Then Summary

→ Description

→ Then on create

Positive:

Positive testing whenever nothing but when we put valid input data then we need to app response.

e.g. Registered account only numeric number.

123456

Negative ~~when to perform~~
negative testing mostly but when we put invalid input data then app response.

or/

12ab34

Performance Testing:

→ Performance testing is a non-functional Software testing technique.

that can check stability, speed and response of application.

3 types. Spike, load, stress.

→ response testing is we need to measure of application

e.g. PhonePay we need payment so then we need to check how many time for payment also we need to check everyone do same or not.

Negative Scenario:

e.g. e-commerce app's shopping cart add multiple product so the cart some product is not available then we click next button that some system respond to item selected 2 item not available

→ the are need address of workers are not

→ when credit option we can enter invalid & evn, abc.

Purpose of negative testing:-

→ It only discover hidden errors message and failed message.

When is it used?

Once developer fix the errors after user testing.

Q) Why Software Testing Required?

→ Software testing is mandatory process because that guarantee to provide quality good and safe the application and before that release to customer.

Q) What are the experience based testing techniques?

- Exploratory Testing
- Error guessing

Q) What are the categories of defect?

- Missing
- Wrong
- Extra

Q) Out of 10 test case which one you test?

→ Which involve more than app functionality.

→ Which testing will do app and only one test.

→ Negative Testing

→ Defect Analysis

Bug leakage

when we ready to release
do market that time the
end user got defect
get bug leakage.

Bug Release:

when we update new version
and release to the market one
~~people know some~~
we know some bugs is release
but ~~not~~ big so that big
are update in later version.