

M-4

→ why would you want automated test

- 1 To ↑ effici
- 2 ↑ test coverage
- 3 Fast & free
- 4 ↓ ↑ efforts
- 5 All of above

→ Best describes aut test

- 1 repeat predefined

→ correct about test aut

- 1 Maintains high invest comp to output
- 2 AT is time consu
- 3 Aut applied to insuff oper with magnify the inefficiency.
- 4 Benefits of MT are usability

→ False about sel

- 1 Open sources
- 2 Requires physical browser
- 3 Testing API
- 4 Not a test tool

Not a component of Selenium Suite

3 A's → Action, Accessor, Assertion.

→ Speed Control tool available for SelID

i. Controlling how fast

→ SelID pane

Testers, ErrorMes, LastComplExe, InformationMessage, InfoCnd

→ \${name}

→ DOM, getElementByName

→ Cannot export SelID

Ruby|test|unit| webDriver

" | remotecon

Python =

u | unittest | recontrol

Csharp|unity| webbr.

→ Using tag class attribute

1. name as lastname

starts with | css inputname|name|

2. " first "

wait in

→ Why we are not using implicit or explicit script

→ changing the page of URL

✓ driver.get URL

<html>

<title>

<body>

<div class="xyz">

<p>

Enter value

<input name="txtbox"

class="txtbox" - default

type="text">

<input name="txtbox"

||

||

<input type="radio button"

value="check1"

</div>

</body>

<html>

Best x-path to findout 2nd Textbox.

1) //div[@class="xyz"]//input[2]

2) " " " " //input[1]

3) " " " "

4) //*[@name="txtbox"][@class="xyz"]

→ (Ans) K should be reverse
driver.timeouts.manage().PageLoadTimeout(10, TimeUnit.SECONDS);

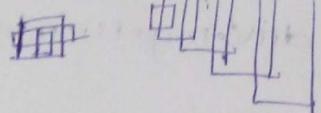
throws exc

wait for max 10 sec for pageload

" " min " "

Syntax

btn.sendKeys()



(for)
→ Select Radio btns,

isselected()

→ Iterating over the open window → switch to method
we are using

handles class handles (variable of type string)

driver.getWindowHandles()

→ Incorrect opt in webdriver API to wait till the visibility element is present

Visibility of element

element to be visible

visibility until element

visibility of element

→ <html>

1) <body>

<xyz>

2) Selectname = MBPBD "option value = "0">

Please select.

- 2) option value = 1, Samsung
3) " " = 2, MI
4) option value = 3, OPPO

<select>

1) Select by index

2) Value

Correct weBDD code to select a second value

Select V=newselect

Sequence

@Beforeclass

1 s.o.i (" ");

@before

s.o.i (" ");

2 @Test

s.o.i ("test1");

Ignore

@Test

s.o.i ("test2");

@After

s.o.i ("After");

@Afterclass

s.o.i (" ");

→ SoftAssert SoftAssert = new softAssert

Soft Assert → Continued
there is any assert
assert → stop executing
if there is an error
else continue

(a) Test

softAss.Assert.equals("txt1", "txt2"),

Assert.assertEquals("txt", "txt");

softAss.Assert.equals("txt1", "txt2");

Valid → suite → class
↓
Valid test NG XML

→ Assertion fails

→ TestNG will fail

X 1. Inside classes (class should be there)
2. Similar to it.
3. Similar to it.

→ TestNG will pass

→ TestNG will pass with warning.

→ NDA

→ Browser driver is not supported by sel webdrive

1) Chrome

2) Mozilla

3) IE

4) PhantomJS

Parallel → Grid is used.

APM native mobile Apps Supported by APM.

1) Hybrid MobileApp

2) Native

3) webbased

4) AOA

→ which comp will be there in
YUNIT

Test result

"runner

X sets, case

+ AOA

→ .Sendkeys() is the test

typeText into textbox.

Syntax error

Selectname = " "; optionvalue = "0" selected

Need of Independent Testing:-

Client

To evaluate Quality of s/w.

In terms of cost, totally unbiased.

Tester sees each defect in neutral perspective.

Test env setup

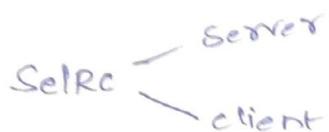
→ Selenium has a Suite of tools

Sel IDE, Sel RC, Sel webdriver or Sel2, Sel Grid.

→ Java, # Ruby, Python, etc.

For automating web applications, Open Source framework.

Supports multiple browsers & OS.



Sel webdr → controls brow by directly comm to it.

→ By using which type of framework, Quadrant / Sprintest is used with angularJS based Appl.

Grunt → it will be continuously integrated by using Grunt.

Mspec, Specflow

Tools in BDD

* Obj, which is ATDD framework?

FitNesse

1) Hybrid automation framework

2) T

3) Ruby

BTDD frameworks → Cucumber
SpecFlow

Cucumber → Ruby Prg lang bcoz similar to English Lang.

Specflow uses which format to write tc → Gherkin lang.

- Helps to → Describe business process
- Capture functional requirements
- Document design details

Use Case diagram:-

Model the functionality of System by using Actors of Use Cases

Abstraction:- if we know that method + how to implement then we go for abstraction.

Interface:- if we know the method + doesn't know how to implement then we go for interface.

L-1 Pattern

M-1:- Programming Practices (1Q)

→ Software reviews & Testing (2-6) (1Q)

→ Exception Handling (1Q)

→ web basics HTML-5 (1Q)

→ " CSS-3 (1Q)

→ " JavaScript (Doc Object (1Q), Forms (1Q))

→ " XML (Anatomy, XML Schema (1Q))

of XML doc (1Q) (Ex:- what is right?)

(Importance) (Ex:- code is valid or not)

→ DBMS (5 Qs)

1. (Single row functions) (SQL Queries) (Advance Level) (1Q)

2. Joins (Basic Qs) (concept Qs (Theory)) (1Q)

3. DML (1Q) (Code related)

4. Database Object (1Q) (" Theory)

5. SubQueries (1Q) (Theory) (complex)

→ OOPS (1Q)

→ UML (1Q)

M-1 (16 Qs)

→ Testing Concepts (4L)

M-2

(18Q/S)

1. Fundamentals of Testing (1Q)
2. Types of Test Case & of Test Case designs (2Q)
(1-Simple, 1-complex)
3. Testing throughout the Life cycle (2Q) (1-simple, 1-complex)
4. Tools Support for Testing (2Q)

→ RVFD (4L)

1. Intro to Req. Engg (1Q) (Simple)
2. Evolution of Types of Req. " (1Q)
3. Req. Formalisation (2Q) (1-simple, 1-complex)
4. " Management (1Q) (Basic Q/S)

→ Intro to Use Cases (2Q) (Basic Q/S)

→ DFDR (4Q) (1-simple, 3-complex) (defect reports)

M-3:- (18Q/S)

→ Code (6Q) (4-Sim, 2-com)

→ Util of Collections (5Q) (1-Sim, 4-Com) (3-codebased, 2-theory)

→ I/O (1Q) (theory complex)

→ Exceptions (3Q) (Sim) (2-Theor, 1-codebased)

→ JUNIT (3Q) (Annotations, 3-codebased)

M-4:- (18Q/S)

→ Intro to Automation (1Q) (com of Theory)

→ " Selenium (2Q) (Simple)

→ working with sel IDE (6Q) (4-Sim, 2-Com) (3-code, 3-com - opt)

→ Testing web appl using webDR API (3Q)

(1-Sim, 2-Com) (2-code, 1-conc)



→ webdriver test using JUNIT (3Q) (1-Sim, 2-Com)
(2-code, 1-concept)

→ Sel webdriver Advance (2Q) (1-code, 1-concept)

→ Sel Frameworks (1Q) (Simple theory)

M-5 - 5Q/s

→ Intro to SE (Lifecycle models - 1Q Theory)

→ " QMS] (Configur manag process) 1/Q (Com)

↓] (Intro to S Testing lifecycle (1Q) (Sim))

QA Tools (2Q) (Sim)
(QMS)

To launch app of chrome

1. Webdr = new System. SetProperty

2. Webdr. chromedriver System.setProperty

For remote webdriver coret code

Desired Capabilities Capabilities = new webdriver ("");

To start remote chrome driver

" " = newdes.Cap

Cap.set platform ('PF-Windows')

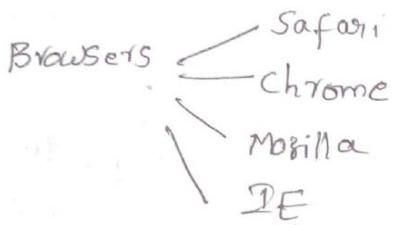
" browsername ("Chrome")

webdriver driv = new remote webdrive ("newWRC"/hub);

- takes Screenshot ("driver")
- For Version 10 (IE) & which platform windows.
- TDDing is ex of
 - Acceptance
 - hybrid
 - behavioral
 - No f A
- Add Test, run test,
Refactor code, repeat
 - 1. data driven
 - 2. key "
 - 3. TDD, ATDD
 - 4.

✓ M-9

1. A developer builds an product management s/m.



user used IE , product not available in search

what should tester mention in DFDR browser name?

✓. IE

2. Online shopping → spelling mistakes in search → Samsung Electronics. Defect needed to be logged, defect still exist in next version which priority & severity?

✓ Low priority, Low severity

3. C → defect density 150%, higher than average;

After 1st test cycle A → 60% lower than avg.

what conclusion could you draw for next test cycle?

✓ C has more hidden defects, need to test C more in detail

4. cancelled status in a defect life cycle indicate that?

✓ Tester realized that defect logged was invalid & agreed to cancel.

5. DFDR helps in - improvement of product quality

- understanding defects in the s/m in project

6. DFDR helps in - improvement in project control achieving on time delivery

7. Defect priority is indication of when to fix the defect.

8. Imp decisions

→ Take decision of extended dead line

→ decide defect severity.

9. Defect life cycle order → New, Assign, fixed, closed
10. Key element of Defect management process
 - Defect prevention
 - Defect reporting
 - Defect resolution.
11. Deviation from Specification → Defect.
12. Defect description should indicate → steps to reproduce defect.
13. DMP doesn't include → Basclining the requirements.
14. Defect reporting is used by testing team to
 - plan retesting efforts.
 - generate accurate summary.
 - analyze quality.
15. complete the following statement
Defect tracking is _____
 - ✓ comm. channel b/w development team & rest of team
 - 2. " " " testing team & rest of team
 - 3. User
16. Defects are going cost in which phase?
 - ✓ production
17. PMS.
 - Functionality
 - Add
 - Search

Admin can login

A - 100
B - 55
C - 75

1. Admin user is 1learn &

- * Isolate — Identify the module, version where defect is found.
 - Condense — Say it clearly, briefly
 - Evidence — Documentation
 - Accurate — Is it error (or) ^{understandy} quickly ~~slow~~ version
- * Maintenance Team Lead — Analyse log file
 - ||| Engineer — Generate accurate summary of status reporting.
 - Testing Team Lead — Analyse performance of team
 - ||| Management — Analyse performance of team

M-2

(DFDR)

q-

- Developer builds application Prod Man System
- * Add & Search Prod through Safari, chrome, MOZ, IE
- He used IE only, product is not available defect was logged in defect report: what should be mentioned.

→ IE

MOZ

Chrome

- Online appli Samsung, display names of product, while testing, with spelling mistakes.

Insert cases which one is missing

→ Low priority, low severity.

- After collecting test cases system C has defect density 150%. higher
→ 60% lower density than average. what conclusion for the next cycle

→ Test in detail. → if we are having higher % of density, we are having more defects
→ And we found many defects

- Observed defect density any conclusion
- Try equate the

- Cancelled state of defect in defect life cycle

tester realize that the defect log is invalid & agreed to cancel it

- def DFDR helps us

→ of prod Quality

Requirement Understanding

Understanding the defects in System

→

→ in project Control

achieving outcome delivery

- Defect priority is indication of

when to fix the defect

- Import decisions taken is based on decision making

Take a decision

Decide defect severity

Risk involved in application

- On def life cycle following

New assign fix

fix assign? New



→ Key elements of Manag process are

defect project

report

resolution

→ A of A

→ Deviations from the application

→ defect

→ defect descrip should indicate

Steps to fix defect

→ " reproduce "

→ DMproces does not include

Allocate defect to appropriate

→ Baseline the report

→ DR by testing team

Analysing - the Quality

Retesting the effects

Generate estimate reports

→ AOA

→ defect tracking

→ Comm channel b/w dev & testing

" " Testing rest of team

" " Testing feedback

AOA

→ Defect are going bcoz the most which phase

→ production tools

* * * [Benefits of def rep]

- PAN CARD details
- Active.
- Tester should report the ambiguities.
- Login defect in product manag appli.
Status:- Duplicate.
- Add of Search product
view all products
- Status of defect changed to reopens status.
- The def attribute that would help manag is Severity.
- wrong severity is the b/w severe def in def reporting.
- Def rev is indication of Criticality.
- Def Sof report leads to multiple cycle coor with dev. team
- Def study
- Errors that cosmetic in nature (low Sev)
- Identifying the application is one of the benefit of def report to Maint Engineer.
- Sev of Priority indicates how impact the application.
- New, Design, Fixed, closed.
- To avoid disagreement of developers,
 1. Sure that def is reproducible.
 2. Discuss with dev with multiple times.
 3. Doc all the steps to reproduce the def.
 4. Inform Manager before login.

- Fix things while creating the defect after Testcase failure
- ✓ 1. Analyze whether the test failure is real or not
- 2. Check the route problems
- 3. Report def directly.
- ✓ 4. Is this failure Specific or General issue.

→ Discuss the Test failure

- defect category for Scenarios.
- ✓ coding

→ Developer is the responsible for RouteCause

- A - 100 def
 - ✓ B - 55
 - C - 75
- 230 defects P₀, P₁, P₂ - Severity levels
- B - 55 More defects we have to find.

→ In which Scenario which is treated Critically?

AOA

→ Isolate - Identify the module.

Evidence - what doc will provide existence

Confidence - Misinterpretation

Accurate ↗

→ say clearly & briefly.

→ Maintenance Engineer - analyse the log file & clear understanding

" - Teamlead → Generate accurate (new) Summary

Testing "

→ Quickly understand the Component & SW

Management

- To analyse the perform of team.

→ Determine which of the statement

- 1. Starts with executing when design finished.
- 2. ~~poss~~ Test design & execution activities are performed in parallel, typically without formulating the test conditions.

→ Defects detecting — Test is run in order to trigger failures that expose defects.

Max bug count — Find most bugs in time available.

Min technical support cost — Test team identifies issues that leads to call support
Access conforms to the — Any claim made in access is check.
Specification

→ Artifacts provide in the testing Testware.

** require to plan, design & execute
or utility in testing is called.

→ Static analysis Tool — b

** Review Tool — b d

Modelling Tool — c

Test Design Tool — a

a. Generate test ilp & execute Test

b. Report in defect & Affects

c. Slicing some test cases & generating

d. Provide Support for enforcing the coding standards.

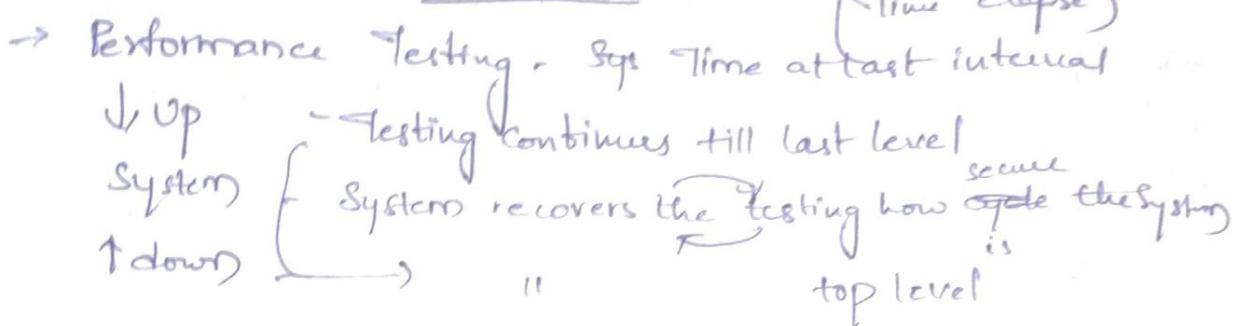
→ Tool take care of managing Requirements & Tracing the test objective.

Test Executing Tool

→ Manage Test

v Configuration tool

* This means by which the data is passed from the module is called as Interface.



SDLC & STLC:-

→ Process of modeling the product after delivering is Maintainance.

- Agile - d
- waterfall - a
- V-model - b
- Incremental
consecutive - c

- a. chosen when requirements development technology are well known & less permanent
- b. is ideal for projects where req are well known & fixed, needs high level of reliability
- c. Suitable for project having evolving requirements to make it early.
- d. Active Stakeholder Requirement (or) Involvement flexible for changing the requirement

→ Security Testing - used for user security

Usability " - For use of system

Recovery " - Used for system recovery

Stress " - used for test max no. of users

→ According to non-functional req, FURPS+, which of the following to S

Speed, scalability, supportability

→ Requirements testable or not

system is user friendly

" built to be portable across windows.

- Types of trading + Functional
- Response time for all the Customers.
- Ability to change the System Internationalisation
- functional requirements defines s/w to meets business needs
- TF

Designer & responsible for (F)

- External observable service by which the system directly fulfill the sys one or more stakeholders request → feature.
- Not a Performance requirement

UI requirement → IEEE
Throughout
begin

→ Quality Attributes

Nonfunctional
function

~~ft~~ According to IEEE

~~CC~~ Condition or capability needed by user

According to CHAOS,

Incomplete requirement lack of user

→ Also to CAO, Poor requirement Management

→ During acceptance testing, Customer came with more changes

~~*** Change in Requirements~~

→ Dev. team implemented all implicit requir. after few months,
there is a drop in visiting customers. - re comments are there.
which type of

Usability
localisation
Installation

Performance
Integration

If it is MR types → Usability or Performance

- completion of Unit testing is entry criteria
- Testing validates the product meets business req - Acceptance
- Developers side → α -testing
- Integration Testing on evaluating the interaction b/w among
- the process of determining ability of computer sys to maintain the Stress testing.
- time taken to load a page is Performance testing,
- Under exploratory testing, quality of test depends on tester experience and skill of inventing test cases.
- unit testing is done by developer.
- α -Testing - Acceptance testing
Response time - Performance "
- Spelling & Gramma - UI testing
- Beyond expected load - stress testing.
- culture Local Specific data - Localisation
- Performance - Load testing
- Boundary analysis - F - Testing
- Usability Testing - NF
- State transition - Functional
- Documentation - NF
- Security - NF

- Are we building the product right → true
- Regr. Testing is white box testing → false
- S/w Accept Testing is last opportunity of the users to examine for functional interface performance → true
- Testing app with 100 users → load testing.
- " where in a ~~weak~~ subject of target for test, to verify work load to major & evaluate perform & behav ability of test is Load testing.
- Concept of V-model in testing is
 - ✓ Dog check processes (Simultaneously)
 - ✗ Striving of victory by finding more than expected.
 - ✓ Verification of Validity
 - ✗ Validation
- Vuf is approach to testing that occurs HLD, LLD, AOA
- Vuf done for Requirements, design, code, AOA
- Recovery Testing is
 - Testing functionality after
 - ✓ Checking the app recovers expected & unexpected config.
- Benefit for S/w life cycle
 - ✗ allows tester
 - ✗ allows identification
 - ✗ facilitates timely fix
 - ✓ Reduces def multiplication

→ Order of testing in SPLC & STLC.
Unit → Integ → Sys → Accept

→ True about β testing

Performance by customer at their own site.
X " developer

→ Incorrect terms of validation

Starts from building the right product
" accessing " data

High level activity

Performed during dev of key artifacts

Determination of correctness of s/w.

→ Best candidate for test automation - Regression Test.

→ Most imp testcase for ale formation

Testcase to find type of ale form

Boundary value condition of length

) out whether ale is formed

NOA -

→ Follo term is not associated with Integration

(NOA, Stubs & drivers)

→ app attribute will be validated in

throughput, response, NOA, Perf

→ , verification techniques.

Code & doc inspection walk-through

Record & playback

Designed coding.

→ Not type of NF testing.

✓ Integration Testing

→ NonF testing tool is
Load Runner.

GTP - Functional Testing

→ Incorrect stat for V-model.

Modules are tested against user req

Testing begins as early as poss in proj life

Can be integrated into each phase of SDLC

Corresponding validation & valid

Includes view of device

→ Following is involved in UI test

Component layout

Structure of " & containers

Component Navigation

→ AOA

→ Not a part of user Accept Testing

✓ Use of automated test execution tools.

Testing against Acceptance test

✗ Integration of systems against user

performance

→ Not a type of NF test is state transitions.

Designer Simulates Prgm

Inspection

Shows step by step what a prgm

Simulation shows how PCs of system will interact with each other.

Redundancy & details

Participants will ready with testcases.

→ which kind of testing

1. Interview

2. Job off

3. Hiring

4. Promotion

5. Resignation

State Transition Testing

→ checklist are often used in reviews such as "work product inspection".

→ Following is not metrics

✓ Quality

cost of Quality

Effort Variance

Productivity

→ Full forms of QMS - Quality Mng System

→ QMS is framework of -

Forms, checklist

Process & Procedure

Templates

✓ AOA

→ QMS is non-evolving sys. once made then cannot be any change - False

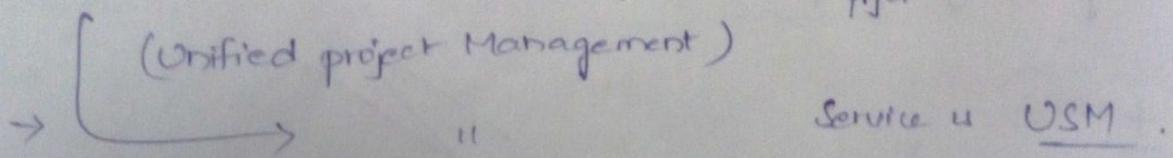
→ the org for baseline for QMSE is ISI

→ Following are popular SDLC models,
agile, waterfall, v-model, AOA.

→ Non-fulfilment of user expectation is defect.

→ Follow supports work product by providing the
Predefined structure for creating work product -
Guidelines, checklist, templates

→ Deliver method to manage the Capital is UPM.

→  (Unified project Management) → Service & USM.

→ All the best practices & sample records are available on KM portal.

- Following is not SDLC phase.
Agile, Planning, Design.
- ISO - International Organisation for standardisation
- In CG, which cycle is followed for continuous improvement
PDCA (Plan do check Act).
- which doc includes the org quality policy & obj
Req Specification
Quality Manual.
- Follow are attributes of Quality
Capability, Scalability, Perform, ADA ✓, Maintainability
- Customer's satisfaction index is called OTACE
(On time and at/at/above client expectation)
- Quality Mng artifacts are stored in QMS.
- A problem related to practice, currently offering is called
(or)pract
Issue.
- Capgemini Quality & Service policy is to meet the client's
expectation - True.
- India QMS is built based on deliver method of
align to group processes - True.

✓

- Loop testing is Control structure testing where the
 - * On the basis path testing
 - * Exceeding the
 - * Focus on testing the validity of loop const in prgm.
- One text box is filled with lower & up case - identify invalid
- CLASS
- Class
- ✓ CLASS
- for Variable class, $1 \leq \text{class} \leq 11$, how many test cases is created according to boundary value analysis. 6 ($0, 1, 2, 10, 11, 12$)
- BVA can be used to perform Blackbox Testing.
- Exhaustive path testing is also called Whitebox Testing.
- Garbage collect method is used to fix memory leak errors.
- BVA is the form of func. testing.
- Error Guessing is the black box testing.
- Test techniques requires developing testcases to demons each prgm function operation in Blackbox.
- testing require internal white box.
- Internal logic - w "
- Banc Test are always +ve Test.
- of $a > 1$

```

  {
    if (a=10)
    {
      a=a+10;
      b=b+6;
      c=c+8;
    }
  }
  else if (b>1)
  {
    b=b+6;
  }
  else
  {
    c=c+8;
  }
  } 3 + 1 = 4
  } 3 - conditions
  (if, else)
  
```

```

→ read p
→ read q
Branch → if ( $P+q > 100$ ) then
    Print ("Large");
endif.
Branch → if ( $P > 50$ ) then
    Print ("P Large");
endif;

```

```

→ if ( $x < y$ ) then
    Statement 1;
else if ( $y \geq z$ ) then
    st 2;
end;

```

→ To achieve 100% coverage, how many test cases are req

```

if ( $a=4$ ) then
    display - msg a;
if ( $a=3$ ) then
    display - msg c;
else
    display - msg b;
else
    " d;

```

