

1. WHAT IS SOFTWARE TESTING?

- TELL WHAT (2 DEFINITIONS)
- TELL WHY WE DO (3 POINTS)
- TELL DIFFERENT TYPES OF SOFTWARE TESTING
- EXPLAIN EACH TYPE QUICKLY

WHAT:

1. THE PROCESS OF FINDING THE DEFECTS IN SOFTWARE IS CALLED SOFTWARE TESTING.
2. VERIFYING THE FUNCTIONALITY (BEHAVIOUR) OF AN APPLICATION AGAINST REQUIREMENT SPECIFICATION IS CALLED S/W TESTING.
3. EXECUTION OF PROGRAM WITH THE INTENT OF FINDING DEFECTS.

WHY:

1. TO IMPROVE THE QUALITY OF THE PRODUCT.
2. TO MAKE SURE THAT THE SOFTWARE WORKS TO MEET THE CUSTOMERS EXPECTATIONS.
3. TO FIND DEFECTS.
4. EVERY SOFTWARE IS DEVELOPED TO SUPPORT A BUSINESS. IF THERE IS ANY DEFECT IN THE S/W IT AFFECTS THE BUSINESS. SO BEFORE WE USE IT FOR THE BUSINESS WE SHOULD HAVE FOUND ALL THE PROBLEMS AND FIX IT.

TYPES:

1. WHITE BOX TESTING
2. GREY BOX TESTING
3. BLACK BOX TESTING

EXPLAIN:

WBT: TESTING EACH AND EVERY LINE OF CODE IS CALLED WBT

BBT: VERIFYING THE FUNCTIONALITY (BEHAVIOUR) OF AN APPLICATION AGAINST REQUIREMENT SPECIFICATION IS KNOWN AS BBT.

GBT: THE COMBINATION OF WBT AND BBT WHEREIN WE DESIGN THE TEST CASES BASED ON KNOWLEDGE OF REQUIREMENT AND INTERNAL DESIGN OF THE CODE.

2. WHAT ARE THE CHARACTERISTICS OF A GOOD TE?

- TE SHOULD HAVE TEST TO BREAK ATTITUDE.
- TE SHOULD BE ABLE TO SEE THE PRODUCT FROM CUSTOMER POINT OF VIEW, BUSINESS POINT OF VIEW, END USER POINT OF VIEW AND DEVELOPERS POINT OF VIEW.
- TE SHOULD HAVE VERY GOOD KNOWLEDGE OF DOMAIN.
- TE SHOULD HAVE VERY GOOD KNOWLEDGE OF TECHNOLOGY SO THAT WE CAN COMEUP WITH BETTER SHORTCUTS TO DO TESTING.

3. WHAT IS THE DIFFERENCE BETWEEN QA AND QC?

QUALITY ASSURANCE

1. IT IS PROCESS ORIENTED
2. IT INVOLVES DIFFERENT STAGES :
 - a. IDENTIFY THE NEED FOR THE PROCESS
 - b. DEFINE THE PROCESS
 - c. MAKE SURE THE PEOPLE ARE FOLLOWING THE PROCESS
 - d. FIND MISTAKE IN THE PROCESS
 - e. IMPROVE THE PROCESS

QUALITY CONTROL

1. IT IS PRODUCT ORIENTED
2. VERIFYING THE FUNCTIONALITY OF THE S/W AGAINST REQUIREMENT SPECIFICATION IS CALLED QUALITY CONTROL.

WHITE BOX TESTING

1. WHAT IS WBT?

- TELL TYPES WITH ITS DEFINITION
- EXPLAIN EACH TYPE QUICKLY

TYPES:

PATH TESTING: WRITE THE FLOWGRAPH TO TEST ALL THE INDEPENDENT PATH. WITH THE HELP OF FLOW GRAPH WE CAN EASILY FIND OUT THAT WHICH PATH HAS BEEN COVERED AND WHICH IS NOT.

CONDITION TESTING: TEST ALL THE LOGICAL CONDITIONS FOR BOTH TRUE AND FALSE VALUES. WHENEVER DEVELOPER STARTS TESTING THE CODE, THEN THERE MIGHT BE A CHANCE THAT HE MAY MISS ANY ONE OF THE CONDITION.

LOOP TESTING: TO APPLY LOOP TESTING WE NEED TO WRITE LOOP FOR ALL THE CYCLES. IF WE WRITE WHILE CONDITION WE MUST CHECK FOR BREAK.

MEMORY POINT OF VIEW : TYPICAL MISTAKES DONE ARE BECAUSE OF USING REPEATED PROGRAM AND NOT USING THE INBUILT FUNCTION AND BECAUSE OF NOT USING OPTIMUM LOGIC.

2. WHAT ARE THE TYPES OF WBT?

PATH TESTING

CONDITION TESTING

LOOP TESTING

MEMORY POINT OF VIEW

3. CAN YOU WRITE A PROGRAM AND CORRESPONDING UNIT TEST PROGRAM?

GREY BOX TESTING

WHAT IS GREY BOX TESTING?

IT IS A COMBINATION OF WBT AND BBT WHEREIN WE DESIGN THE TEST CASES BASED ON KNOWLEDGE OF REQUIREMENTS AND INTERNAL DESIGN OF THE CODE

BLACK BOX TESTING

WHAT IS BLACK BOX TESTING?

- TELL WHAT
- TELL ALL THE TYPES
- EXPLAIN EACH TYPE QUICKLY

WHAT:

VERIFYING THE FUNCTIONALITY (BEHAVIOUR) OF AN APPLICATION AGAINST REQUIREMENT SPECIFICATION IS CALLED AS BLACK BOX TESTING.

TYPES:

FUNCTIONALITY TESTING

INTEGRATION TESTING

SYSTEM TESTING

EXPLAIN:

F.T.: TESTING EACH AND EVERY COMPONENT THOROUGHLY AGAINST REQUIREMENT SPECIFICATION IS CALLED FUNCTIONALITY TESTING.

I.T.: TESTING THE DATA FLOW OR THE INTERFACE BETWEEN THE MODULES IS CALLED I.T.

S.T.: IT IS END TO END TESTING WHEREIN TESTING ENVIRONMENT IS JUST SIMILAR TO PRODUCTION ENVIRONMENT.

FUNCTIONALITY TESTING

WHAT IS FUNCTIONALITY TESTING?

TESTING EACH AND EVERY COMPONENT THOROUGHLY IS CALLED FUNCTIONALITY TESTING.

NOTE:

FROM WBT CONTEXT UNIT TESTING IS TESTING EACH AND EVERY LINE OF CODE THOROUGHLY

FROM BBT CONTECT UNIT TESTING IS TESTING EACH AND EVERY COMPONENT THOROUGHLY

INTEGRATION TESTING

1. WHAT IS INTEGRATION TESTING?

- TELL WHAT
- TELL HOW TO DO

WHAT:

TESTING THE DATAFLOW OR THE INERFACE BETWEEN THE MODULES IS KNOWN AS INTEGRATION TESTING

HOW:

1. UNDERSTAND THE APPLICATION
 - UNDERSTAND HOW EACH MODULE WORKS IN DEPTH
 - UNDERSTAND HOW ALL THE MODULES ARE RELATED
2. IDENTIFY ALL POSSIBLE SCENARIOS
3. PRIORITIZE THE IDENTIFIED SCENARIOS
4. DOCUMENT THE SCENARIOS
5. EXECUTE THE SCENARIOS ACCORDING TO PRIORITY
6. IF YOU FIND BUGSS SEND IT TO DEVELOPMENT TEAM

2. WHAT ARE THE TYPES OF INTEGRATION TESTING?

1. INCREMANTAL:

INCREMENTALLY ADDING THE MODULE AND TESTING THE DATA FLOW B/W THE MODULES IS CALLED INCREMENTAL I.T.

- a. TOP DOWN : INCREMENTALLY ADDING THE MODULE AND TEST THE DATA FLOW, MAKE SURE THAT MODULE WHICH U ADD IS CHILD OF PREVIOUS MODULE.
- b. BOTTOM UP : INCREMENTALLY ADD THE MODULE AND TEST THE DATA FLOW B/W THE MODULES , MAKE SURE THAT MODULE WHICH U ADD IS PARENT OF PREVIOUS MODULE.

2. NON INCREMENTAL:

COMBINE ALL THE MODULES AT A SHOT AND TEST THE DATA FLOW B/W THE MODULES IS CALLED AS NON INCREMENTAL I.T.

3. IF I GIVE U ONE PRODUCT HOW WILL YOU DO INTEGRATION TESTING?

4. HOW THE WORK ALLOCATION HAPPENS IN REAL TIME PROJECT?

- WE HAVE TO ASSIGN SET OF FEATURES TO ANY TEST TEAM SUCH A WAY THAT GROUPING OF FEATURES MAKES US NOT MISSOUT ANY SCENARIOS WITH ALL DIFFERENT POSSIBLE WAYS
- GROUPING SHOULD BE DONE SUCH A WAY THAT YOU CAN GROUP ALL IDENTICAL FEATURES BASED ON THE SIZE OF TESTING BUT NOT BASED ON THE NUMBER OF FEATURES.
- ONCE THE BUILD COMES WE HAVE TO ASSIGN THE GROUP OF FEATUES AND SEE TO EVERYONE ACCORDING TO THEIR WORK. IF ANY PERSON HAS HEAVY WORKLOAD WAIT FOR THE NEXT FEW BUILDS AND PASS ON HIS EXTRA WORK TO A PERSON WHO HAS LESS WOEEK LOAD.

5. ONE MODULE IS READY AND THE OTHER MODULE IS NOT READY. HOW WILL YOU DO INTEGRATION TESTING?

CREATE A DUMMY MODULE FOR THE PRODUCT WHICH IS NOT READY AND DO INTEGRATION TESTING.

6. WHAT IS STUB AND DRIVER?

STUB : IT IS A DUMMY MODULE BUILT, WHICH ACTS LIKE REAL MODULE AND IT CAN GENERATE DATA OR RECEIVE DATA.

DRIVER : IT ID THE ONE WHICH SETS UP THE TEST ENVIRONMENT AND DOES THE TRANSACTION , ANALYSE THE RESULT AND SEND THE REPORT.

SYSTEM TESTING

1. WHAT IS SYSTEM TESTING?

- TELL DEFINITION

IT IS END TO END TESTING WHEREIN TESTING ENVIRONMENT IS JUST SIMILAR TO PRODUCTION ENVIRONMENT.

2. WHAT ARE THE TYPES OF SYSTEM TESTING?

- a. END TO END TESTING
- b. COMPATABILITY TESTING
- c. PERFORMANCE TESTING
- d. USABILITY TESTING
- e. ACCESSABILITY TESTING
- f. ADHOC TESTING

3. WHAT IS THE DIFFERENCE BETWEEN SYSTEM AND END TO END TESTING?

SYSTEM TESTING:

- IT IS END TO END TESTING WHERE TEST ENVIRONMENT IS SIMILAR TO PRODUCTION ENVIRONMENT.
- INVOLVE DIFF TYPES OF TESTING LIKE END TO END, COMPATABILITY, PERFORMANCE, REGRESSION, USABILITY TESTING.

END TO END TESTING:

- NAVIGATING THROUGH ALL THE FEATURES AND TEST WHETHER END FEATURE IS WORKING OR NOT IS CALLED END TO END TESTING.
- IT IS A TYPE OF SYSTEM TESTING.

4. WHAT IS SYSTEM INTEGRATION TESTING?

- TELL DEFINITION
- EXPLAIN WITH FEW SCENARIOS

DEFINITION:

TESTING THE DATA FLOW BETWEEN TWO DIFFERENT SOFTWARE SYSTEMS IS CALLED SYSTEM INTEGRATION TESTING.

EG: INSTAGRAM – FB , WHATSAPP-GOOGLE MAP

5. WHEN DO THEY DO SYSTEM INTEGRATION TESTING?

WHEN ANY 2 VERTICLES OF A COMPANY OR A BIG COMPANY TAKES OVER ANOTHER COMPANY, THEY BUILD A COMPANY SOFTWARE TO PULL AND INTEGRATE THE 2 COMPANIES DATA. TESTING THAT PART OF THE SOFTWARE IS CALLED SYSTEM INTEGRATION TESTING.

OR

IT IS TESTING CONDUCTED ON A COMPLETE INTEGRATED SYSTEM TO EVALUATE THE SYSTEMS'S COMPLIANCE WITH ITS SPECIFIED REQUIREMENT. SYSTEM INTEGRATION TESTING IS PERFORMED TO VERIFY THE INTEGRATION BETWEEN THE MODULES OF A S/W SYSTEM.

6. WHAT IS BUILD?

ALL THE PROGRAMS WRITTEN ARE COMPILED, THEN WE GET BINARIES. ALL THE BINARIES MUST BE COMPRESSED, THE COMPRESSED FILE IS CALLED BUILD.

7. WHAT IS PATCH?

IT IS A SMALL S/W WHICH CONTAINS MODIFYING PROGRAMS, NEWLY ADDED PROGRAMS AND THE RECORD OF DELETED PROGRAMS.

8. WHAT IS TEST CYCLE?

IT IS THE TIME OR EFFORTS SPENT TO START AND FINISH THE COMPLETE PRODUCTION TESTING.

IT DEPENDS ON

- a. SIZE OF THE APPLICATION
- b. COMPLEXITY OF THE APPLICATION
- c. NUMBER OF ENGG IN THE PROJECT

9. WHAT IS RELEASE?

- a. STARTING FROM GATHERING THE REQUIREMENT , DEVELOP THE S/W, TEST THE S/W, UNTILL WE LAUNCH IT TO THE PRODUCTION IS CALLED AS RELEASE.
- b. 1 RELEASE CAN TAKE 40 – 60 TESTING CYCLES, IT'S A TRADITIONAL MODULE
- c. IN AGILE MODULE IT TAKES 4-7 CYCLES.

10. WHAT IS CONTINUOUS INTEGRATION?

HERE TOOLS WILL CREATE A PATCH AND WORK AUTOMATICALLY AND SEND IT TO THE SERVER OF TESTING TEAM WHERE IT CAN BE SCHEDULED AUTOMATICALLY, SETTING DATA & TIME ARE MANUALLY SUBMITTED.

OR

THE TOOL ONLY IS INVOLVED IN SENDING A PATCH TO THE TESTING TEAM AND IT IS ALSO INVOLVING IN TESTING IT. IF THE BUILD ENGG UPDATE THEN IT WILL AUTOMATICALLY SEND AND INSTALL THE BUILD.

11. WHO IS INVOLVED IN RELEASING THE APPLICATION?

PROJECT MANAGER

DEVELOPMENT TEAM

RELEASE ENGG

TE

BUSINESS ANALYST

ACCEPTANCE TESTING

1. WHAT IS ACCEPTANCE TESTING?

- TELL WHAT (2 APPROACHES)
- TELL WHY (3 POINTS)
- DIFFERENT APPROACHES (ALL 4)

WHAT:

IT IS AN END TO END TESTING DONE BY ENGG SITTING AT CUSTOMERS PLACE WHEREIN THEY TAKE ALL REAL TIME BUSINESS SCENARIOS AND CHECK WHETHER THE S/W IS CAPABLE OF HANDLING THE REAL TIME BUSINESS SCENARIOS.

WHY:

- CHANCES ARE THERE UNDER BUSINESS PRESSURE S/W COMPANY MIGHT PUSH THE S/W WITH LOT OF BUGS. TO FIND SUCH ISSUES THEY DO A.T.

- CHANCES ARE THERE DEVELOPERS WOULD HAVE MISUNDERSTOOD THE REQUIREMENT AND DEVELOPED A WRONG FEATURE, TO FIND THAT THEY DO A.T.
- IF THEY MOVE THE PRODUCT TO PRODUCTION WITH THE CRITICAL BUGS THEY WILL UNDERGO SEVERE LOSS. TO AVOID THAT THEY DO A.T.

APPROACH 1:

THE TEST ENGG TEST THE S/W ACCORDING TO THE REQUIREMENT GIVEN BY THE CUSTOMER IN BUSINESS POINT OF VIEW.

APPROACH 2:

ALSO CALLED AS UAT

IT IS END TO END TESTING DONE BY THE END USERS WHEREIN THEY USE THE S/W FOR PARTICULAR PERIOD OF TIME AND CHECK WHETHER IT IS CAPABLE OF HANDLING THE REAL TIME BUSINESS SCENARIOS.

APPROACH 3:

IT IS END TO END TESTING DONE BY OUR OWN TE BEING AT CUSTOMER PLACE WHEREIN THEY REFER USER SCENARIOS GIVEN BY CUSTOMER AND CHECK WHETHER S/W IS CAPABLE OF HANDLING ALL THE REAL TIME BUSINESS SCENARIOS.

APPROACH 4:

IT IS END TO END TESTING DONE BY OUR OWN TE SITTING AT OUR OWN PLACE WHEREIN THEY REFER USER SCENARIOS GIVEN BY CUSTOMER AND CHECK WHETHER S/W IS CAPABLE OF HANDLING ALL THE REAL TIME BUSINESS SCENARIOS.

2. WHY WE DO ACCEPTANCE TESTING?

- CHANCES ARE THERE UNDER BUSINESS PRESSURE S/W COMPANY MIGHT PUSH THE S/W WITH LOT OF BUGS. TO FIND SUCH ISSUES THEY DO A.T.
- CHANCES ARE THERE DEVELOPERS WOULD HAVE MISUNDERSTOOD THE REQUIREMENT AND DEVELOPED A WRONG FEATURE, TO FIND THAT THEY DO A.T.

- IF THEY MOVE THE PRODUCT TO PRODUCTION WITH THE CRITICAL BUGS THEY WILL UNDERGO SEVERE LOSS. TO AVOID THAT THEY DO A.T.

3. WHAT ARE THE DIFFERENT APPROACHES OF A.T.?

4. WHAT ARE THE DIFFERENT TYPES OF ACCEPTANCE TESTING?

ALPHA AND BETA TESTING

5. WHAT IS ALPHA AND BETA TESTING?

TESTING THE PRODUCT AFTER THE COMPLETION OF BUILD BEFORE RELEASING TO THE PRODUCTION IS CALLED AS ALPHA TESTING

TESTING THE PRODUCT AFTER RELEASING THE BUILD FOR PRODUCTION IS CALLED BETA TESTING.

6. WHAT IS UAT?

IT IS END TO END TESTING DONE BY THE END USERS WHEREIN THEY USE THE S/W FOR PARTICULAR PERIOD OF TIME AND CHECK WHETHER IT IS CAPABLE OF HANDLING THE REAL TIME BUSINESS SCENARIOS.

SMOKE TESTING

1. WHAT IS SMOKE TESTING?

- TELL WHAT
- TELL WHY (ALL POINTS)
- TELL WHEN WE DO (ALL POINTS)

WHAT:

TESTING THE BASIC AND CRITICAL FEATURES OF AN APPLICATION BEFORE WE DO THOROUGH TESTING IS CALLED SYSTEM TESTING.

WHY:

- a. TO CHECK WHETHER THE PRODUCT IS FEASIBLE OR NOT. IN THE BEGINNING ONLY IF YOU FIND TOO MANY BUGS THAT MEANS PRODUCT IS NOT ELIGIBLE FOR FURTHER TESTING. BETTER WE CAN STOP TESTING AND SPEND ALL THE REMAINING TIME IN IDENTIFYING SOME MORE SCENARIOS
- b. IN THE BEGINNING ONLY TEST THE BASIC FEATURE , IF YOU FIND ANY CRITICAL BUGS SEND IT TO DEVELOPERS IN THE BEGINNING STAGE ONLY SO THAT DEVELOPERS WILL HAVE SUFFICIENT TIME TO FIX IT.
- c. WE DO THIS TO CONFIRM THAT INSTALLATION CONFIGURATION HAPPENS PROPERLY.
- d. WE DO THIS TO CHECK WHETHER WE HAVE RECEIVED A BROKEN BUILD FROM DEVELOPERS.
- e. IT IS A KIND OF HEALTH CHECK FOR S/W.

WHEN:

- a. WHENEVER NEW BUILD COMES WE START WITH SMOKE TESTING BECAUSE DEVELOPERS ARE GIVING NEW BUILD MEANS THEY WOULD HAVE DONE CHANGES (ADDITION, MODIFICATION, REMOVAL OF FEATURES OR BUG FIXES)
- b. THE CHANGE MIGHT AFFECT BASIC FEATURE ITSELF. TO FIND SUCH ISSUES WE DO SMOKE TESTING
- c. CUSTOMER SHOULD START ACCEPTANCE TESTING WITH SMOKE TESTING. CHANCES ARE THERE WHILE INSTALLING WRONGLY THEY MIGHT HAVE OR THEY WOULD HAVE MISSED FEW FILES WHILE RECEIVING THE BUILD.
- d. WHENEVER THE PRODUCT IS MOVED TO PRODUCTION CONFIRM THAT INSTALLATION HAS TO BE DONE PROPERLY, THEY DO SMOKE TESTING.

2. WHY WE DO SMOKE TESTING?

3. WHEN WE DO SMOKE TESTING?

4. WHAT IS THE DIFFERENCE BETWEEN SMOKE TESTING AND SANITY TESTING?

SMOKE TESTING:

- a. IT IS WIDE & SHALLOW TESTING
- b. IT IS SCRIPTED IE., EITHER REFER AUTOMATION SCRIPTS OR MANUAL SCRIPTS FOR TESTING

SANITY TESTING:

IT IS DEEP AND NARROW TESTING APPROACH

IT IS UNSCRIPTED IE., WE NEITHER HAVE AUTOMATION NOR MANUAL SCRIPT FOR TESTING.

ADHOC TESTING

1. WHAT IS ADHOC TESTING?

- TELL WHAT
- TELL WHY
- TELL WHEN WE DO ADHOC TESTING
- TELL HOW WE DO BY GIVING SOME EXAMPLES

WHAT:

TESTING THE APPLICATION RANDOMLY IS CALLED ADHOC TESTING WHEREIN WE DON NOT REFER ANY KIND OF FORMANL DOCUMENTS LIKE TEST CASES OR TEST SCRIPTS OR TEST SCENARIOS

WHY:

- a. WHEN THE PRODUCT IS LAUNCHED CHANCES RAE THERE END CUSTOMERS MIGHT USE THE APPLICATION RANDOMLY AND FIND DEFECTS. TO AVOID THAT TE SHOULD DO ADHOC TESTING.
- b. IF YOU REFER THE REQ AND TEST THE APPLICATION NUMBER OF BUGS THAT YOU WILL FIND WILL BE VERY LESS . SO DO NOT REFER THE REQ , COMEUP WITH CREATIVE SCENARIOS THAT ARE OUT OF THE REQ AND TEST THE AAPPLICATION.
- c. WE DO ADHOC TESTING TO SOMEHOW BREAK THE PRODUCT
- d. WE DO ADHOC TESTING TO SOMEHOW INCREASE THE BUG COUNT
- e. WE DO ADHOC TESTING TO SOMEHOW IMPROVE THE TEST COVERAGE
- f. WE DO ADHOC TESTING TO CHECK WHETHER THE PRODUCT WORKS ACCORDING TO IMPLICIT REQUIREMENTS

WHEN:

- a. WHEN THE FEATURE IS FUNCTIONALLY STABLE THEN WE THINK ABOUT ADHOC TESTING
- b. WHILE DOING SMOKE TESTING IN THE BEGINNING WE DON NOT DO ACCEPTANCE TESTING BECAUSE THE AVAILABLE TO DO SMOKE TESTING IS VERY LESS
- c. BEFORE YOU LAUNCH THE APPLICATION TO THE CUSTOMER FOR ACCEPTANCE TESTING YOU SHOULD HAVE FINISHED ADHOC TESTING
- d. AFTER TESTING THE PRODUCT ACCORDING TO THE REQUIREMENT IF TIME IS LEFT WE DO ADHOC TESTING
- e. WHENEVER WHILE DOING FT,IT OR ST IN BETWEEN IF WE GET A CREATIVE SCENARIO WE SHOULD DO ADHOC TESTING
- f. WHENEVER WHILE DOING FT, IT OR ST WE SHOULD DOCUMENT THE SCENARIOS WHEN WE GET TOO MANY ADHOC TESTING SCENARIOS AND THEN EXECUTE WHEN YOU GET TIME.

2. WHY WE DO ADHOC TESTING?

3. WHEN WE DO ADHOC TESTING?

EXPLORATORY TESTING

1. WHAT IS EXPLORATORY TESTING?

- TELL WHAT
- TELL WHEN WE DO
- TELL DRAWBACKS
- TELL HOW TO OVERCOME THE DRAWBACKS

WHAT:

EXPLORE THE APPLICATION AND UNDERSTAND THE APPLICATION . BASED ON UNDERSTANDING IDENTIFY ALL POSSIBLE SCENARIOS AND DOCUMENT THEM. BASED ON DOCUMENTATION DOING FUNCTIONAL, INTEGRATION, SYSTEM TESTING IS CALLED EXPLORATORY TESTING.

WHEN:

- a. WHENEVER THERE IS NO SRS
- b. WHENEVER THERE IS SRS BUT NOT UNDERSTANDABLE
- c. WHENEVER THERE IS SRS AND IT IS UNDERSTANDABLE BUT THERE IS NO TIME TO READ AND UNDERSTAND

DRAWBACKS:

- a. CHANCES ARE THERE WE MIGHT MISUNDERSTAND FEATURE AS BUG
- b. CHANCES ARE THERE WE MIGHT MISUNDERSTAND BUG AS FEATURE
- c. CHANCES ARE THERE THAT FEATURE MIGHT BE MISSING BUT WE NEVER KNOW

OVERCOME:

- a. BY INTERACTING WITH THW CUSTOMERS / BUSINESS ANALYST / DEVELOPERS
- b. BY COMPARING WITH THE COMPETING APPLICATION

2. WHY WE DO EXPLORATORY TESTING?

- a. WHENEVER THERE IS NO REQUIREMENT
- b. THERE IS A REQUIREMENT BUT WE ARE NOT ABLE TO UNDERSTAND IT
- c. WE ARE ABLE TO UNDERSTAND BUT THERE IS NO TIME TO GO ON IT

3. HOW DO THEY MANAGE EXPLORATORY TESTING IN REAL PROJECT?

- a. FIRST TIME WHEN YOU JOIN ASK THE TE THE APPLICATION , UNDERSTAND THE FEATURE. BASED ON UNDERSTANDING ASK TE TO IDENTIFY THE SCENARIO AND WRITE THE TEST CASES. BASED ON THE TEST CASE WE SHOULD DO THE TESTING
- b. AFTER FEW DAYS NEW ENGG COMES OR JOINS , ASK HIM TO EXECUTE THE OLD TEST CASES SO HE NEED NOT EXPLORE THE PRODUCT SO THAT THE TIME IS SAVED. ALSO ASK NEW ENGG TO WRITE TEST CASES FOR NEW FEATURES.

COMPATABILITY TESTING

1. WHAT IS COMPATABILITY TESTING?

- TELL WHAT
- TELL WHY 3 POINTS

WHAT:

TESTING THE FUNCTIONALITY OF AN APPLICATION IN DIFFERENT H/W AND S/W ENVIRONMENT IS CALLED COMPATABILITY TESTING.

WHY:

- a. DEVELOPERS DEVELOPS THE APPLICATION IN ONE PLATFORM. TE TEST THE APPLICATION IN THE SAME PLATFORM. WHEN THE PRODUCT IS LAUNCHED , END CUSTOMERS MIGHT USE THE APPLICATION IN SOME OTHER PLATFORM AND FIND DEFECTS BECAUSE OF THIS NUMBER OF CUSTOMERS WILL COME DOWN AND BAD NAME SPREADS IN THE MARKET. TO AVOID THIS WE SHOULD DO COMPATABILITY TESTING.
- b. TO CHECK WHETHER FEATURES ARE WORKING CONCIstantly (IN THE SAME WAY) IN ALL THE PLATFORMS.
- c. DEVELOPERS WOULD HAVE WRITTEN COMMON CODE & CLAIMS THAT IT WORKS EVERYWHERE. SO WE HAVE TO TEST IT IN ALL THE PLATFORMS
- d. DEVELOPERS WOULD HAVE WRITTEN PLATFORM SPECIFIC CODE FOR EVERY PLATFORM. TO CHECK A PIECE OF CODE WE WOULD HAVE TESTED IT IN ALL THE PLATFORM.

2. WHEN WE DO COMPATABILITY TESTING?

WHEN THE PRODUCT BECOMES FUNCTIONALLY STABLE IN THE BASE PLATFORM / 1 PLATFORM THEN WE THINK ABOUT TESTING IT IN OTHER PLATFORMS.

3. WHAT KIND OF BUGS YOU FIND WHILE DOING COMPATABILITY TESTING?

- a. IF WE FIND MORE OF USER INTERFACE ISSUES BECAUSE RENDERING (DISPLAY) VARIES FROM H/W TO H/W , OS TO OS AND BROWSER TO BROWSER
- b. IF WE FIND MORE ALIGNMENT ISSUES
- c. IF WE FIND SCATTERED CONTENT
- d. IF WE FIND VOCAL FRAMES OR TABLES
- e. IF THERE IS OBJECT OVERLAPPING
- f. CERTAIN IMAGES MAY NOT BE DISPLAYED IN CERTAIN BROWSER
- g. CERTAIN OBJECTS MAY NOT BE DISPLAYED IN CERTAIN BROWSER
- h. CERTAIN OBJECT MAY NOT WORK IN CERTAIN BROWSER
- i. SCROLL BAR ISSUE: SOMETIMES SCROLL BAR MAY NOT BE DISPLAYED BUT SOMETIMES ITS DISPLAYED BUT MAY NOT WORK, IT CAN BE VERTICAL OR HORIZONTAL SCROLL BAR.

OR

- a) MISSING CONTENT
- b) CONTENT MISSMATCH
- c) ALIGNMENT ISSUE
- d) IMAGE NOT DISPLAYED
- e) OBJECT OVERLAPPED

f) SCROLL BAR ISSUES

4. HOW DO YOU TEST THE WEB APPLICATION ?

- a. WEB APPLICATION MEANS WE HAVE SO MANY COMPONENT SO WE HAVE TO TEST EACH AND EVERY COMPONENT THOROUGHLY, THIS IS NOTHING BUT FUNCTIONALITY TESTING.
- b. WEB APPLICATION MEANS I WILL HAVE MANY INTEGRATION SCENARIO SO WE MAY HAVE TO DO INTEGRATION TESTING
- c. THERE WILL BE SO MANY END TO END BUSINESS SCENARIO SO WE HAVE TO DO SYSTEM TESTING
- d. WEB APPLICATION MEANS IT IS USED BY MULTIPLE USERS SO WE MAY HAVE TO DO PERFORMANCE TESTING
- e. WEB APPLICATION MEANS DIFFERENT USERS WILL BE USING DIFF PLATFORM SO WE HAVE TO DO COMPATABILITY TESTING
- f. WE WILL TEST THE APPLICATION IN DIFF OS, IN EACH OS I WILL TEST IN DIFF VERSION OF BROWSER, IN EACH VERSION I WILL TEST IN DIFFERENT SETTING LIKE ENABLE/DISABLE COOKIES, DIFF RESOLUTION
- g. IF THE APPLICATION CONTAINS HIGHLY SECURED PLATFORM THEN WE PERFORM WEB SECURITY TESTING
- h. END USERS MIGHT USE THE APPLICATION RANDOMLY AND FIND BUGS, SO WE PERFORM ADHOC TESTING
- i. AS SOON AS BUILD COMES WE CHECK WHETHER BASIC OR CRITICAL FEATURES ARE WORKING WHICH IS NOTHING BUT SMOKE TESTING.
- j. IF S/W IS DELIVERED IN MULTIPLE LANG THEN WE WILL PERFORM GLOBALISATION TESTING

USABILITY TESTING

1. WHAT IS USABILITY TESTING?

- TELL WHAT
- TELL HOW WE DO

WHAT:

TESTING THE USER FRIENDLINESS OF AN APPLICATION OR EFFORTS NEEDED TO UNDERSTAND THE APPLICATION IS CALLED USABILITY TESTING.

HOW:

- a. TAKE 5 NEW USERS AND 5 DOMAIN EXPERTS AND GIVE THEM THE APPLICATION AND MAKE THEM TO USE THE APPLICATION
- b. USERS WILL USE EACH AND EVERY MODULE AND GIVE THE FEEDBACK
- c. IF THE RATING IS LESS (<3) THEN IT IS CONSIDERED AS A BUG . THE DEVELOPERS WILL MODIFY THE USER INTERFACE

2. FOR WHAT KIND OF APPLICATION WE DO USABILITY TESTING?

- a. ANY APPLICATION WE UNDERGO TRAINING ,WE DON'T DO USABILITY TESTING
- b. ANY APPLICATION WHICH IS USED BY VARIETY OF USERS WE DO USABILITY TESTING
- c. ANY APPLICATION WHICH IS USED BY EXTERNAL USERS WE DO USABILITY TESTING

3. WHEN WE DO USABILITY TESTING?

- a. WHENEVER THE APPLICATION IS FUNCTIONALLY STABLE WE DO USABILITY TESTING
- b. AFTER THE DESIGN AND DEVELOPMENT OF A PROTOTYPE WE DO USABILITY TESTING

REGRESSION TESTING

1. WHAT IS REGRESSION TESTING?

- TELL WHAT
- EXPLAIN TYPES
- EXPLAIN HOW YOU FIND IMPACT REGION
- EXPLAIN HOW YOU DO FULL REGRESSION

WHAT:

- a. TESTING THE UNCHANGED FEATURES TO MAKE SURE THAT IT IS BROKEN DUE TO MODIFY OR ADDING OR REMOVING THE FEATURES OR BUG FIXES IS CALLED AS REGRESSION TESTING
- b. RE EXECUTION OF SAME TEST CASES IN DIFF RELEASE OR TEST CYCLES TO MAKE SURE THAT CHANGES ARE NOT INTRODUCING DEFECT IN UNCHANGED FEATURES IS CALLED AS REGRESSION TESTING

TYPES:

UNIT REGRESSION TESTING: TESTING ONLY THE CHANGES OR BUG WHICH IS FIXED

REGIONAL REGRESSION TESTING: TESTING THE CHANGES AND THE IMPACT REGIONS

FULL REGRESSION TESTING: TESTING THE CHANGES AND ALL REMAINING FEATURES IS CALLED FULL REGRESSION TESTING

IMPACT REGIONS

- a. BASED ON PRODUCT AS A TE I WILL BE KNOWING HOW EACH AND EVERY MODULE WORKS IN DEPTH AND ALSO I WILL BE KNOWING HOW THE MODULES ARE INTER RELATED. BASED ON THAT KNOWLEDGE I WILL BE ABLE TO RECOGNISE / IDENTIFY THE IMPACT AREAS
- b. BY PREPARING IMPACT MATRIX
- c. BY CONDUCTING IMPACT ANALYSIS MEETING WHERE THE ENTIRE TEST TEAM MEETS AND DISCUSS ABOUT EVERY CHANGE AND THE IMPACT REGIONS
- d. BY INTERACTING WITH CUSTOMERS, BUSINESS ANALYST, TE, DL AND PREPARING THE IMPACT

HOW YOU DO FULL REGRESSION TESTING:

- 2. WHAT ARE THE DIFFERENT TYPES OF REGRESSION TESTING?**
- 3. HOW CAN YOU DO IMPACT ANALYSIS BY DOING REGRESSION TESTING**

OR

HOW WILL YOU IDENTIFY REGRESSION?

- 4. WHY WE GO FOR AUTOMATION AND WHAT ARE THE DRAWBACKS OF MANUAL TESTING?**
 - a. REPEATEDLY TESTING THE SAME FEATURE
 - b. TE MIGHT NOT BE EFFECTIVE OVER A PERIOD OF TIME
 - c. AS THE PRODUCT SIZE INCREASES TEST CYCLE DURATION INCREASES
 - d. IF TEST CYCLE DURATION INCREASES , TURN AROUND TIME TO DELIVER THE PRODUCT TO THE CUSTOMER INCREASES
 - e. MAN POWER IS EXPENSIVE

5. WHAT IS PROGRESSION TESTING?

TESTING THE NEWLY ADDED FEATURE IS CALLED AS PROGRESSION TESTING

6. WHAT IS THE DIFFERENCE BETWEEN REGRESSION AND RETESTING?

REGRESSION TESTING:

DOING THE CHANGES MIGHT HAVE IMPACT ON OTHER FEATURE. SO TESTING THE UNCHANGED FEATURE TO MAKE SURE THAT IT IS NOT BROKEN BCZ OF CHANGES IS CALLED AS REGRESSION TESTING

RE-TESTING:

TESTING ONLY THE BUG WHICH IS FIXED OR CHANGES MADE IS CALLED AS RE-TESTING

7. WHAT IS THE DIFFERENCE BETWEEN SDLC AND STLC?

SDLC

IT IS THE PROCEDURE TO DEVELOP THE S/W

IT HAS GOT DIFF STAGES LIKE REQUIREMENT COLLECTION, ANALYSIS, CODING, TESTING, INSTALL, MAINTAINANCE

STLC

IT IS THE PROCEDURE TO TEST THE S/W

IT HAS GOT DIFF STAGES LIKE SYSTEM STUDY, PREPARE TEST PLAN, PREPARE TEST CASES, PREPARE TEST MATRIX, PREPARE TEST EXECUTION, DEFECT TRACKING, PREPARE TEST EXECUTION REPORT, REPROSPECT MEETING

8. WHAT IS SDLC? WHAT IS THE APPROACH TO TEST THE APPLICATION IF I GIVE YOU AN APPLICATION?

TEST PLAN

1. WHAT IS TEST PLAN?

TEST PLAN IS A DOCUMENT WHICH DRIVES ALL THE FEATURE OF TESTING ACTIVITIES .

2. WHAT IS TEST STRATEGY DOCUMENT?

3. WHO WRITES TEST PLAN?

4. WHO REVIEWS TEST PLAN?

5. HOW LONG DO YOU NEED TO PREPARE TEST PLAN?

6. WHAT IS THE APPROACH IN TEST PLAN?

7. WHAT IS RELEASE NOTES? AND WHAT IT CONTAINS?

8. WHAT ARE MATRICES?
9. HOW DO YOU DO EFFORT ESTIMATION?
10. EXPLAIN WORK BREAKDOWN APPROACH IN DETAIL (EXPERIENCE PPL),

TRACABILITY MATRIX

1. WHAT IS TRACABILITY?

IT IS A DOCUMENT WHICH IS WRITTEN TO ENSURE THAT EVERY REQ HAS TO BE ATLEAST ONE TEST CASE.

2. WHAT ARE THE ADVANTAGES AND DISADVANTAGES OF TRACABILITY MATRIX?
3. WHAT IS FORWARD TRACABILITY MATRIX?
4. WHAT IS BACKWARD TRACABILITY MATRIX?
5. WHAT IS BIDIRECTIONAL TRACABILITY MATRIX?
6. WHEN REQ IS NOT GIVEN HOW DO YOU PREPARE TRACABILITY MATRIX?
7. WHAT ARE THE DIFF B/W REQ REVIEW AND TRACABILITY MATRIX?

DEFECT TRACKING

1. WHAT IS DEFECT?

IT IS A DEVIATION FROM REQ SPECIFICATION OR IF ANY FEATURE IS NOT WORKING ACCORDING TO THE REQ.

2. WHAT IS THE DIFF B/W DEFECT, BUG, ERROR, FAILURE ?

- DEFECT IS DEVIATION FROM THE REQ
- BUG IS AN INFORMAL NAME GIVEN TO DEFECT
- ERROR IS A MISTAKE DONE IN THE CODE BCZ OF WHICH WE ARE NOT ABLE TO COMPILE OR RUN THE PROGRAM
- WE GET COMPILE TIME ERROR DUE TO SYNTAX ERROR AND RUN TIME ERROR IS DUE TO LOGICAL MISTAKES
- FAILURE : DEFECT CAUSES OR LEADS TO FAILURE. ONE DEFECT MIGHT LEAD TO 1 FAILURE OR MULTIPLE FAILURES

3. AS SOON AS YOU FIND THE DEFECT YOU SHOULD SEND IT TO DEVELOPER, WHY?

- OTHERWISE YOU WILL FORGET THE BUG
- SO THAT DEVELOPERS WILL HAVE SUFFICIENT TIME TO FIX IT
- OTHERWISE SOMEONE ELSE WILL FIND IT

4. CAN YOU EXPLAIN DEFECT LIFE CYCLE IN DETAIL?

5. WHAT IS REJECT STATUS? AND WHY WE GET THAT?

WHAT:

TE ASSUMES IT AS A DEFECT AND SENDS IT TO DEVELOPMENT TEAM BUT DEVELOPMENT TEAM IS NOT ACCEPTING IT AS A BUG BUT CLAIMING IT AS A FEATURE.

WHY:

- IT IS DUE TO MISUNDERSTANDING OF REQ
- BECAUSE OF REFERING TO OLD REQ
- BECAUSE OF IMPROPER / INCORRECT INSTALLATION
- BECAUSE OF EXTRA FEATURES

6. WHAT IS NOT REPRODUCABLE STATUS? AND WHY WE GET THAT?

TE IS ABLE TO GET THE DEFECT OR SEE THE DEFECT BUT DEVELOPER IS NOT ABLE TO GET THE SAME DEFECT. THIS IS CALLED NOT REPRODUCABLE STATUS

WHY:

- IT IS BCZ OF IMPROPER DEFECT REPORT PREPARED
- IT IS BCZ OF USING DIFF PLATFORMS IE., DEVELOPERS MIGHT BE USING A BROWSER/A PARTICULAR VERSION OF BROWSER / OS . BUT TE MIGHT BE USING SOME OTHER OS/BROWSER/SOMEOTHER VERSION OF BROWSER TO GET THE BUG
- IT IS BCZ OF USING DIFF DATA TO REPRODUCE THE BUG

7. WHAT IS DUPLICATE STATUS? AND WHY WE GET THAT?

IF YOU SEND A BUG WHICH IS ALREADY SENT BY SOMEONE ELSE, THEN STATUS OF THAT BUG WILL BE DUPLICATE

WHY:

- IT IS BCZ OF COMMON FEATURES
- SOMEONE ELSE MIGHT COME TO YOUR MODULE AND FINDS THE DEFECT AND SEND IT TO DEVELOPERS. WHEN U FIND AND SEND THE SAME DEFECT THEY WILL CHANGE THE STATUS TO DUPLICATE

- OLD TE WOULD HAVE FOUND LOT OF BUGS, IF U FIND AND SEND THE SAME BUG, CHANCES ARE THERE THEY WILL CHANGE THE STATUS TO DUPLICATE

8. WHAT IS POSTPONE STATUS? AND WHY WE GET THAT?

WHAT:

DEVELOPERS ARE ACCEPTING THAT IT IS A DEFECT BUT THY WANT TO FIX IT LITTLE LATER BCZ OF FEW REASONS . THIS STATUS IS CALLED AS POSTPONE STATUS

WHY:

- IF THERE IS A MINOR BUG AND DEVELOPERS ARE NOT HAVING SUFFICIENT TIME IN FIXING IT , IN SUCH A CASE THY MIGHT POSTPONE
- YOU WOULD HAVE FOUND A BUG IN THE FEATURE WHEREIN CUSTOMER IS EXPECTING LOT OF CHANGES
- IF IT IS A MINOR BUG IN THE FEATURE IT IS EXPOSED TO INTERNAL USERS

9. WHAT IS RFE?

WHEN THERE IS A BUG FOUND BUT NOT MENTIONED IN THE REQ AS A FEATURE, IT IS CALLED AS REQUEST FOR ENHANCEMENT STATUS.

10. WHAT IS CANNOT BE FIXED STATUS? AND WHY WE GET THAT?

WHAT:

HERE DEVELOPERS ARE ACCEPTING THAT IT IS A DEFECT BUT THEY SAY THAT THEY ARE NOT IN THE STAGE OF FIXING IT BCZ OF FEW REASONS

WHY:

- a. IF COST OF FIXING THE BUG IS MORE THAN THE COST OF LOSS IN THE BUSINESS
- b. MINOR BUG IN CORE FEATURE,CHANCES ARE THERE FIXING THAT BUG MIGHT HAVE MORE IMPACT ON THE PRODUCT SO THEY WILL CHANGE THE STATUS TO CANNOT BE FIXED.

11. YOU FOUND A BUG AND SENT IT TO DEVELOPER AND DEVELOPER SAYS NOT REPRODUCABLE , WHY?

12. HOW DO YOU CONVINCE THE DEVELOPERS THAT IT IS A DEFECT?

- a. I WILL TELL THE PROPER PROCEDURE, DATA USED, PLATFORM USED TO GET THE BUG
- b. I WILL SEND A SCREENSHOT OF THE BUG
- c. I WILL ASK THEM TO CORRECT MY COMPUTER AND GIVE THEM A DEMO
- d. IF I GET A BUG I WILL TRY TO REPRODUCE IT IN 4-5 COMPUTERS AROUND ME . I WILL ASK THEM TO FIX IT ELSE ESCALATE IT TO THE LEAD OR MANAGER

13. WHAT IS SEVERITY?

IT IS DECIDED BASED ON THE IMPACT OF DEFECT ON CUSTOMER'S BUSINESS.

THERE ARE DIFFERENT LEVELS OF SEVERITY:

BLOCKER/SHOW STOPPER

CRITICAL

MAJOR

MINOR

14. WHAT IS PRIORITY?

IT IS THE IMPORTANCE TO FIX THE DEFECTS LIKE HOW SOON THE DEFECTS SHOULD BE FIXED.

THERE ARE DIFFERENT LEVELS OF PRIORITY ARE

HIGH

MEDIUM

LOW

15. WHAT IS THE DIFF B/W PRIORITY AND SEVERITY?

SEVERITY

IT IS DECIDED BASED ON THE IMPACT OF CUSTOMER BUSINESS

THERE ARE DIFFERENT LEVELS:

BLOCKER, CRITICAL, MAJOR, MINOR

PRIORITY

IT IS IMPORTANCE TO FIX THE BUG

THERE ARE DIFFERENT LEVELS:

HIGH, MEDIUM, LOW

16. CAN YOU EXPLAIN HOW DEFECT TRACKING TOOL WORKS?

17. WHAT IS DEFECT OR BUG TRIAGE?

WHEN THE TIME IS VERY LESS AND THERE ARE TOO MANY PENDING BUGS TO BE FIXED, AT THAT TIME ALL RELEVANT PEOPLE SIT TOGETHER AND GROUP THE BUGS INTO DIFF CATEGORIES LIKE

- ALL THE BUSINESS CRITICAL BUGS ARE MOVED TO ASSIGN STATUS
- THERE ARE BUGS WHICH HAS TO BE FIXED BUT NOT IMMEDIATELY ARE MOVED TO POSTPONE STATUS
- THERE ARE BUGS NEED NOT TO BE FIXED WHICH ARE MOVED TO CANNOT BE FIXED STATUS

THIS ACTIVITY OF GROUPING THE BUGS IS CALLED DEFECT TRIAGE.

18. WHAT IS DEFECT SEEDING?

INTENTIONALLY INTRODUCING THE DEFECT TO FIND THE EFFECTIVENESS OF TEST ENGG IS CALLED DEFECT SEEDING.

19. WHAT IS DEFECT MASKING?

IF ONE BUG IS HIDING ANOTHER BUG THEN IT IS CALLED AS DEFECT MASKING.

GLOBALIZATION TESTING

1. WHAT IS I18N TESTING?

- TELL WHAT

WHAT:

TESTING THE APPLICATION WHICH IS DEVELOPED FOR MULTIPLE LANGUAGES IS CALLED AS I18N TESTING.

HERE WE CHECK WHETHER

- CONTENT IS IN RIGHT LANGUAGE OR NOT
- RIGHT CONTENT IS DISPLAYED IN RIGHT PLACE OR NOT
- FEATURE IS BROKEN WHEN THE LANGUAGE IS CHANGED

2. EXPLAIN HOW WE DO I18N TESTING?

EXPLAIN HOW APPLN WORKS FOR ENGLISH

EXPLAIN HOW APPLN WORKS FOR CHINEES

EXPLAIN HOW TO PERFORM PSEUDO TRANSLATION (ADD PREFIX , ADD SUFIX)
AND PERFORM TESTING

3. CAN YOU TELL WHAT KIND OF BUGS WE FIND WHILE DOING I18N TESTING?

- a. WHENEVER WE SELECT CHINESE LANG , CONTENT WAS DISPLAYED IN FRENCH
- b. CERTAIN CONTENT MIGHT BE DISPLAYED IN ENGLISH IRRESPECTIVE OF THE LANG YOU SELECT
- c. IF THE ALLIGNMENT IS NOT PROPERLY ASSIGNED FOR EVERY LANG
- d. DISPLAY OF THE CURSOR ACCORDING TO THE WAY OF WRITING THE LANG LIKE IT SHOULD BE DISPLAYED IN LEFT FOR ENGLISH AND IN RIGHT FOR URDU

4. WHAT IS L10N TESTING?

TO CHECK WHETHER CERTAIN FEATURES ARE CHANGING OR WORKING ACCORDING TO COUNTRY STANDARD OR CULTURE IS CALLED LOCALISATION TESTING

EG: TESTING THE CURRENCY FORMAT

TESTING THE PINCODE FORMAT

TESTING THE DATE AND TIME FORMAT

ACCESSABILITY TESTING

WHAT IS ACCESSABILITY TESTING?

OR

AMERICAN DISABILITY ACT

OR

S08 TESTING?

TESTING THE USER FRIENDLINESS OF THE S/W FROM PHYSICALLY CHALLENGED PERSON'S POINT OF VIEW IS CALLED AS ACCESSABILITY TESTING.

HERE WE CHECK WHETHER THE S/W IS USER FRIENDLY FOR DIASBLED PEOPLE.

PERFORMANCE TESTING

1. WHAT IS PERFORMANCE TESTING?

- TELL WHAT
- TELL TYPES
- TELL HOW TO DO

WHAT:

TESTING THE STABILITY AND RESPONSE TIME OF AN APPLICATION BY APPLYING LOAD IS CALLED AS PERFORMANCE TESTING.

RESPONSE TIME: TIME TAKEN TO SEND A REQUEST , EXECUTE THE CODE AND RETURN BACK THE O/P

STABILITY: ABILITY TO WITHSTAND THE NO OF USERS LOAD

LOAD: NO OF USERS

TYPES:

LOAD TESTING: TESTING THE STABILITY AND RESPONSE TIME OF THE APPLN BY APPLYING LOAD < OR = DESIGNED NO OF USERS

STRESS TESTING: TESTING THE STABILITY AND RESPONSE TIME OF THE APPLN BY APPLYING LOAD > DESIGNED NO OF USERS

VOLUME TESTING: TESTING THE STABILITY AND RESPONSE TIME OF THE APPLN BY TRANSFERING HUGE AMOUNT OF DATA THROUGH A S/W IS KNOWN AS VOLUME TESTING

SOAK TESTING: TESTING THE STABILITY AND RESPONSE TIME OF THE APPLN BY APPLYING CONTINUOUS LOAD.

HOW:

2. WHAT ARE THE TYPES OF PERFORMANCE TESTING?

3. FOR WHAT KIND OF APPLICATION WE DO PERFORMANCE TESTING?

4. CAN YOU EXPLAIN HOW TO DO PERFORMANCE TESTING?

TEST CASE

1. WHAT IS A TEST CASE?

2. WHY WE WRITE TEST CASES?

- a. TO HAVE A BETTER TEST COVERAGE
- b. TO HAVE CONSISTANCY IN TEST EXECUTION
- c. TO AVOID TRAINING EVERY NEW ENGG ON THE PRODUCT/REQUIREMENT
- d. TO DEPEND ON THE PROCESS RATHER THAN THE PERSON
- e. IT IS THE ONLY DOCUMENT WHICH ACTS LIKE A PROFF TO OUR CUSTOMERS, DEVELOPMENT TEAM AND MANAGEMENT TEAM THAT WE HAVE COVERED AL POSSIBLE SCENARIOS
- f. IT ACTS LIKE A BASE DOCUMENT FOR WRITING AUTOMATION SCRIPT. IF YOU REFER THE TEST CASES AND WRITE AUTOMATION SCRIPT YOU CAN ENSURE THAT SAME KIND OF COVERAGE IS MAINTAINED EVEN IN AUTOMATION SCRIPTS
- g. IF YOU DOCUMENT THE SCENARIOS YOU DON'T HAVE TO REMEMBER THE SCENARIOS
- h. IF YOU WRITE TEST CASES, TEST EXECUTION HAPPENS IN A VERY ORGANIZED WAY
- i. IF YOU WRITE TEST CASES, TIME TAKEN FOR TEST EXECUTION REDUCES

3. WHEN WE WRITE TEST CASES?

- WHEN DEVELOPERS ARE BUILDING THE PRODUCT TESTING TEAM IS BUSY IN WRITING THE TEST CASES
- WHEN DEVELOPERS ARE ADDING NEW FEATURES, WE SHOULD WRITE TEST CASES ON NEW FEATURES
- WHEN DEVELOPERS MODIFY ANY FEATURE/ STORY WE SHOULD WRITE TEST CASES ON MODIFIED FEATURE AND OTHER FEATURES ALSO IF THEY ARE INTER LINKED

4. CAN YOU EXPLAIN THE PROCEDURE TO WRITE TEST CASES?

SYSTEM STUDY

IDENTIFY ALL POSSIBLE SCENARIOS

WRITE TEST CASES

REVIEW TEST CASES

FIX THE REVIEW COMMENTS

VERRIFY THE FIX

TEST CASE APPROVED

STORE IT IN TEST CASE REPOSITORY

5. CAN YOU EXPLAIN TEST CASE DESIGN TECHNIQUE?

a. ERROR GUESSING TECHNIQUE

GUESS ALL POSSIBLE ERRORS AND DRIVE THE SCENARIOS. WE GUESS THE ERRORS BASED ON INTUTION AND EXPERIENCE

b. EQUIVALANCE PARTITIONING

PRESSMAN

- IF I/P IS RANGE OF VALUES THEN DESIGN THE TEST CASE FOR 1 VALID AND 2 INVALID VALUES
- IF THE I/P IS SET OF VALUES THEN DESIGN THE TEST CASES FOR 1 VALID AND 2 INVALID VALUES
- IF THE I/P IS BOOLEAN THEN DESIGN THE TEST CASES FOR BOTH TRUE AND FALSE VALUES

PRACTICE

- DIVIDE THE RANGE INTO EQUIVALENT PARTS AND TEST THE APPLN FOR ALL THE VALUES. MAKE SURE THAT TESTING IS DONE FOR ATLEAST 2 INVALID VALUES
- IF THERE IS DEVIATION IN THE REQUIREMENT

c. BOUNDARY VALUE ANALYSIS

IF THE I/P IS RANGE OF VALUES BETWEEN A TO B , THEN DESIGN THE TEST CASES FOR A,A+1,A-1,B,B+1,B-1

d. TEST CASE OPTIMIZATION

IN THIS WE ARE REDUCING THE SCENARIOS BY AVOIDING THE REPEATED SCENARIOS FOUND BY EQUIVALANCE PARTITIONING AND BVA

6. HOW DO YOU ENSURE THAT YOUR COVERAGE IS GOOD?

7. HOW DO YOU CONVINCE YOUR MANAGEMENT OR USER THAT YOU HAVE TESTED EVERYTHING?

8. CAN YOU EXPLAIN PROCEDURE TO EXECUTE THE TEST CASES?

9. CAN YOU EXPLAIN HOW TO USE TEST MANAGEMENT TOOL AND WRITE, MODIFY, DELETE, EXECUTE THE TEST CASES?

AGILE MODULE

1. WHAT IS SCRUM?

IT IS A FRAME WORK TO MANAGE THE COMPLETE PRODUCT DEVELOPMENT PROCESS.

2. WHAT IS STANDUP MEETING OR SCRUM MEETING OR DAILY STANDUP?

- TELL WHAT WE DO
- TELL WHO WILL DO
- TELL HOW LONG IT GOES ON
- TELL WHEN WE SHOULD DO

WHAT WE DO:

HERE ENTIRE SCRUM TEAM MEETS AND EACH ENGG PRESENTS

- a. WHAT HE HAS DONE YESTERDAY AND ITS IMPEDIMENTS
- b. WHAT HE IS PLANNING TO DO AND HIS EXPECTED IMPEDIMENTS

WHO WILL DO:

SCRUM MASTER TAKES RESPONSIBILITY TO DO THIS MEETING

SCRUM MASTER WILL TRY TO SOLVE CERTAIN IMPEDIMENTS RIGHT IN THE MEETING OR IF HE TAKES MORE TIME HE WILL NOTE DOWN THE IMPEDIMENTS IN IMPEDIMENT BACKLOG

HOW LONG IT GOES AND WHEN WE SHOULD DO:

GENERALLY IT HAPPENS FOR 10 TO 15 MIN AT THE BEGINNING OF THE DAY

3. WHAT IS A STORY POINT?

ESTIMATED EFFORT TO DEVELOP AND TEST THE FEATURE/ STORY IS CALLED AS STORY POINT

4. WHAT IS BURNT DOWN CHART?

- TELL DEFINITION
- EXPLAIN WITH GRAPH

DEFINITION:

IT IS A GRAPHICAL REPRESENTATION OF WORK EXPECTED V/S TIME

5. WHAT IS SPRINT PLANNING?

6. WHAT IS PRODUCT BACKLOG?

IT IS A PERSONALISED LIST OF FEATURES/ STORIES TO BE DEVELOPED IN THE PRODUCT

IT CONTAINS VER HIGH STORIES, NEED NOT BE DETAILED

IT IS GENERALLY MANAGED BY THE PRODUCT OWNER

7. WHAT IS SPRINT BACKLOG?

8. WHAT IS A STORY BOARD?

IT IS A PLACE WHICH CONTAINS LIST OF PENDING STORIES / TASK AND LIST OF COMPLETED STORIES/TASKS