**ASSIGNMENT 2**

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Q.1: Explain the following:

i. Black Box testing strategies in detail.

Ans- Black box testing is a method to test a software in which the internal structure /implementation/design of the item being tested is not known to the tester. It is also known as Behavioral Testing. Black box testing focuses on the testing functional requirements and the information domain for a software. The tester identifies a set of input conditions that will fully exercise all functional requirements for a program.

Types of Black Box testing strategies

* Equivalence Class - It is a Black Box testing technique that separates the information test information of the application under test into each parcel at any rate once of comparable information from which test cases can be determined.
* Boundary value analysis - It is a type of black box or specification based testing technique in which tests are performed utilizing the limit esteems.
* Domain tests - It is a Black Box testing technique in which choosing few test cases from an about boundless gathering of test cases.
* Orthogonal Arrays – It is a Black Box testing technique which is used at the point when various contributions to the application under test are little however too complex for thorough testing.
* All pairs testing – It is a method to test all the conceivable discrete mixes of the parameters in question.

ii. White Box Testing strategies in detail.

Ans – White Box testing technique that looks at the program structure and gets test information from the program logic/code. It is a method that uses the control structure described as a part of component to derive test case. It is also called as Clear Box testing

Types of White Box Testing Strategies

* Statement coverage – It is a technique which aim at revising all programming statements with minimal tests.
* Branch Coverage – This series is running a series of tests to ensure that all branches are tested at least once.
* Path Coverage - This technique corresponds to testing all possible paths which means that each statement and branch is covered.

Q.2: Write down any five differences between black box and white box testing.

Ans -

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| Black Box Testing | White Box Testing |
| In this type of testing internal structure/design/implementation of software being tested is NOT known to tester. | In this type of testing internal structure/design/implementation of software being tested is known to tester. |
| Mainly applicable for higher level of testing. | Mainly applicable for lower level of testing. |
| Independent Software Testers | Software Developers |
| Programming and implementation knowledge is not required. | Programming and implementation knowledge is required. |
| The main aim is to check on what functionality is performing by system under tests. | The main aim is to check how the system is performing. |