

Explain the difference between black box and white box testing ?

| Black Box Testing | White Box Testing |
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| Tests the functionality of the software system without looking at the internal code | Tests the internal workings of the software system, including the code, algorithms, and data structures |
| Does not require knowledge of the internal implementation details of the software system | Requires detailed knowledge of the internal implementation details of the software system |
| Tests the software system from the perspective of the end user | Tests the software system from the perspective of the developer |
| Focuses on inputs and outputs of the software system, as well as its behavior in response to different inputs | Focuses on the structure and logic of the software system, as well as its internal state and processing |
| Can be used to test both functional and non-functional requirements of the software system | Primarily used to test the correctness of the software system |
| May miss some errors or defects that are specific to the internal implementation details of the software system | Can uncover errors or defects that are specific to the internal implementation details of the software system |