

CMSC435 Software Engineering

Quiz 08

Name:

What is the difference between White-box testing and Black-box testing?
Differentiate between integration testing and system testing and justify with respect to White-box and Black-box testing.

A white-box testing is a method of testing software that tests internal structures or workings of an application, as opposed to its functionality. White-box testing can be used to validate whether code implementation follows intended design, to validate implemented security and to uncover exploitable vulnerabilities. White box testing uses specific knowledge of programming code to examine outputs.

Black-box testing is a method of testing that tests the functionality of an application as opposed to its internal structures or workings. In black-box testing the tester only knows the inputs and what the expected outcomes should be and not how the program arrives at those outputs.

Integration testing can be considered as white box testing because tests do require knowledge of units being integrated.

System testing falls under black-box testing as such, one should require no knowledge of inner design of the code or logic.