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Module Two Journal

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What is static testing?

Static testing involves examining software and related work products without running the code. This process typically includes reviewing requirements or specification documents and analyzing code without executing it. The review process aims to identify and eliminate errors and ambiguities in documents before they influence the development process, thus reducing potential defects in the code. Static analysis, on the other hand, allows for the examination of code to detect structural flaws or systematic programming weaknesses that could lead to defects.

What is dynamic testing?

Dynamic testing is a method of software testing that evaluates the software’s behavior during execution. This process involves compiling and running the code under review, providing inputs, and validating the outputs, effectively executing test cases. Test cases can be executed manually or through automation processes, but the software must be compiled and run. The primary goal is to validate the software’s functionality and ensure it operates correctly and without faults post-installation.

What are the differences between static and dynamic testing?

Dynamic and static testing both have the same objective of finding defects as soon as possible. The main difference is that dynamic testing executes the actual code or final product or hardware product before finding the defects and static testing starts before executing any code. Dynamic testing also focuses on external behaviors that are visible like on a screen that is displayed. Static testing is most effective in finding defects before any code is even written. It improves consistency and quality of work products.

Why is it important to use both static and dynamic testing?

While static testing can find defect before code is written, dynamic testing could find defects after code is written that static testing could’ve possibly missed. Using both testing helps keeps the defects down because you could miss defects during static testing and during dynamic testing.