

Requirement validation:

Requirement validation is the process of checking if the requirements specified for a software system are complete, correct, and feasible. The goal is to ensure that the requirements are well-defined and that they meet the customer's needs. Requirement validation is an important part of the software development process because it helps identify potential problems early on, which can save time and money. Techniques for requirement validation include reviews, walkthroughs, and inspections.

Dynamic analysis:

Dynamic analysis is the process of evaluating software behavior during execution. This type of analysis is done to identify errors or defects that may occur during the execution of a software program. Dynamic analysis is useful for detecting runtime errors, memory leaks, and other performance-related issues. Dynamic analysis tools include profilers, debuggers, and testing frameworks.

Software quality assurance:

Software quality assurance (SQA) is the process of ensuring that software products and services meet the required quality standards. SQA involves planning, designing, implementing, and maintaining quality standards and procedures throughout the software development life cycle. The goal of SQA is to ensure that software products and services are delivered on time, within budget, and with the desired quality. SQA activities include code reviews, testing, and quality audits. SQA is an essential part of software development because it helps ensure that the software meets the user's requirements and expectations.