

Smoke testing = a testing technique performed after software build to verify critical functionalities; it is named after the concept of "smoke test" in hardware engineering, where a device is powered on the first time and if it smokes, there's a fundamental problem.

Example: → check that the GUI is responsive, ~~but~~ check if the app launches successfully.

Load testing = is a type of performance testing used to determine a system's behaviour under both normal and anticipated peak load conditions.

Example: → Submitting a REST api / webserver to a large amount of requests to see how it works under stress.

Similarities:

Issues

- 1) Both are used to detect early in the development phases. Smoke testing is performed after a build to identify several functional issues, while Load testing is used to detect performance issues under load conditions before the software is released.
- 2) They both test a system from end to end.
- 3) They both are key testing phases that prevent financial losses.
- 4) They both can be documented and tested.

Differences:

- 1) Smoke testing is performed to ensure key features are working.
Load testing is performed to see how they react to heavy usage.
- 2) Smoke → Stability
Load → behaviour under stress
- 3) Smoke testing doesn't necessarily reveal bugs, load testing does (buffer overflow, memory leaks)
- 4) No programming knowledge needed for smoke testing, in comparison with load testing.