

Q.) What do you mean by Engineering & how it is different from software Engineering?

As we know there are certain steps involved in Software Development Lifecycle of different models like waterfall, RAD, Spiral & Prototype. Suggest a new development lifecycle which can perform better than these other than Agile.

Ans.) Engineering is the process of using known science and math to create something that serves a purpose efficiently and cost effectively.

Software Engineering is the systematic, disciplined and quantifiable approach to development, operation and maintenance of intangible software systems.

Suggestion on new development lifecycle which can perform better than → waterfall, RAD, Spiral & Prototype can be thought of a DevSecOps (Shift-Left Model).

While often associated with DevOps, DevSecOps functions as a distinct lifecycle that prioritizes security by Design from the very first step of planning. It's working is like that, it integrates automated security gates into every single commit.

It is advantageous as it solves the "bottleneck" problem faced in Waterfall and RAD where security checks at end of a cycle often force expensive, late stage reworks.

It is best for highly regulated industries where traditional models are too slow but agile is too loosely structured.



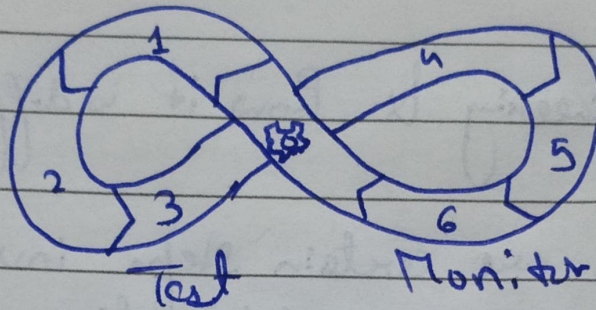
DevSecOps

Plan

Deploy

Build

operate



① Plan :- threat modeling

④ ~~⑤~~ Deploy :- Access & configuration management

⑤ ~~⑥~~ operate :- Log collection, RASP

⑥ ~~⑦~~ Monitor :- SIEM, vulnerability

③ Test :- DAST

② Build :- Pre commit hooks, Software composition Analysis