

SECURITY DEVELOPMENT LIFE CYCLE (SecDLC)

- Pre-SDL: Appropriate training for all members about security basics
- Phase 1: Identify functional aspects of software that require deep security review
- Phase 2: Design specifications should include security considerations

SOFTWARE ENGINEERING

A P's of software engineering

People

- Backbone of any project: without the right team, any plan can crumble
- Project team: skills and expertise
→ build, problem-solve
- Stakeholders: people w/ interest in project
→ sponsors, clients
→ their needs & expectations influence project goals and direction
- Project manager: manage stakeholders and steer project team

Process

methodologies, processes to manage & build project

Project environment

internal factors: structure, culture, policies, procedures within org

external factors: influences from outside org
eg: market conditions, regulatory requirements, technological advancements

SOFTWARE DEVELOPMENT

Life Cycle

Software process: Structured set of activities and associated outcomes (intermediate & final) that produces a software product

who?

entry criteria: conditions to be satisfied for initiating this phase

task & deliverable

exit criteria

dependencies

constraints: time schedule, resources

Levels of Abstraction

Requirements: high level "what"; should NOT talk about "how"

Architecture (HA): high level "how", mid-level "what"

Design (LD): mid-level "how", low level "what"

Code: low level "how"

