

# Software Development Life Cycle (SDLC)

## Requirements:-

Importance: This phase identifies stakeholders' needs and defines the project scope.

Interconnects: Requirements serve as a foundation for subsequent phases, ensuring alignment with stakeholders' expectations.

## Design:-

Importance: Design phase translates requirements into a blueprint, specifying system architecture and functionalities.

Interconnects: Designs guide implementation and testing by providing a structured framework.

## Implementation:-

Importance: This phase involves actual coding based on design specifications.

Interconnects: Implemented code reflects design decisions and ensures alignment with project requirements.

## Testing:-

Importance: Testing verifies the functionality, reliability, and performance of the developed software.

Interconnects: Testing validates the implementation against requirements and design, identifying and rectifying defects.

## Deployment:-

Importance: Deployment involves releasing the software to users or production environments.

Interconnects: Successful deployment signifies the culmination of the SDLC, transitioning the software from development to operational use.

Hence,

Each phase of the SDLC plays a crucial role in ensuring the success of software projects. By understanding their importance and interconnections, teams can effectively manage the development process and deliver high-quality software solutions.

