Day 1 - 17 Nov 2025

SDLC (Software Development Life Cycle)

- **SDLC** is the structured process used to plan, design, develop, test, deploy, and maintain software systems.

1. Waterfall Model

- Linear and sequential approach.

- Each phase must be completed before the next begins.

- Suitable for projects with fixed requirements.

- Less flexibility for changes once a phase is completed.

2. Agile Model

- Iterative and incremental development.

- Requirements evolve through collaboration.

- Focuses on small, frequent releases.

- Better adaptation to change and continuous improvement.

DevOps Framework

DevOps integrates development and operations to improve software delivery speed, quality, and reliability.

1. Flow

- Enables smooth movement of work from development to production.

- Focus on automation, reducing bottlenecks, faster delivery.

2. Feedback

- Fast, continuous feedback loops.

- Helps detect issues early and improve collaboration.

3. **Continuous Learning & Experimentation**

- Culture of constant improvement.

- Encourages learning from failures, experimenting, and enhancing processes.