

Example: E-Commerce Application

Imagine you're building an online store with features like:

1. User registration & login
2. Product catalog & search
3. Shopping cart
4. Checkout & payment
5. Order tracking
6. Admin dashboard

1. Concept Overview

Model - Incremental SDLC

Key Idea - The system is built and released in functional parts (increments). Each increment adds new features.

Focus - Delivering new features step by step.

Model - Iterative SDLC

Key Idea - The system is built through repeated cycles (iterations) of improvement and refinement. Each iteration improves the same functionality.

Focus - Refining and improving existing features.

2. Release Difference

1. Incremental SDLC

A new functional module or component is released each time (e.g., Login → Product Catalog → Cart).

Purpose of release - To add new capabilities for users.

Release frequency - After completing each increment (could be monthly or per feature).

System growth - System grows in size with each release.

User impact - Users get new features to use.

Example (E-commerce)

Release 1: User Registration

Release 2: Product Catalog

Release 3: Shopping Cart |

Visualization

Incremental Releases (Adds New Features)

Release 1 → [User Login]

Release 2 → [Login + Product Catalog]

Release 3 → [Login + Catalog + Cart]

Release 4 → [Login + Catalog + Cart + Checkout]

2. Iterative SDLC

An improved version of the same module/system is released each time (e.g., Better UI, performance, or stability of Login feature).

Purpose of release - To enhance or refine existing capabilities.

Release frequency - After each iteration cycle (could be weekly or bi-weekly).

System growth - System grows in quality or maturity with each release.

User impact - Users get a better experience with existing features.

Example (E-commerce)

Iteration 1: Basic Login UI

Iteration 2: Add password encryption

Iteration 3: Add social login |

Visualization

Iterative Releases (Improves Existing Features)

Release 1 → [Basic E-commerce MVP]

Release 2 → [Improved UI + Optimized Cart + Better Search]

Release 3 → [Performance Upgrade + Secure Payment + New Layout]

Release 4 → [Final Polished Version]

Combined (Iterative + Incremental)

In real-world Agile or modern SDLC:

- Each increment (new feature) is developed iteratively (improved over sprints).
- So releases include new features + refinements.