IT-21001

Rapid Application Development (RAD) Model

Introduction:

The RAD model, developed in the 1980s by IBM, is a software development approach focused on fast, iterative releases, quick prototyping, modularity, and stakeholder involvement. It contrasts with linear methodologies like the Waterfall model by emphasizing adaptability.

Key Phases:

1. Requirement Planning: Define scope and gather user requirements through brainstorming and task analysis.
2. User Design: Develop prototypes iteratively based on feedback to align with user needs.

3. Construction: Refine modular prototypes into the final product using efficient tools.

4. Cutover: Integrate and test the system, followed by deployment.

Objectives:

→ Speedy development through modular design and reusable components.

→ High adaptability and stakeholder participation.

→ Improved quality via early testing.

Advantages:

→ Faster delivery, cost efficiency, and better user satisfaction.

→ Easier adaptation to changing requirements

Disadvantages:

→ Requires skilled teams and is unsuitable for complex or large projects.

→ Relies on active customer involvement.

Applications:

Ideal for innovation-driven projects, short timelines, and modular systems with high user involvement.

Conclusion:

While RAD excels in rapid, user-centered development, it is unsuitable for large-scale or complex projects. Proper context ensures efficiency and user satisfaction.