



Maintenance & Reliability Management

Solution Development Lifecycle

Course Introduction

Optimizing maintenance costs is essential for improving profitability and efficiency in any The Solution Development Lifecycle (SDLC) is a structured approach to creating and delivering solutions that meet business and user needs. Understanding the SDLC is essential for ensuring successful project outcomes, minimizing risks, and managing resources effectively throughout the solution development process.

This training program covers each phase of the SDLC, from requirements gathering to design, development, and deployment. Participants will learn how to apply best practices in each stage, ensuring solutions are high-quality, aligned with business goals, and deliver maximum value. Emphasis is placed on the importance of stakeholder collaboration, effective testing, and post-deployment maintenance for long-term success.

Target Audience

This course is designed for project managers, business analysts, developers, and anyone involved in the development and delivery of solutions within an organization.

Learning Objectives

- Understand the key stages and processes in the Solution Development Lifecycle.
- Learn how to effectively gather and analyze requirements for solution design.
- Gain insights into designing scalable, secure, and efficient solutions.
- Understand the development and implementation phases, including best practices.
- Learn how to test, deploy, and maintain solutions while ensuring continuous improvement.

Course Outline

• 01 DAY ONE

Introduction to the Solution Development Lifecycle

- Understanding the Solution Development Lifecycle (SDLC)
- Key phases of the SDLC
- The role of SDLC in solution design and delivery
- Benefits of using a structured development process
- Overview of SDLC models (Waterfall, Agile, DevOps, etc.)
- How SDLC aligns with business needs and objectives
- The importance of stakeholder engagement in SDLC

• 02 DAY TWO

Requirements Gathering and Analysis

- Importance of requirements gathering in the SDLC
- Techniques for collecting requirements (interviews, surveys, workshops)
- Types of requirements: functional, non-functional, and technical
- Prioritizing and validating requirements
- Creating user stories and use cases
- Analyzing requirements for feasibility and alignment
- Documenting and communicating requirements effectively

• 03 DAY THREE

Design and Architecture

- Overview of solution design in SDLC
- Creating system architecture and design specifications
- Key design principles (modularity, scalability, maintainability)
- Designing for security and performance
- Tools and methodologies for solution design
- Prototyping and wireframing in the design phase
- Ensuring stakeholder feedback is integrated into the design

• 04 DAY FOUR

Development and Implementation

- Transitioning from design to development
- Key steps in the development phase (coding, unit testing)

- Best practices for code quality and version control
- Agile development practices and their role in SDLC
- Collaboration between development teams and stakeholders
- Managing risks and challenges during development
- Deploying solutions and ensuring readiness for implementation

• **05 DAY FIVE**

Testing, Deployment, and Maintenance

- Importance of testing in the SDLC
- Types of testing: functional, integration, and performance testing
- Deployment strategies (phased, big bang, etc.)
- Post-deployment monitoring and maintenance
- Handling feedback and issues after deployment
- Continuous improvement in the SDLC

Confirmed Sessions

FROM	TO	DURATION	FEES	LOCATION
April 14, 2025	April 18, 2025	5 days	4250.00 \$	UAE - Dubai
Sept. 21, 2025	Sept. 25, 2025	5 days	4250.00 \$	KSA - Riyadh
Nov. 24, 2025	Nov. 28, 2025	5 days	4250.00 \$	UAE - Abu Dhabi