





# SOFTWARE DEVELOPMENT LIFECYCLE (SDLC)

## **Overview:**

The Software Development Lifecycle (SDLC) training is designed to provide participants with a comprehensive understanding of the software development process, from planning and design to deployment and maintenance. This training will cover the various methodologies and frameworks used in software development, including Agile, Waterfall, and DevOps, as well as the tools and techniques used to manage software development projects.

#### **Objectives:**

- Understand the phases of the SDLC and the various methodologies used in software development.
- Learn how to plan and manage software development projects using industry-standard tools and techniques.
- Gain knowledge of software testing and quality assurance, including different types of testing and testing tools.
- Develop an understanding of deployment and maintenance practices, including release management and version control.

This 5-day training program will provide participants with a comprehensive understanding of the Software Development Lifecycle (SDLC) and the tools and techniques used to manage software development projects. By the end of the training, participants will have the knowledge and skills to plan, design, develop, test, deploy, and maintain software applications.



# **Targeted Groups:**

- Software engineers
- Quality assurance testers
- Release managers

# **Planning:**

#### Day 1: Introduction to SDLC and Agile Methodologies

- Overview of the SDLC and its phases
- Introduction to Agile methodologies, including Scrum and Kanban
- Agile project management tools and techniques

#### Day 2: Waterfall Methodology and Project Planning

- Overview of the Waterfall methodology
- Creating a project plan, including scope definition, project charter, and work breakdown structure (WBS)
- Estimating project resources and timelines

#### **Day 3: Software Design and Development**

- Software design principles and best practices
- Object-oriented programming (OOP) concepts
- Overview of different programming languages and frameworks

#### Day 4: Software Testing and Quality Assurance

- Types of software testing, including unit testing, integration testing, and acceptance testing
- Test-driven development (TDD) and behavior-driven development (BDD) methodologies
- Overview of testing tools and techniques



### **Day 5: Deployment and Maintenance**

- Release management and version control
- Overview of DevOps practices and tools
- Post-deployment maintenance and support