

V1.0

Training Program on  
Software Development Life Cycle

WWW.4P2

## **Software Development Life Cycle (SDLC) Training Program**

SDLC stands for Software Development Life Cycle. SDLC is a process that consists of a series of planned activities to develop or alter the Software Products. This tutorial will give you an overview of the SDLC basics, SDLC models available and their application in the industry. This tutorial also elaborates on other related methodologies like Agile, RAD and Prototyping.

Software Development Life Cycle usually pronounced as SDLC in software development sector. For the Development Successful software application, there must be a clear understanding of the various roles like Business, projects managers, software Developers and testers should have complete knowledge of the Development process and skill set to resolve issues. This SDLC Training describes the important phases used in Software development process.

### **What is SDLC?**

The software development life cycle (SDLC) is the process of planning, writing, and modifying software. It encompasses a set of procedures, methods, and techniques used in software development. Developers use the approach as they design and write modern software for computers, cloud deployment, mobile phones, video games, and more.

### **Advantages of SDLC**

- The SDLC is important because it helps ensure that the right people are involved in the right activities at the right times. A well-defined SDLC also allows you to measure your progress relative to your goals and gives you a way to ensure everything is on track. Using a structured approach to developing software helps ensure that your project will be successful by allowing you to:
  - Understand your requirements and how you want your software to work
  - Identify risks at an early stage.
  - Plan how you will deliver your solution in stages, such as building prototypes or writing functional specifications
  - Be sure that each stage of development fits with what has gone before and what comes next.

## **Audience**

The SDLC training is a 2-days course designed for:

- Professionals
- Anyone who wants to learn Software Engineering
- Business Analysts on Software Delivery roles, Delivery Managers, Project Managers
- Project Teams, Software Testers.

## **Learning Objectives:**

- Understand the Software Development Process from Start to End.
- Understand the various Roles and Responsibilities during the execution.
- Understand the software project lifecycle.
- Understand Software Quality Management.

## **Training Outline:**

### **Day-1**

#### **Introduction**

**Introduction to SDLC, and benefits**

**SDLC Overview**

**SDLC Waterfall Model, Iterative Model, Spiral Model, V-Model**

**Introduction to the Phases of SDLC**

#### **Phase 1**

##### **Requirements gathering and analysis**

- **Techniques for requirements gathering**
- **Requirements Modelling**
- **Documentation**

#### **Phase 2**

##### **Design**

- **Design Patterns**
- **Architecture**
- **HLD & LLD**

## Day-2

### Phase 3

#### Implementation or coding (Development)

- Debugging & Integration Challenges
- Configuration Management

### Phase 4

#### Testing

- Types of testing
- Test Planning
- Test Cases
- Test Automation
- Tools for managing testing phase

### Phase 5

#### Deployment

- Software Release Process
- Version Control

### Phase 6

#### Maintenance and support.

- Role of Ops team in patching & upgrade

#### Project Management

- Overview of Project life-cycle and SDLC
- Managing Changes

#### Quality Assurance

- Definition
- Principles
- Metrics
- Techniques for ensuring software quality