GitLab Certified Associate

Duration: **2 Days**

Prerequisites:

- Basic understanding of Git and GitLab
- Familiarity with general software terms
- Knowledge of operating systems
- Basic idea of continuous integration, delivery, and deployment
- Basic programming skills
- Awareness of cloud and virtualization concepts
- Understanding of Linux/UNIX command line interface.

Course Description:

The GitLab Certified Associate certification attests to an individual's foundational knowledge and skills in utilizing GitLab, a DevOps platform. This certification demonstrates one's ability to effectively collaborate in a high-performing DevOps environment. Concepts covered typically include project creation, navigation, GitLab flow, and CI/CD. These certifications are valuable for professionals in the IT sector, especially those engaged in software development, IT management, and operations, as GitLab is widely used for source code management and CI/CD pipelines. Industries use the certification to identify qualified professionals who can help optimize their workflows, accelerate software delivery, and enhance their overall DevOps practices.

Target Audience:

- IT professionals interested in version control systems
- Developers aiming to enhance their coding and collaboration skills
- Operations staff seeking to streamline their workflow
- Team leaders pursuing efficient project management techniques
- Software engineers looking to understand continuous integration/continuous deployment
- Tech enthusiasts interested in open-source contributions.

Course Outlines:

Module 1 – GitLab Overview
- What is GitLab?
- Sequential DevOps vs Concurrent DevOps
- GitLab Flows
- GitLab Recommended Process
- GitLab Components
- Demo: GitLab Features

Module 2 – GitLab Components & Navigation
- GitLab Organization
- GitLab Epics
- Issue: The Starting Point for your workflow
- GitLab Workflow Example
- Demo: GitLab Components

Module 3 – Git Basics
- What is Git?
- Centralized vs Distributed VCS Architecture
- Git Key Terms
- Why Git is So Popular
- Common Commands
- Basic Git Workflow within GitLab
- Demo: Working Locally with Git

Module 4 – Basic Code Creation in GitLab
- Code Review: Typical Workflow
- Code Review Workflow – GitLab Tools To Use
- Demo: Merge Request in GitLab
- Demo: Assigning, Reviewing, and Approving in GitLab
- Demo: Additional Tools for Working with Code

Module 5 – GitLab's CI/CD Functions
- What is CI/CD?
- CI/CD Advantages
- GitLab Flow
- GitLab CI/CD Key Ingredients
- Anatomy of a CI/CD Pipeline
- Demo: Building a CI/CD Pipeline

Module 6 – GitLab's Package and Release Features
- What are Package and Container Registries?
- Release Feature in GitLab
- What is Auto DevOps?
- Module 7 – GitLab Security Scanning
- Demo: Using Static Application Security Testin