Curriculum:

- **Introduction**
  - What is DevOps
  - Overview of various DevOps methodology
  - Difference between Waterfall Model vs Agile vs Scrum methodology

Understanding and Overview of Various Azure cloud services:

- **Azure Cloud Services**
  - Azure Active Directory
  - Azure App services
  - Azure SQL Server
  - Azure Key-Vault
  - Azure Container registry
  - Azure Kubernetes Services
  - Custom template creation

YAML Scripting:

- Data Serialization Overview
- YAML Introduction and Overview
- Data Types in YAML
- Lab session for Basic YAML syntax and indentation

Azure DevOps Services (In-depth Understanding with Practical LABS):

- **Work Item Management**
  - Understanding Azure DevOps Boards
  - Overview of Azure DevOps work item project option
  - **Lab** session of Agile project management
  - Lab session of Scrum project management
  - Customization of Azure DevOps Boards

- **Repository Management**
  - **GIT**

- Understanding distributed and centralized repository management
- Understanding merging and branching strategy
- Understanding various advance GIT topics (Cherry-pick, Reset etc.)
- Lab session – Practically running and executing more than **50 GIT commands** used frequently

➢ **Azure GIT repos**

- Understanding various GUI based git functionality through Azure GIT repos
- Azure GIT security and policies overview
- Azure GIT end to end lab session and integration
- Lab session of various Azure GIT repo's function (Pull Request, Cherry-picking, Revert etc.)
- Lab session to understand various types of merges (Basic, Squash, Semi Linear and Rebase)

Building Infrastructure (Infrastructure as a Code):

- Introduction to Azure Resource Manager Templates
- LAB → ARM Templates creation
- Integration of ARM templates wit Release pipelines
- LAB → Complete Infrastructure creation through ARM template task

Build Management

- Introduction to Continuous Integration and Deployment/Delivery
- Understanding build process
- LAB → Build pipeline creation using classic model
- LAB → Build pipeline creation using YAML scripts
- LAB → Azure Pipelines - .Net Core Application
- LAB → Azure Pipelines - .Net Core Application YAML Scripts
- Maven Build Introduction
- LAB → Azure Pipelines – Java Maven Project
- SQL Database auto deployment Introduction
- DACPAC Overview

- LAB → DACPAC build pipeline creation
- Understanding Service Principle and Service Connection
- LAB → Service Connection creation

- **Test Management:**
  - Starting with Azure Test Plans
  - Lab - Working with Test cases

- **Azure Artifacts:**
  - Understanding packages
  - Lab session – Azure Artifacts feeds creation and understanding
  - Lab session to understand ways of publishing and restoring custom artifacts

- **Release Management:**
  - Understanding Azure Release Pipelines
  - LAB → Azure Release Pipelines – Azure Web App
  - LAB → Multistage release deployment
  - LAB → Azure Release Pipeline - .NET Application deployment
  - LAB → Azure Release Pipeline - JAVA Application deployment
  - LAB → Azure Release Pipeline – DACPAC deployment
  - Azure Deployment Groups – Setup and Implementation

- **Containerization**:
  - Overview of Azure Kubernetes Services
  - Overview of Kubernetes
  - LAB → YAML script creation and application deployment on Kubernetes – Nginx Web App

- **Miscellaneous**
  - Lab session -> Custom **Agent pool creation**
  - Lab session -> **Service connection** manual and automated creation

- Basic Azure AD
- Task group and libraries
- Project setting overview
- Organisation setting overview

Practice Session:

- Complete end to end build creation and deployment using classic model
- Complete end to end build creation and deployment using YAML scripts
- Real world use cases – 1 (ASP.NET Web Core Application)
- Real world use cases – 2 (MS SQL Database Deployment)

Interview Guidance:

- Mock Interview - 1
- Mock Interview - 2