Azure Integration Services

Overview: Azure Integration Services is an offering by Microsoft Cloud for performing mission-critical integrations. It provides Azure customers with a serverless compute experience that helps drive efficiency and consistency when connecting applications.

Duration: 5 Days

		Course Content

Day1	**Module 1:**	Integration Services Overview
		➢ Integration Scenarios
		➢ Integration Challenges
		➢ Basic enterprise integration on Azure
		    1) Architecture
		➢ Overview of types of Integration Services
		    1) Logic Apps
		    2) Service Bus
		    3) API Management
		    4) Event Grid
		    5) Azure Functions
		    6) Data Factory

	Module 2:	Azure Logic Apps
		➢ Why logic app?
		➢ Logic app Fundamentals
		➢ Logic app Vs Functions Vs Microsoft Flow
		➢ Anatomy of a logic app
		➢ Connectors in logic app
		➢ Triggers and Actions in Connectors
		    1) Creating and managing logic app
		    2) Create logic apps using Management Console
		    3) Create logic apps using Visual Studio
		    4) Create and Manage logic apps using CLI
		    5) Create and Manage logic apps using PowerShell
		➢ Demo: Creating first logic app using Management Console
		➢ Demo: Creating first logic app using .Net
		➢ Demo: Create schedule-based and recurring automation workflows with Azure Logic Apps
		➢ Hand-on:
		    1) Create schedule-based and recurring automation workflows with Azure Logic Apps

Day2	**Module 3:**	Azure Service Bus ➢ Why Service Bus? ➢ What Is Service Bus? ➢ Storage Account Queues Vs Service Bus Queues ➢ Enterprise integration using message broker and events ➢ Service Bus Tiers with Features ➢ Working with Queues ➢ Managing Service Bus Queues using Management Portal ➢ Demo: Managing Service Bus Queues using Management Portal ➢ Working with Service Bus Topics

		➢ Demo: Managing Service Bus Topic using Management Portal
		➢ How Service Bus Handles Failures
		➢ Demo: How to work with Service Bus Queues in .Net
		➢ Demo: How to work Service Bus Topics in .Net
		➢ Configure Dead Letter Queue
		➢ Demo: Getting Started with Service Bus Queues Using .Net
		➢ Demo: Getting Started with Service Bus Topic Using .Net
		➢ Hand-on:
		    1) Sending and Receiving Data from Service Bus Queues using .Net
		    2) Working with Service Bus Topic using .Net

Day3	**Module 4:**	API Management
		➢ Why we need APIM Service
		➢ API Management overview
		➢ Basic enterprise integration on Azure
		➢ Working with APIs in APIM
		    1) Components of API Management Service
		    2) API Management Service Instance
		    3) Creating new API in API Management Service Instance.
		    4) Adding and configuring methods in API
		➢ Demo: Import and publish your first API
		➢ Configure authentication for APIs
		➢ Configure policies
		➢ Test the new API in the Azure portal
		➢ Demo: Test the new API in the Azure portal
		➢ Create and publish a product
		➢ Monitor Published APIs
		➢ Demo: Working with products
		➢ Demo: Monitoring Published APIs
		➢ Hands-on:
		    1) Creating and Managing API Management Service.

	Module5:	Azure Event Grid ➢ Why we need Event Grid ➢ Scenario for using Event Grid ➢ Explore Event Grid ➢ Type of Event Grid ➢ Difference between Even Grid and Event Hub ➢ Creating and Capturing Events in Azure Event Grid ➢ Demo: Handling Event using Event Grid. ➢ Demo: Send email notifications about Azure IoT Hub events using Event Grid and Logic Apps ➢ Hand-on: 1) Send email notifications about Azure IoT Hub events using Event Grid and Logic Apps

Day4	**Module6:**	Azure Functions
		➢ Why we need Azure Function
		➢ Azure Functions overview
		    1) Benefits of Azure Function
		    2) Overview of plans
		    3) Scaling Options and limits in different plans
		    4) Function app timeout duration in different plans
		➢ Architecture of Azure Function

		➢ Compare Azure Function and Web Jobs
		➢ Developing Azure Functions
		➢ Demo: Creating Azure Function using Azure Portal
		➢ Demo: Creating Azure Function using .Net
		➢ Best practices for reliable Azure Functions
		➢ Implement Durable Functions
		    1) Benefit of Durable Function over Azure Function
		    2) Components of Durable function
		➢ Demo: Creating Durable Function .Net
		➢ Hand-on:
		    1) Working with Azure Function based on Httptrigger
		    2) Working with Azure Function based on even trigger

Day5	**Module7:**	Data Factory ➢ Why? ➢ Overview of Data Factory ➢ Flow process of data factory ➢ Introduction to Data Lake ➢ Demo: Copying Data from Azure SQL to Data Lake ➢ Demo: Load Data from Data Lake to Power BI ➢ Demo: Creating Pipeline using Data factory ➢ Introduction to Azure Data Lake Analytics
	Module8:	Explore integration services solution architecture ➢ Basic enterprise integration on Azure ➢ Enterprise integration using message broker and events ➢ Publish internal APIs to external users
	Module 9:	Course Wrap up