Course Outline

Module 1: Developing Long-Running Tasks and Distributed Transactions

Topics for this module include:

o   Implementing large-scale, parallel, and high-performance apps using batches
o   HPC using Microsoft Azure Virtual Machines
o   Implementing resilient apps by using queues

You also get to learn about implementing code to address application events by using webhooks. Implementing a webhook gives an external resource a URL for an application. The external resource then issues an HTTP request to that URL whenever a change is made that requires the application to take an action.

Module 2: Configuring a Message-Based Integration Architecture

Lessons

o   Configure an app or service to send emails
o   Configure an event publish and subscribe model
o   Configure the Azure Relay service
o   Configure apps and services with Microsoft Graph

After completing this module, students will be able to:

o   How to configure a message-based integration architecture

Module 3: Developing for Asynchronous Processing

Lessons

o   Implement parallelism, multithreading, and processing
o   Implement Azure Functions and Azure Logic Apps
o   Implement interfaces for storage or data access
o   Implement appropriate asynchronous computing models

- o Implement autoscaling rules and patterns

    After completing this module, students will be able to:

- o Understand how to Develop for Asynchronous Processing

Module 4: Developing for Autoscaling

    Lessons

- o Implementing autoscaling rules and patterns
- o Implementing code that addresses singleton application instances
- o Implementing code that addresses a transient state

    After completing this module, students will be able to:

- o Begin creating apps for Autoscaling

    Module 5: Developing Azure Cognitive Services Solutions

    Lessons

- o Developing Solutions using Computer Vision
- o Developing solutions using Bing Web Search
- o Developing solutions using Custom Speech Service
- o Developing solutions using QnA Maker

    After completing this module, students will be able to:

- o Understand Azure Cognitive Services Solutions