Microsoft Cloud Workshop: IoT for Business (MS-40531)

Modality: Virtual Classroom

Duration: 1 Day

SATV Value: 1

About this course:

Use the distinct advantages of IoT (Internet of things) to create a smart city system that will enhance New York City's public transport and traffic. Use a variety of cloud technology and Internet of things Edge apps to provide predictive city bus management, like machine learning to identify anomalies, location broadcasting to monitor bus route location, and sending traffic information to improve notify traffic signal timing. Traffic signals will also receive the new Internet of things tools that can help identify problems with performance and maintenance, like when a light is out. Easily access all this data from Azure Time Series Insights ' unified reporting dashboard.

Course Objective:

· Using Azure Time Series Information and insight to visualize, query, and store the significant numbers of time-series data gathered by the different Internet of things devices, and also analyze the underlying cause and identify anomalies

· Use Azure Internet of things Edge to gather tracking data for vehicles, identify abnormalities using the local Azure Machine Learning framework and send the compiled data to the Azure Internet of things Center as required

· Visualize bus location data on a map using Azure Location Based Services

· Manage Internet of things (LoT) devices using IoT Hub

· Using its available REST Query APIs, create a custom app on top of Time Series Insights

Audience:

This online training program is designed for IT professionals and Cloud Architects who have solutions design and infrastructure architecture experience in cloud technology and want to know more about Azure and its services as defined in the ' At Course Completion ' and ' About this Course ' areas. Anyone taking this training should also be trained in other cloud technologies other than MS, fulfill the preconditions of the program, and want to cross-train on Azure.

Course Outline:

Module 1: Whiteboard Design Session - IoT for businessLessons

- Review the customer case study

- Design a proof of concept solution
- Present the solution

Module 2: Hands-on Lab - IoT for businessLessons

- Azure data, storage, and serverless environment setup
- Provision additional Azure services
- Create bus and traffic light simulated devices, and add alerts and filters
- Create IoT Edge device and custom modules
- Run a console app to view critical engine alerts from the Service Bus Queue
- Create Azure Function App to ingest critical engine alerts and store them in Cosmos DB
- View all data in Azure Time Series Insights