DAILY ASSESSMENT FORMAT

Date:	05 AUG 2020	Name:	PAVITHRAN S
Course:	industrial iot on google cloud platform	USN:	4AL17EC068
Topic:	industrial iot on google cloud platform	Semester & Section:	6TH B
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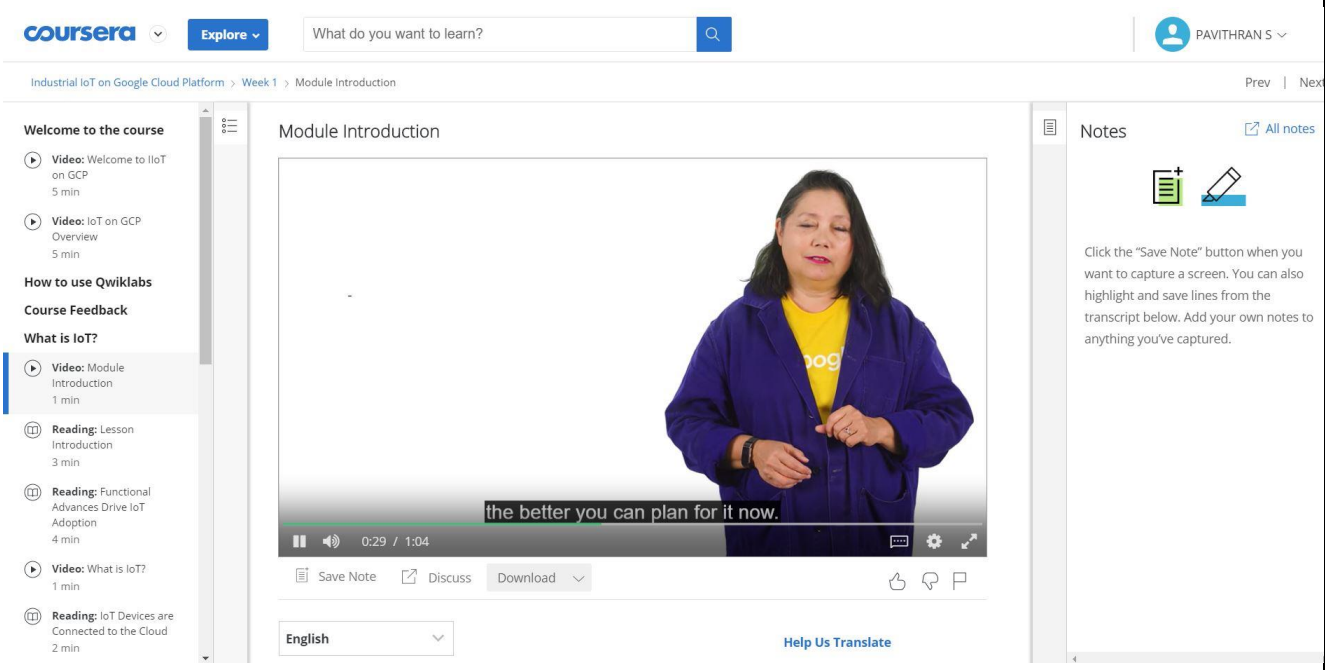
FORENOON SESSION DETAILS

Image of session



Report – Report can be typed or hand written for up to two pages.

What can be done with IIoT?

Today, companies are using IoT devices to perform a wide variety of tasks. As companies find new use cases for IoT, the industry will continue to grow. Some of the more wide spread uses of IIoT are listed below.

Accelerate business agility

When you combine a global network with an intelligent IoT platform, you can unlock valuable business insights. You can accelerate business agility by connecting globally dispersed devices, at the edge or in the cloud, with comprehensive cloud services. For example:

Real-time asset tracking: Real-time asset tracking: Embed devices in valuable assets and track them in real time, perform complex analytics and machine learning on the data collected, and assess the status of your business to deliver actionable insights.

Machine learning on the edge

You can also run IoT solutions with machine learning capabilities both locally on the device (using Tensorflow and a TPU board) and in the cloud. For example:

Predictive maintenance: Embed sensors in equipment and automatically predict when equipment needs maintenance; optimize equipment performance in real time; predict downtime; detect anomalies; and track device status, state, and location.

Machine learning is beyond the scope of this course; it will be discussed in a later IoT course.

Improve operational efficiency

When your device is connected to the cloud, you can manage global assets and perform firmware updates. Discover how efficiently your devices operate, manage global assets, and carry out firmware updates on Cloud IoT. The platform supports a wide variety of embedded operating systems and provides out-of-the-box support for devices from leading manufacturers like Intel and Microchip. Plus, you

can trigger automatic changes based on real-time events using Cloud Functions workflows.

For example:

Logistics and supply chain management: Embedding cloud connected sensors and devices in company transport vehicles can improve the management of the fleet, inventory tracking, and cargo integrity monitoring.

Localization intelligence

IoT devices allow you to visualize where assets are located in real time, where they've traveled, and how often they've moved. Whether your IoT assets are indoors, in remote areas, or distributed across hundreds of cities, you can track them with precision.

Smart Cities and buildings: Embed cloud-connected sensors and devices in buildings and infrastructure. Build a comprehensive solution that spans across billions of sensors and edge devices and bring a new level of intelligence and automation to entire homes, buildings, or cities.

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