

Exercise Week 10: IoT Devices

Due Mar 27 at 11:59pm **Points** 7 **Questions** 7
Available until Mar 27 at 11:59pm **Time Limit** None

Instructions

This exercise asks questions about the following IoT scenario:

A VRBO owner has a smart phone app to control the following IoT devices in a rental unit in a vacation condo complex:

- thermostat to adjust the temperature of the furnace
- indoor lights
- lock with keypad
- water valve for main water supply

The VRBO owner can control the IoT devices over the Internet from a smart phone app.

The IoT devices inside the unit communicate via the Zigbee wireless communication protocol.

Renters can control the following IoT devices in the following ways while in the unit:

- enter code into keypad
- manually turn thermostat up or down
- turn lights on and off with voice commands

The condo complex has a perimeter camera that provides a video feed to the condo owners that they can access from their phones after entering a password.

The VRBO owner installed a device that activates an outdoor light when motion is detected. The motion detector with outdoor light is not connected to the smartphone app or any IoT devices inside the unit.

Attempt History

	Attempt	Time	Score
LATEST	<u>Attempt 1</u>	33 minutes	7 out of 7

Score for this quiz: **7** out of 7

Submitted Feb 14 at 11:02am

This attempt took 33 minutes.

Question 1

1 / 1 pts

Which is an example of an element?

☐ Changing temperature

☒ Thermostat

☐ Video feed password

☐ Zigbee protocol

Correct!

Question 2

1 / 1 pts

Which two devices are inside the same authorization boundary?

☐ Keypad and perimeter camera

☒ Thermostat and water valve

☐ Motion sensor and inside lights

☐ Inside lights and outside lights

Correct!

Question 3

1 / 1 pts

Which device is an enabling system for the VRBO owner?

- ☐ Lock
- ☐ Thermostat
- ☒ Perimeter camera
- ☐ Water valve

Correct!

Question 4

1 / 1 pts

The water valve IoT device does not have a password that can be set. The VRBO owner creates a segmented network for all of the IoT devices inside the unit that is password controlled. What is the term for what the VRBO owner has accomplished with the segmented network?

- ☒ Compensating control
- ☐ Vulnerability disclosure
- ☐ Predisposing condition
- ☐ Secure development

Correct!

Question 5

1 / 1 pts

The thermostat has a sensor that detects the temperature in the room. What is the term for this part of an IoT device?

Correct!

- ☐ Element
- ☐ Hub
- ☐ Control
- ☒ Transducer

Question 6**1 / 1 pts**

The thermostat communicates using the Zigbee wireless communication protocol. What is the term for this part of an IoT device?

Correct!

- ☒ Network interface
- ☐ Enabling element
- ☐ Predisposing condition
- ☐ Control baseline

Question 7**1 / 1 pts**

When a renter is scheduled to arrive at the unit, the VRBO owner uses the smartphone app to turn on the water, raise the temperature, turn on some inside lights, and activate the keypad code provided to the renter.

What is the term for this scenario?

Correct!

- ☒ Use case

☐ Key device cybersecurity requirement

☐ Supply chain practice

☐ Likelihood of occurrence

Quiz Score: **7** out of 7