



Study Guide for Week #14

Module 14: Smart Home Sensors. Introduction to Amazon Alexa and Google Home

Material Outline

- (1) Smart Home Definition
- (2) How does it work?
- (3) History of Smart Home Technology
- (4) Which types of technology is used in smart home
- (5) Example of current products
- (6) Amazon Alexa
- (7) Google Home
- (8) AI in voice assistants

Provided Documents

Documents	Description
Week14-WatchMEfirst	Video explaining the goals of this week
Week14-StudyGuide.pdf	The guiding documents for the materials covered in this week, student work, and learning outcomes of this week.
Week14-Slides.ppt	PowerPoint slides regarding smart home sensors.
Week14-Lecture	Video Lecture
Week14-PaperReading	A paper about “Next-Generation of Virtual Assistants (Microsoft Cortana, Apple Siri, Amazon Alexa and Google Home)”
Week14-Resources: Reading	An interesting article explaining the cons and

Documents	Description
-> Which AI assistant wins?	pros of both giant voice assistants in the market
Week14-Resources: Video - > Is Alexa an Artificial Intelligence?	A short video explaining why AI is considered inside Alexa
Week14-Resources: Video - > AI in Google Home makes real phone calls	A demonstration of how Google Home has advanced it's AI to actually make real phone calls.
Week14-Checklist	A checklist for your reference

Student Assignments

- Digest PowerPoint slides
- Watch the Lecture (or attend the in-person lecture)
- Read the Week 14 Material (All readings and papers provided)
- Watch the explicative videos
- Submit Lab #6

Learning Goals

This module is part of the learning outcomes

- (1) Describe the new and up-to-date voice assistants
- (2) Understand the technology behind voice assistants
- (3) Implement a program interaction with a voice assistant emulator