AZTAP – Home Automation and Accessibility Technology

Presented by: Nathan Pullen
Overview

• What does home automation mean to you?

• Have you heard the terms “smart home”, “connected home”, ”internet of things” (IOT) or “automation” before?
Outline

• What can be automated
• Building blocks
• Hardware
• Controllers
• Interfaces
• Resources
• Examples
What functions can be automated?

• Lighting and outlets
• HVAC
• Doors and locks
• Security systems
• Home entertainment
• Remote monitoring and access
• Virtual assistant
Building Blocks of Automation

• A smart home requires many different parts, including hardware and software, working together.

• Different platforms allow for integration and control.
Building Blocks of Automation

- Determine what you want to accomplish
- Plan for core hardware needs first (switches, outlets, bulbs, sensors)
- Add your hub or controller next
- Configure your preferred interface(s)
Hardware Devices

- Platforms
  - Insteon, zwave, zigbee, wifi
- Switches, Outlets, Bulbs
  - Insteon, Lutron, Zwave, Ecobee, Wemo, Hue, Wink, Switchmate
- Access, Security, HVAC, Environment
  - Nest, Honeywell, Venstar, Somfy, alarm.com, Ring, Schlage, August
Controllers and Hubs

- Universal Devices (ISY-99x)
- Insteon Hub
- Samsung SmartThings
- Apple Home Kit
- MiCasa Verde
- Wink Hub
- Vera
Interfaces

- Amazon echo (alexa)
- Google home
- Apple Homekit
- Samsung Hub
- Logitech Harmony
- Controls via voice, smartphone, tablet, remotes, sensors, triggers
Resources

• Hubs & Controllers: http://amzn.to/2t5PzhM
• Interfaces
  — Alexa: http://amzn.to/2upOOUF
  — Apple: http://apple.co/2tZT36
  — Samsung: http://amzn.to/2t5OkiE
  — Logitech: http://amzn.to/2u4r6wf
Recommended Example System

- ISY994 controller: http://amzn.to/2v7I9Mw
- Insteon Switch: http://amzn.to/2thdBua
- Insteon Outlet: http://amzn.to/2t5q4Nt
- Echo Dot: http://amzn.to/2up3Aej
- Thermostat: http://amzn.to/2th7Hcv
- Door lock: http://amzn.to/2uyOjrR