

# **Voiced Digital Assistants**

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# Hello Computer

- [Hello Computer](#) - we are almost there! The future (as portrayed in the past) has come to the present!
- And there are more features coming too. How about controlling your device with gestures on a touchscreen. Or even the potential for you to make gestures from across the room and have the assistant "see" you and respond.
- But we are getting ahead of ourselves, let's stick to voice command for now.

# To Boldly Go Where No One Has Gone Before

- 50 years ago Star Trek featured computers that could be commanded (and interacted with) by voice.
- People wanted to be able to do it for real, so they ordered designers to "Make it so!".
- The technology still has a long way to go, but it's come a long way already. Companies like our local IHMC are working hard to make smooth efficient human-computer interaction a reality.

# Voiced Digital Assistants

- Apple's "Siri" on Apple devices (including HomePod)
- Windows 10's "Cortana" on Windows 10 devices
- Amazon's "Alexa" (on Echo, Tap, Dot, etc)
- Google Assistant on Google Home and Android devices ("Hey Google", "OK Google")
- Others
  - Other apps available, above are the "biggies".
  - Other devices (e.g. Sonos One) that can work with your choice of assistant

# Main Tool We'll See in Class is Alexa/Echo

- This presentation mostly uses Alexa for demonstration purposes. I can also show some Siri (on my iPhone) and Cortana (on my laptop) if desired and maybe "OK Google" (on my tablet if it cooperates).
- Cortana will be our backup if Alexa gets shy in our classroom environment. Many of the basic features are the same (or similar) on all the devices.

# Amazon Device Family & Google Comparison

- [Amazon Echo lineup \(comparison\)](#)
- [Amazon Echo vs Dot](#)
- [Google Home lineup \(comparison\)](#)
- Amazon vs Google
  - [Article at PCmag](#)
  - [Article at TechRadar](#)
  - [Article at The Wirecutter](#)

# Common Question; Can you change the "Wake Word" or "Hot Word"

- Apple "Siri" can not be renamed
- Windows10 "Cortana"; there is a 3rd party app MyCortana (from Source Forge) that allows you to add or change wake words. Reviews are mixed, not recommended, use at your own risk.
- Download at [Tom's guide](#)
- Article at [Portableone](#)

# Changing the "Wake Word" or "Hot Word"

- Amazon "Alexa"; log in to alexa.amazon.com or Alexa app
  - Select Settings, then the device to change. Select "Wake Word". Select choice & save.
  - 4 choices available; Alexa, Echo, Amazon, Computer
- Google (Home)/Android "Hey Google" & "OK Google". No official renaming but again you can get a 3rd party app (which I do not recommend)
- Article at [Smarthome.news](https://smarthome.news)



# Dominos' Ferris Bueller Ad is Cool

- But you may want to consider disabling your "wake word" so your TV doesn't activate your assistant to do things (like order you a pizza etc;)
- Echo and Google Home have a button to turn off the microphone.
  - <https://www.wired.com/2017/02/keep-amazon-echo-google-home-responding-tv/>
- Other TV commercials for Amazon, Google etc have the same potential issue. This is one reason you may want to change the "wake word".

# Amazon example, press microphone button to enable/disable listening

The top of the echo [dot] has four buttons, four microphones and an LED ring. The + and – buttons control the volume, the white circle activates Alexa and the circle (or microphone) with a line through it enables or disables the microphones. Lights up red when disabled. On two button echos, rotate the top to change volume instead.



# Google “mute” buttons (enable/disable listening)

Lights up when disabled, press again to enable

Some devices have a switch you slide instead



# Amazon Alexa Settings

- Alexa can be setup/controlled via an app from your smartphone or tablet, or you can setup/control Alexa from a computer with a browser at [alexa.amazon.com](http://alexa.amazon.com)
- Windows 10 how to examples
  - <http://www.windowcentral.com/using-amazon-echo-windows-10>
  -

# Alexa My Most Used Commands

- **Alexa, play news**
- **Alexa, play news from Reuters**
- **Alexa, what's today's weather**
- **Alexa, read email**
- **Alexa, set timer 10 minutes**
- **Alexa, set alarm for 7 AM**
- **Alexa, add event**
- **Alexa, what's on my calendar today**
- **Alexa, play my Collective Soul station**

# Alexa Examples

**Alexa, what's tomorrow's weather**

**Alexa, what's 2 plus 2**

**Alexa, tell me a joke**

**Alexa, why did the chicken cross the road?**

**Alexa, do the Red Sox play today?**

**Alexa, set a timer for 55 minutes**

**Alexa, timer status**

**Alexa, what's my sports update <<settings/sports\_update**

# More Alexa examples

**Alexa, talk like a pirate**

**Alexa, what is your quest?**

**Alexa, what is your favorite color?**

**Alexa, what is "Towel Day"?**

**Alexa, what is the meaning of life?**

**Alexa, define capitalism?**

**Alexa, how does a rainbow work?**

**Alexa, who's playing in the NHL tonight?**

**Alexa, when is the summer olympics?**

**Alexa, how fast can a camel run?**

**Alexa, what is a meme?**

**Alexa, why are memes dank?**

**Alexa, what can I substitute for butter?**

**Alexa, what can I substitute for a cup of butter?**

# Alexa More Interesting Things

- Seven unexpected things Amazon's Alexa can do

- <http://www.foxnews.com/tech/2017/01/14/seven-unexpected-things-amazons-alexa-can-do-for.html>



# Alexa Lists of Commands

- "Full" list of commands. Keep in mind, these kinds of lists don't stay "full" for long.
- <https://www.cnet.com/how-to/amazon-echo-the-complete-list-of-alexa-commands/>
- 50 "Best" commands
- <https://beebom.com/best-alexa-commands-for-amazon-echo/>
-

# Alexa Calendar

- Demo calendar in class
  - Show Alexa settings for calendar
  - Alexa, what's on my calendar for tomorrow
  - Alexa, add event to my calendar for Friday, or
    - *Alexa, add event (she will prompt you after that)*
  - *Removing events is difficult or impossible by voice (same for items on shopping and to-do lists).*

# Alexa Read Email

**Alexa works with Gmail, Outlook.com, Hotmail and Live.com accounts.**

**Types of email it works with; Google, Microsoft, Apple, Microsoft Exchange**

**Youtube video on [setting up email](#)**

# Alexa – Amazon Music

- Amazon Music (AM) - play songs/albums uploaded to Amazon Music
- Alexa, play Boots Randolph << play an artist
- Alexa, shuffle Boots Randolph << same as prev
- Alexa, play Yakety Sax << play a song
- Alexa, play The Concert in Central Park

# Alexa – Amazon Music 2

- 2 ways to do iTunes songs with Amazon Echo
  - <https://www.techjunkie.com/itunes-amazon-echo/>
  - Connect a Bluetooth device to Echo
  - Transfer files; iTunes to Amazon Music
    - Drag & drop from itunes to amazon music doesn't work for me.
    - “upload selected file” or “upload selected folder” in AM does.

# Alexa – Pandora (Music)

- Setup – demo setting up Pandora in Alexa settings
- Sample Commands
  - Alexa, play Simon & Garfunkel on Pandora
  - Alexa, skip this song
  - Alexa, volume up
  - Alexa, volume 5
    - On a scale of 0-10
  - Alexa, pause
  - Alexa, play
  - Alexa, stop
  - Alexa, what's playing?

# Alexa – Books, Audio Books

- Alexa can be set up to read Kindle books, and play audio books via Audible (and maybe Kindle too).
- I don't have any audio books to demonstrate, but descriptions of it sound similar to setting up and playing music.
- I will demonstrate "reading" a book via Kindle
  - Alexa, read The Little Mermaid

# Example: Alexa & Vivint

- I have a Vivint smart home system with alarm, thermostat, door locks, & doorbell camera. Someday I may get garage door opener too.
  - Alexa, ask vivint what's the temperature
  - Alexa, ask vivint turn AC to 80
  - Alexa, ask vivint if system is armed
  - Alexa, tell vivint lock doors
  - Alexa, tell vivint lock front door
    - Note: You can't unlock doors via voice command



# Alexa Compatible Devices

- Vivint is just one example, there are many other devices that can talk/work via Alexa
- Best Alexa compatible devices
  - <http://www.tomsguide.com/us/pictures-story/880-best-alexa-compatible-devices.html>
  -

# Some Other Devices Require More Apps To Run Smoothly

- Sometimes you want to (or need to) make a "combo" to use other devices with Echo/Alexa. It's like a little app to make something complicated simpler. Some are premade, or you can design them yourself.
- Example; Philips Hue lights also require IFTTT (If This Then That) applets. This simplifies their use with Alexa.
  - [IFTTT Website](#)
  - [IFTTT on Wikipedia](#)
  - [Good IFTTT Applets](#)
  - [IFTTT Tutorial Video](#)

# Instant Purchases via Alexa/Echo

- Amazon - requires you have a "1 click" payment method set up and an amazon prime membership
  - Relevant Amazon help pages with more details
    - [About Placing Orders with Alexa](#)
    - [Shop for Prime-Eligible Items with Alexa](#)
- Dominos Pizza is another example (I mentioned their TV ad earlier). You set up a default order which you can easily order by voice through Alexa.
- Many companies will be offering this sort of thing (or already are).

# Alexa Skills

- More "things" that Alexa can do, analogous to apps on a smartphone tablet.
- [Skills page on amazon.com](#)

# Connecting Alexa and Cortana (using them together)

- You can set up an Amazon Echo to have “Cortana functionality” by enabling the Cortana skill
- You can set up Cortana to have “Alexa functionality” by installing and using the Alexa app
- Best of 2 worlds as each does certain things better
- <https://www.cnet.com/how-to/how-to-use-alexa-and-cortana-together/>
- <https://www.pcmag.com/feature/363221/how-to-connect-alexa-and-cortana-use-them-together>

# Demonstration videos

- **Amazon Echo Show**

- <https://www.youtube.com/watch?v=pchrhtTnrM4>

- **Google Home**

- <https://www.youtube.com/watch?v=81uyYKPpWww>

- **Apple HomePod**

- <https://www.youtube.com/watch?v=qkS6MnuvbCc>
- <https://www.youtube.com/watch?v=-6H1divN--A>