**Strengths and Weaknesses**

|  |  |
| --- | --- |
| **Strengths** | **Weaknesses** |
| * Web app development * Echo development * Building hardware devices | * Smartphone app programming |

**Things We Can Do:**

* Work with the Echo Dot as an input interface
  + Lighting
  + Speakers / Music
  + Query the web
  + Connected to Amazon.com
  + Create keywords in order to trigger user-made modules
  + Poll a pressure mat/infrared beam?
  + Can she constantly poll something or do you have to trigger her?
* Possibly a web app?
* Control lighting
* Smart Locks
* Cameras inside and outside the home

**Things We Cannot Do:**

* Access Alexa remotely

**What DD Wants:**

* House that sees location and knows that he will be late\
* Wants to watch a movie, so wants to get some torrents on his way home.
* Do things based on his schedule and his location
* There’s a camera and checks who is at his door?
* Facial Recognition
* Possibly ping phone for data (battery, location, etc.)

**CS - 347: Informal Design Doc**

Group 1:

current stuff: https://www.smarthome.com/

Alexa-compatable stuff: https://www.cnet.com/smart-home/compatibility/amazon-alexa/

Group 2

<http://www.instructables.com/id/Hacking-the-Amazon-Echo/>:

<https://github.com/armzilla/amazon-echo-ha-bridge>

<http://makezine.com/2015/06/26/ifttt-adds-new-channel-makers/>

https://madeby.google.com/home/?utm\_source=en-ha-na-sem&utm\_medium=cpc&utm\_campaign=googlehome

https://home-assistant.io/components/alexa/

Group 3:

<http://www.digitaltrends.com/home/everything-that-works-with-amazon-echo-smart-home/3/>

<https://support.smartthings.com/hc/en-us/articles/205275404-How-to-connect-Amazon-Alexa-with-SmartThings>

Group 4:

<https://developer.amazon.com/blogs/post/Tx14R0IYYGH3SKT/flask-ask-a-new-python-framework-for-rapid-alexa-skills-kit-development>

* Details how to create a skill and use it with an Alexa

<https://developer.amazon.com/blogs/post/TxDJWS16KUPVKO/New-Alexa-Skills-Kit-Template-Build-a-Trivia-Skill-in-under-an-Hour>

* Tutorial skill for amazon alexa

<https://developer.amazon.com/alexa/smart-home>

* Home page for alexa smart home setup

<https://developer.apple.com/homekit/>

* Details Apple’s version of a smart home, allowing light control, home automation, and control of smart devices

<https://madeby.google.com/home/>

* Google’s version of the smart home, allows the consumer to interact with smart devices like Philips Hue, Nest, and Chromecast, and can be used to play music, start watching a movie, etc.

<https://github.com/amzn/alexa-skills-kit-js/blob/master/README.md>

* Github samples of alexa skills

Group 5:

Topics that we should research:

* Amazon Echo APIs:
  + <https://developer.amazon.com/services-and-apis>
* Arduino vs Raspberry Pi hooks with Echo / Google Home
* Android/iOS interface to control home?
* Amazon Echo vs. Google Home?

**Teams**

|  |  |  |
| --- | --- | --- |
| Team | Final Members | Secondary Members |
| EEG Processing  (Make sense of EEG data)  (database->things happening) | **Zeke Zhao**  **Matt Colozzo**  **Jonathan P.**  **Khanh Nguyen** | Alex Massenzio  Justin Zauderer  Christian Bouwense  Monica |
| EEG Retrieval  (Programming with APIs)  (Head->database) | **Christian Bouwense**  **Alex Massenzio**  **Justin Zauderer** | Anthony  Jonathan P.  Zeke Zhao  Ayal C.  Matt Colozzo |
| Echo  (Interfacing with all other modules/features) | **Anthony**  **Jennifer C**  **Monica** | Thomas P.  Ayal.c  Khanh Nguyen |
| Hardware (Central and nodes)  3 | **Justin B.**  **Thomas P.**  **Jake Chapolski** | Matt M  Jake |
| Camera (Facial Recognition)  ( ͡° ͜ʖ ͡°)  3 | **Matt M**  **Ayal**  **Louis R.**  **Eric Zhen** | Justin B.  Jennifer C  Louis R |

Memes are now illegal

**Pun**ishable by death by Damopolous