- Agenda:
  - Design Review 0
    - System Block Diagram
    - Subsystem Requirements Check
      - Housing
      - Network
      - Auxiliaries
      - Website
      - Sensing + Controls
    - Plan of Action
      - Timeline
  - Questions
    - What potential risks do you foresee and how can we mitigate them?
    - What do you believe is our biggest hurdle right now?
    - You had discussed the difficulties with bluetooth last semester; what are common problems you've observed?
    - Are there any security or safety concerns?
    - Are there any features that should be considered to improve overall design and functionality?
    - Website: new domain? Who provides? Or part of main one?
    - More C3's or more bluetooth modules?

Byrce: *System block diagram with the components*

Prof: The kit boards have the c3 already

B: Speaking about the auxiliaries… cad black box with speakers and visual reminders such as leds for different room reminders for other disabilities
Cad is for the structure of the conveyor belts
Pills through funnel to sensor pad….. ⅔ options for this
Leds on the system itself to know if pills are on the pad or not
Wall power

Prof: usb? He has a radio with this

B: display on the system with all the information and reminders and a clock

Prof: is it multi lined? For scrolling

B: two displays side by side or above ….if not then there would be a push button to scroll to the next medicine … there would be a notification to know if more prescriptions would be available to take

going through the document of design review 0

Kara: medicine containers mounted and motors will control movement …making sure no wires will be hanging out

Bryce: working on software…bluetooth is how we are speaking to the controllers .. a bit difficult

Prof: look into **esp now** …low data rate and easier than figuring out bluetooth

Eric: working on the auxiliaries ….for audio or visual cues….cad housing for this and incorporating a different controller for this

Prof: make sure there is a snooze button

Syd: override something

Aaliyah: spoke about the projects website

Prof: Website needs to be resided onto the senior design website ….website on aws to host our projects website because in the real world wed need many users…

Syd: sensing pad controls … initially we wanted a load sensors but too expensive and wont feel a pills weight…camera, laser beam, or infrared instead …..color contrasting against backgrounds

Prof: difficult parts: how we deliver the pill and sensing ….the cad design and how they might all fall or get stuck in the chute..determine if anything was caught.. Figure out other ways to sense this…

Bryce: will likely have a counter so we will know how many were taken

Syd: if we do a grid vs a camera

Prof: instead of having the pills distributed based on what we take and what time …instead dropping

Syd: pill sensor box and making them drop and have a light telling them which one is going to drop or take

Prof: this is the one and its time to take these and itll light up…make it easier for them
U need to be taking these now and remind them in other rooms and things like that
Brainstorm a bunch of different ways to do this…because we cant really weigh them

Syd: what if we dont need to move them at all … we need a reasonable container and a light system

Prof: set up so that i could not open the wrong one….so there was some movement to where there would be a timed hold so that everything else was covered…21 things filled and covered and then a blank spot

Aaliyah: covered pad except a whole in the middle and the filled container would just move and empty only when that is over the whole

Prof: make sure it is accessible for grandma and only accessing this specific ….

Bryce: *speaking about timeline*

Safety concerns?
Any other features?

Prof: do not make it easy to take the wrong pills
Minimal viable product …if we use this thing what will we need to have… then do addons …like remote controllers…start with key basics and then go onto add ons like remotes and other features

3d print something and not bother moving things by hand….how are we doing the mechanics of this and indicators …. Course code for 3d printing is on the website