

## Design Review 2 Meeting Minutes

3/5/2025

### UI:

- Demo: could not hear the mic input, noise potentially affects microphone input
- Screen demo: still screen, haven't incorporated text response streaming yet.
- Will pair with chat assistant and scroll text through screen as it fills up.
- Think about shrinkage in prints when it cools

### Power:

- Flow chart overview
- Either connect battery to load or to approved well-designed charger
- Connector to plug into board?
  - Crimping our own connectors: make sure leads don't touch (cover one with tape while working on the other)
- In-line connector
- Closet already has a lot of chargers, so we might not have to invest in one.
- Run pair of wires to connector in slot (connected to board) to take strain off of board.
- Right now we have a 5v buck. Look into buck boost?
  - When selecting buck boost, likely a specific layout recommended in spec sheet
  - They'll recommend specific parts for the layout. Use these.
- Access panel for battery
- Would be good to have multiple batteries so that we can continually test and not have to wait for a battery to charge

### Motors

- Use matching connector to the one used in demo config. 3 pin molex
- Servos never return to initial position. Need feedback control (encoders)
- PI controller would be good, PID prob not needed.
- Overlap area during motion: cut holes to run wires.
- Another breakout board for accelerometer
- If getting accelerometer breakout board for prototyping, keep in mind that some of these boards have ancient accelerometers that aren't available anymore.
- Motors only hold position by natural resistance of the gearing.
- Would be good to have servos that could set to specific angle