## Meeting #10 Agenda for 10/27/20

- Discuss changes to DVR plan with Dr. Perry
  - Dates and feasibility
  - Recommendations section
- Discuss Project Value Proposition for Thursday
- Continue Prototyping Device
  - Check on circuit control and output control
  - Check on handle fabrication
  - Check on output linkage fabrication
    - Assemble and test components if necessary/possible
- Client meeting on Friday
  - Jett will be absent, but can still arrange for the meeting to occur
  - Questions?
  - Updates
- Determine if we will need to meet Thursday to continue prototyping

## Team Meeting #10 Minutes

- Client Meeting Planning
  - Questions
    - Should there be set RPM speeds that can be selected for the motor? How many options should there be?
    - Is there a specific need for a trigger, or would an on/off button suffice?
  - Updates
    - We have a rough draft of the CAD model for the prototype, as well as a rough draft for the code that will run the device
    - The potentiometer will control the motor speed, and the device will be powered by a single button/trigger pull
    - Show Dr. Hiller the electronics and design choices if possible
- DVR Revisions
  - Jett spoke with Dr. Perry and worked through the DVR to update it according to his suggestions
  - DVR is now current
- Prototyping and Design Discussion and Considerations
  - We should possibly look back on the toothbrush motor depending on how our prototype mechanical linkage works out
  - We should consider button placement on the device to be comfortable, but not easy to accidently activate
  - For the next few weeks, we will focus on ensuring that the shaving mechanism we have designed will work, as well as programming the electronic control of that mechanism
    - When we are ready to grit, there is potentially a sandblasting shop outside of town that we could work with
      - Laser etching could also work for gritting sanding surface
  - After discussion of several possible mechanical linkages, we have decided to attempt a design that will use the mounted motor back behind the shaft (similar to a traditional drill), with a key, solenoid, or electromagnet that will actuate the shaft forward and backward



Action Items:

- Jett will complete the value proposition and submit to Dr. Perry by Thursday
- Maclean, Ryan, and Lucas will attend the client meeting with Dr. Hiller on Friday, and provide him with updates and questions as needed/outlined above
- **Everyone** will continue to develop the prototype to meet the deadlines for 11/13/20, including completing the mechanical design for the device shaver mechanism, CAD model, and first prototype testing