Update Log – CAD + CAM

Jan 20, 2024

* Started measurements of the board based on Jessica’s design and added it to my pre-existing document from a studio (where we measured the dimensions of the breadboard)
* Found some potential boxes and chose the one outlined in the file “boxes.py reference”. This box was chosen because of its simplicity and compactness (contributing the usability performance objective). I also specifically chose laser cutting because it had a good chance of being faster and for the aesthetic.
* Looked through the boxes.py export, imported it into Fusion360 (psa-parts) and added the holes corresponding with the lights, the button, and the micro-USB. For this part, simplicity was prioritized, to make sure the result once it was printed was predictable and adjustable (easy to modify) if needed.
* The parts were extruded and uploaded to a second Fusion file (the psa-assembly). I started to assemble them.

Jan 21, 2024

* I finished assembling the parts and realized I could add in an extra component to secure the bread board easily into place. I added holes in the inner sides that fit perfectly with the breadboard attachments and added and inner side in the back of the box for the attachments on that side (the attachment holes only corresponded to the attachments that stook out of the breadboard – so 2 out of 4 sides which is enough to hold it in place, combined with snugness of fit everywhere else).
* This was updated in the Fusion assembly file
* I added the button as well, along with some circular caps that we could try out once it was laser cut.
* I sent the file back to Jessica so she could check over the measurements.
* I exported and imported into AutoCAD, used the MyFab template and made sure everything was up to MyFab expectations (in the correct layer, etc).
* I submitted to MyFab (order: Las7310)