

Counting Colors

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Gameplay

Controller

Design Process

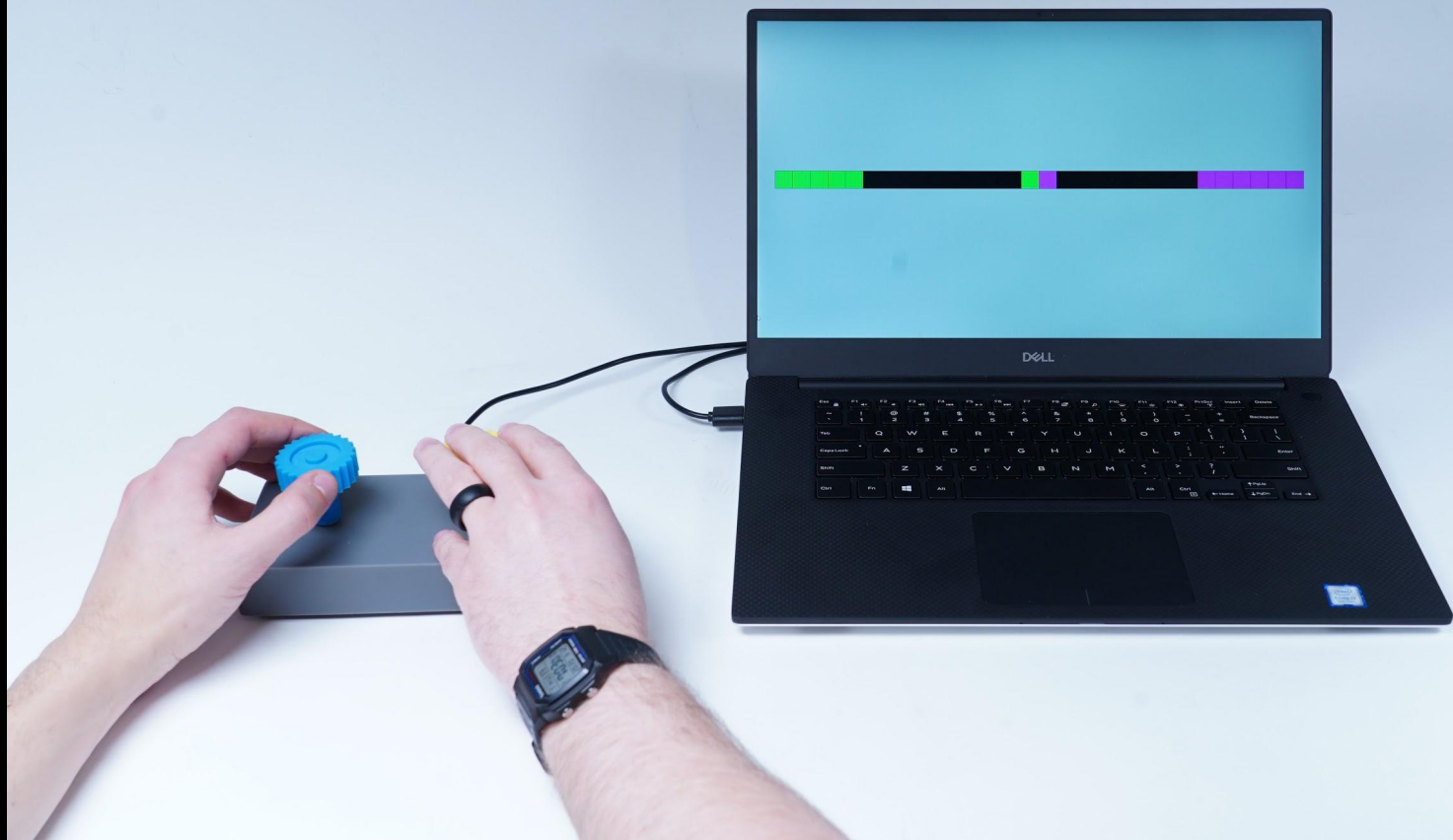
Gameplay

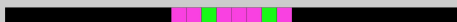
Players memorize how many pixels of each color were displayed, then make their guess by rotating and clicking the controller knobs.

Five rounds at three different difficulties equals 15 possible points. Highest score wins.

Neither player knows which color they will have to guess for, so they can play cooperatively or competitively.







Memorize array of pixels



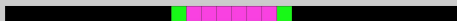
Recieve different target colors



Input guesses by rotating knobs



Lock in guesses by clicking knobs

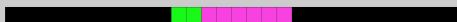


Both players guessed correctly

Start next round

Lock in guesses

Both players guessed incorrectly



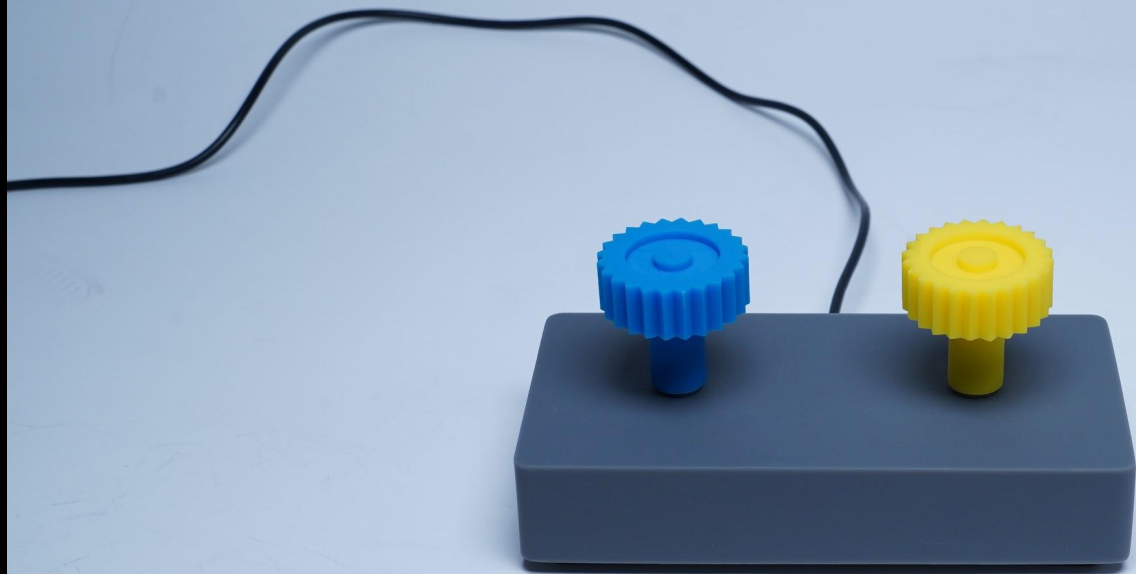
One more demo round

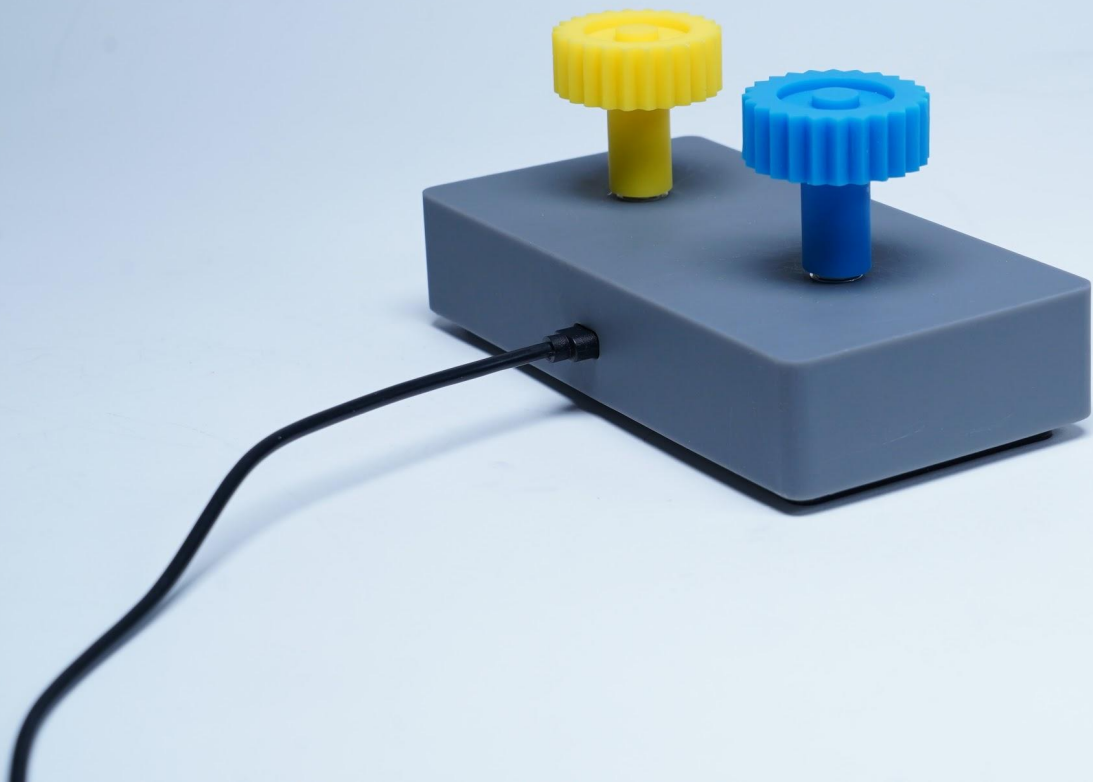
Lock in guesses

Only player 2 guessed correctly

End of game scores are displayed

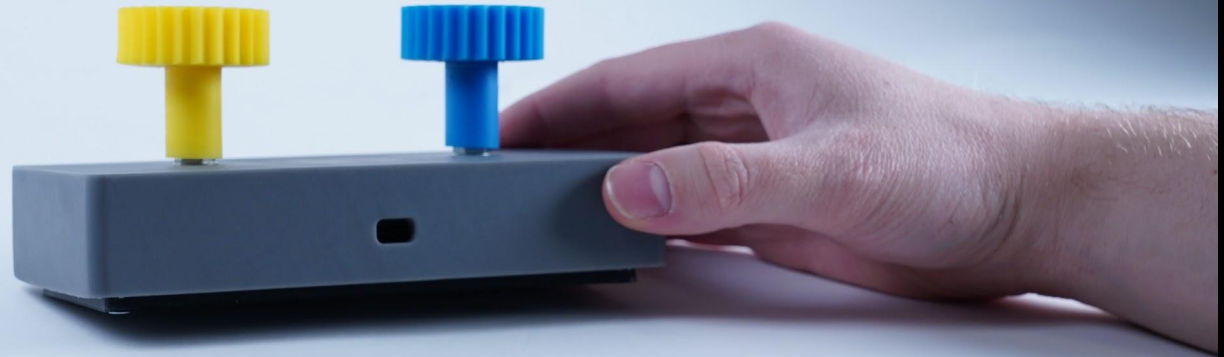
Controller





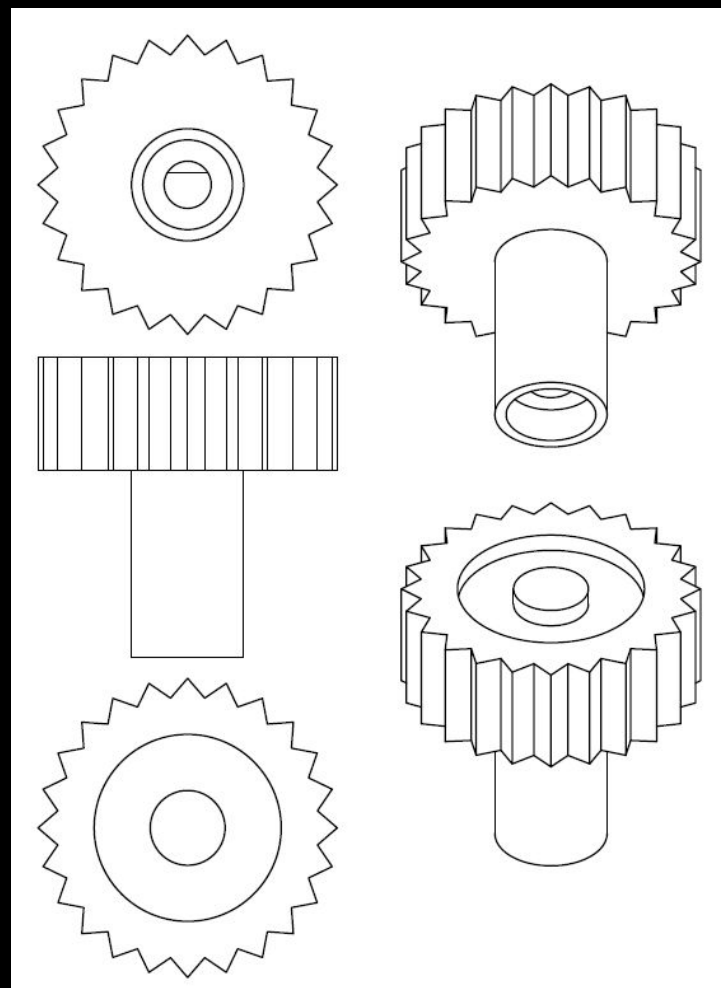
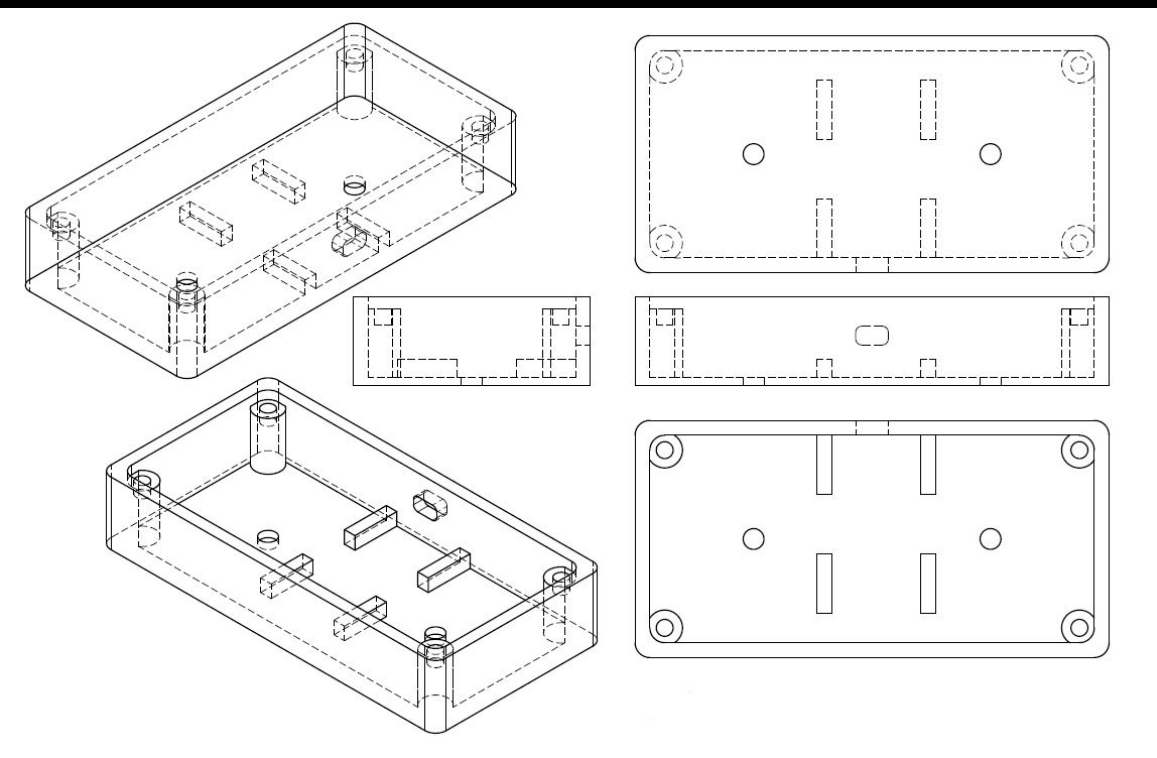


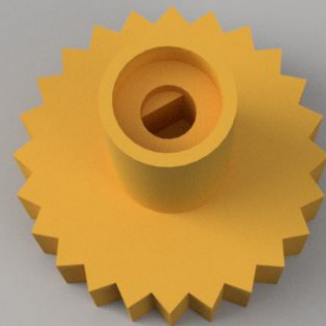
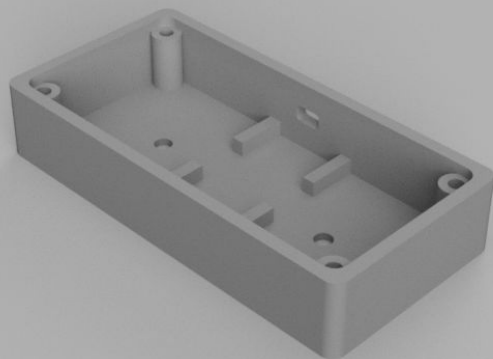
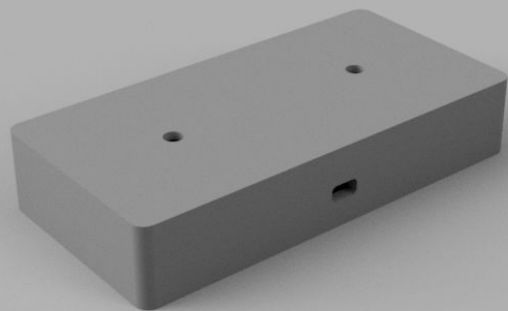


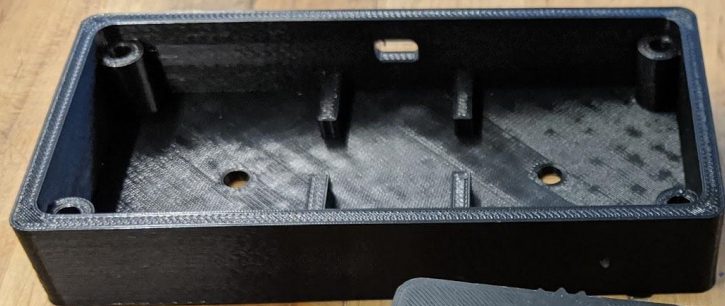


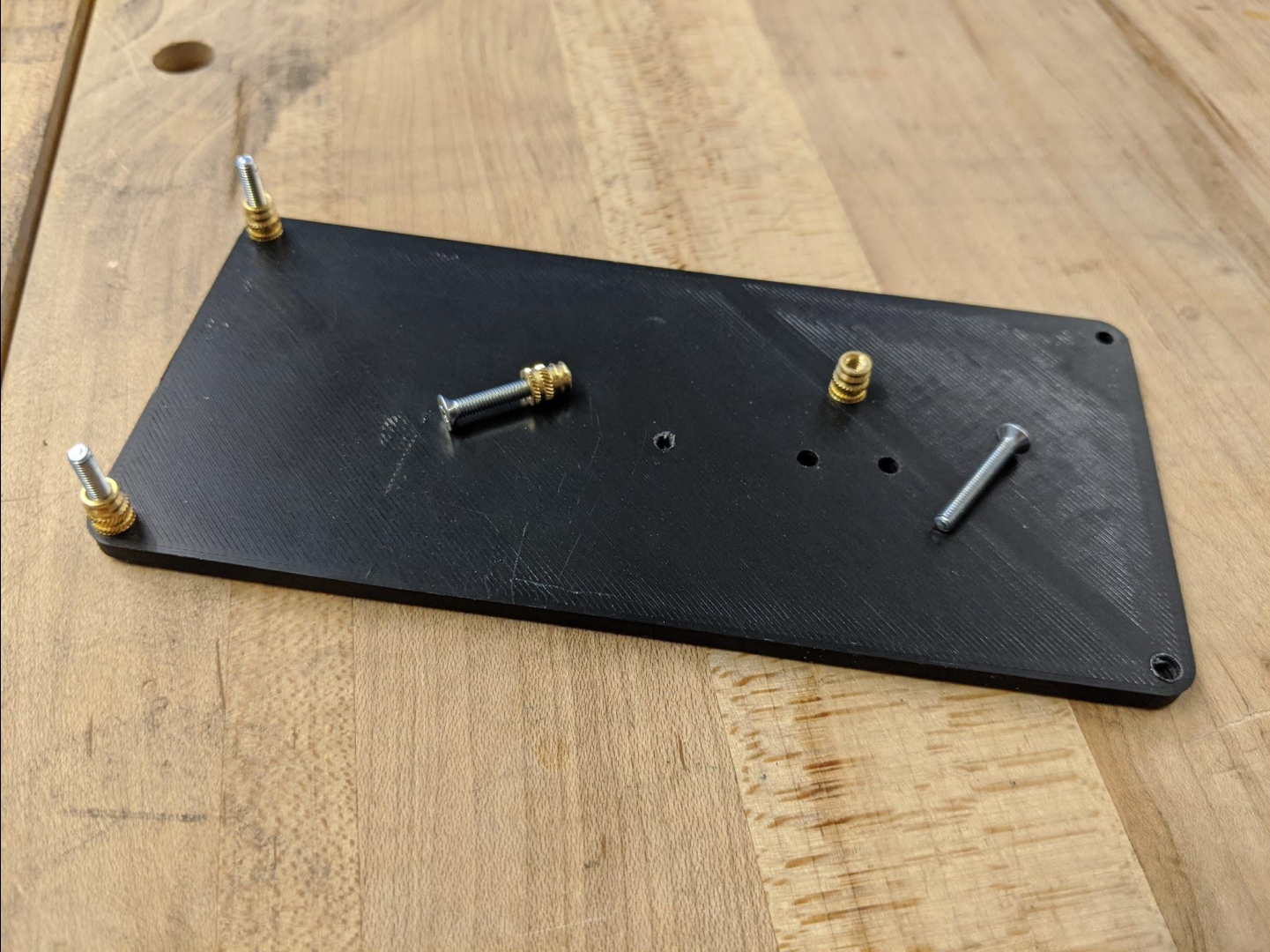


Design Process











Source Encod
vs. N
Signal Capacity for
Die rolls
Roll # of faces
N = 10, n = 10, p = 0.5
N = 10, n = 10, p = 0.5



Lessons Learned

- Getting multiple opinions is really important to developing a great game/controller/overall experience, and you don't have to wait to ask for those opinions, but can get them throughout every step of the process.
- Being able to rapidly prototype different models with differently sized features is extremely beneficial to making a clean and polished final design in a reasonable amount of time.
- Documenting your work is much easier if you do it as you go, rather than waiting until the very end to throw it all together.
- It is incredibly helpful to collaborate with others and be inspired by their ideas because it sparks wonderful ideas of your own and helps push you along.
- Simplicity doesn't necessarily mean boring.
- Something as simple as a couple of rotary encoders can be used for a variety of things, including counting colored pixels, walking down a hallway, rotating some pipes, and so much more.
- I want to build an IDC-style workshop in or next to my future home.