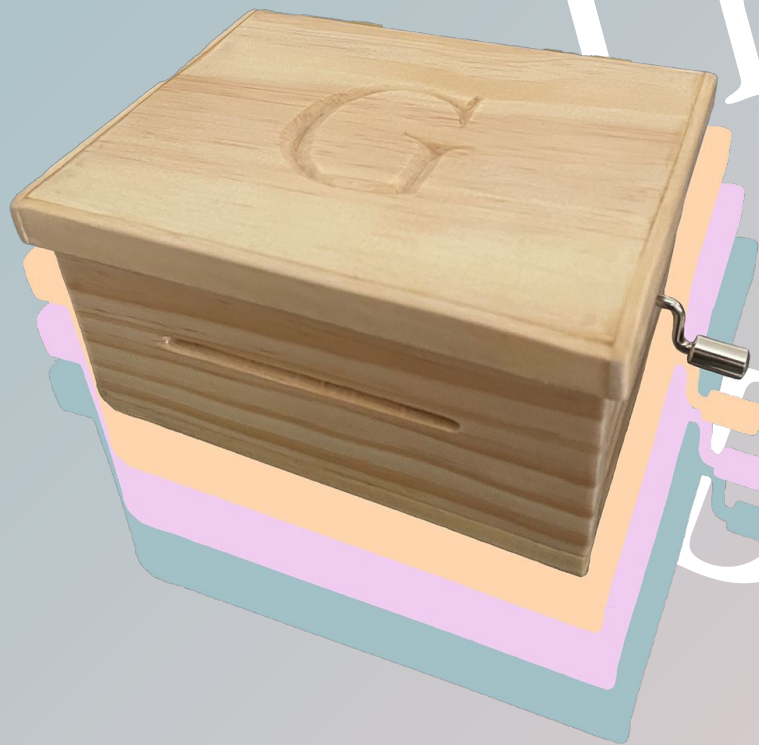




The Music Box

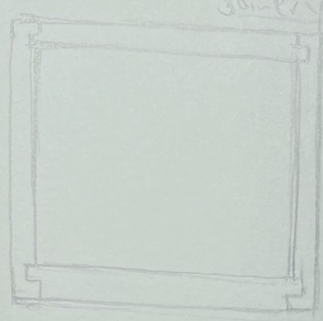


The Idea

I wanted to use and build my woodworking skills to hand craft a music box that could play any song. The components for a programmable music box are relatively easy to come by, but I wanted mine to be completely customized, from the hand carved initial to the chiseled joinery.



The Plan



Pine

front



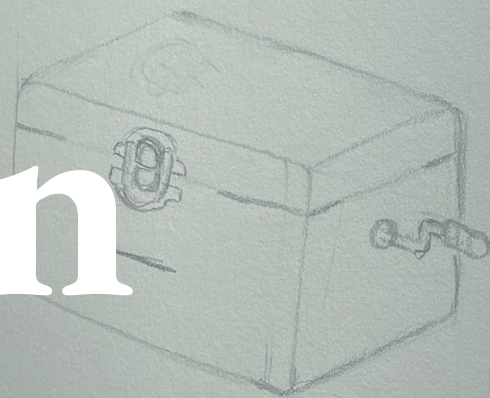
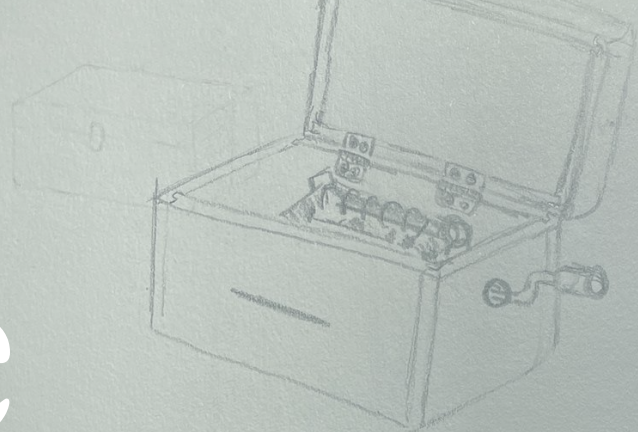
2.7in

Back



No
hinge

right
side



The plan

Simple: create an encasing for the music box mechanism. At minimum, there needed to be a slot in the front and back for the paper music strips to go through and a hole in the side for the crank. From there I could build out the look of the box. I wanted the joinery to be simple but good-looking so I chose the barefaced housing joint. I chose pine for the wood – I wanted the materials to be pretty while still being easy to work with since all joinery would be hand chiseled. Originally the box was to have a clasp and a no hinge look, but, in later changing the design of the lid and finding hinges that would complement the style of the box, this became unnecessary.

Learning
New
Skills

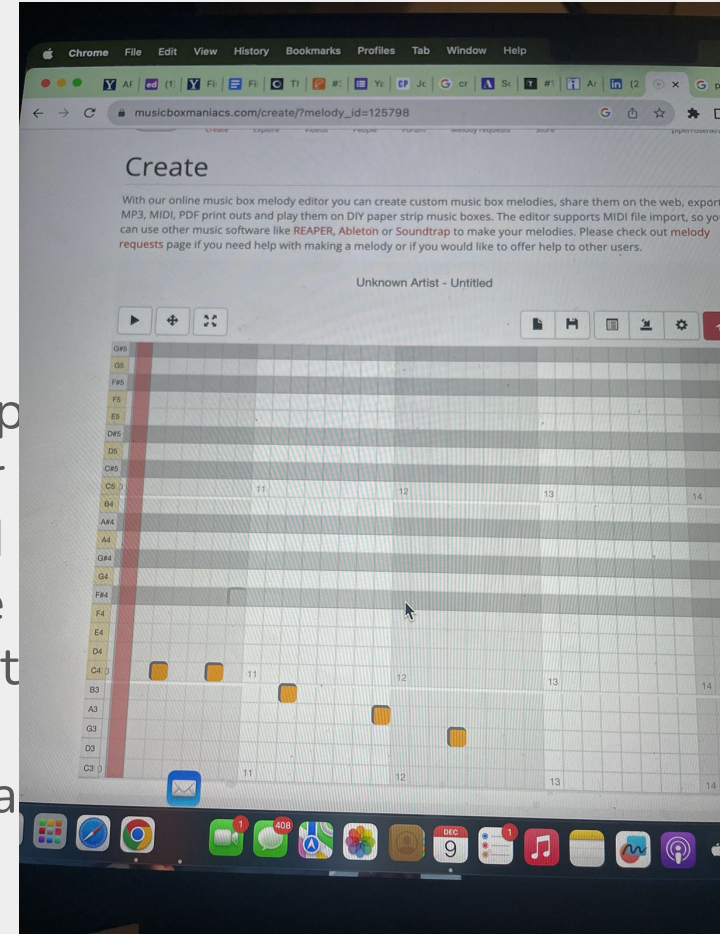
Learning New Skills

This project combined two things I don't have a lot of previous experience with: music and larger scale woodworking. I had experience with whittling and smaller projects but this was my first project with the extensive use of hand tools, chisels, and joinery. I made a mock up of the joinery using scrap wood which helped me get used to the chisels. Precise letter carving was difficult with few tools and no prior experience, but I found my improvement over different practice trials encouraging.

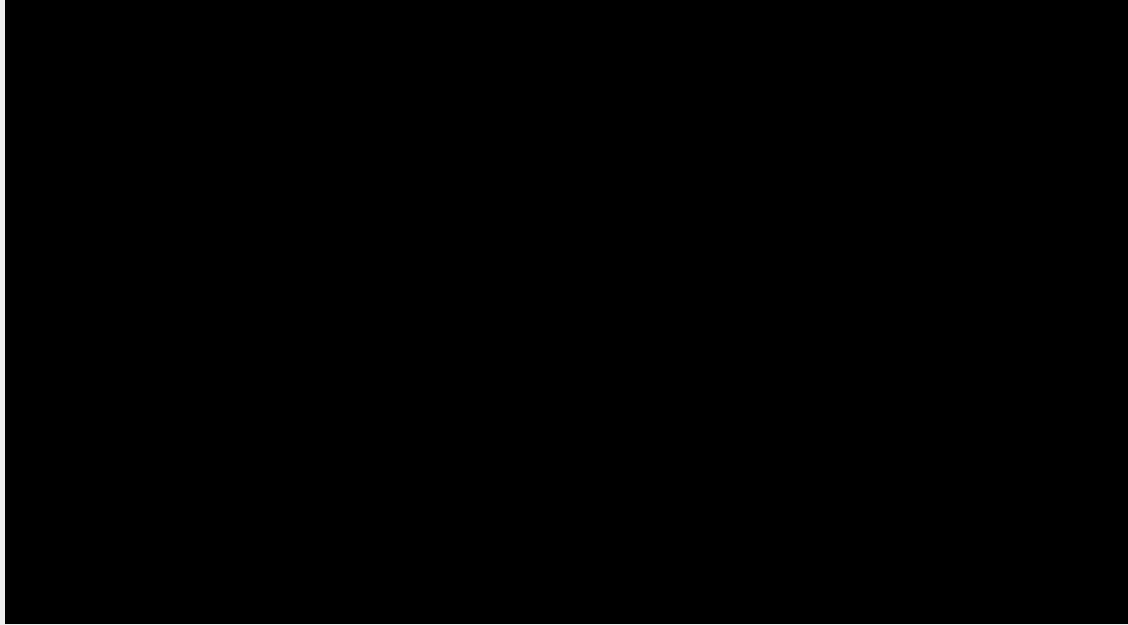


Learning New Skills

As for the music aspect, I found musicboxmaniacs.com which has a library of songs that can be printed for use in a programmable music box. It also has software that converts inputted notes into music box strips. There was no sheet music publicly available for my goal song ('Boats' by Emily Keener) so I had to convert what I heard by ear into notes on the music box. This was challenging given I haven't had to read music since middle school, but I found it rewarding since I've started to acquire a new skill that I never would've touched otherwise.



Demo



Quick clip of the music box in action (better demo video to be added soon). Part 1 of my music box rendition of 'Boats' on the software can be found [here](#).