

# Easing Phone Transitions

Final Proposal Digital Fabrication

Last month, I moved  
from an iPhone to  
the Lightphone 2.

This is a hard  
transition!

The Lightphone 2  
has to be easy to  
use to avoid excuses  
to go back

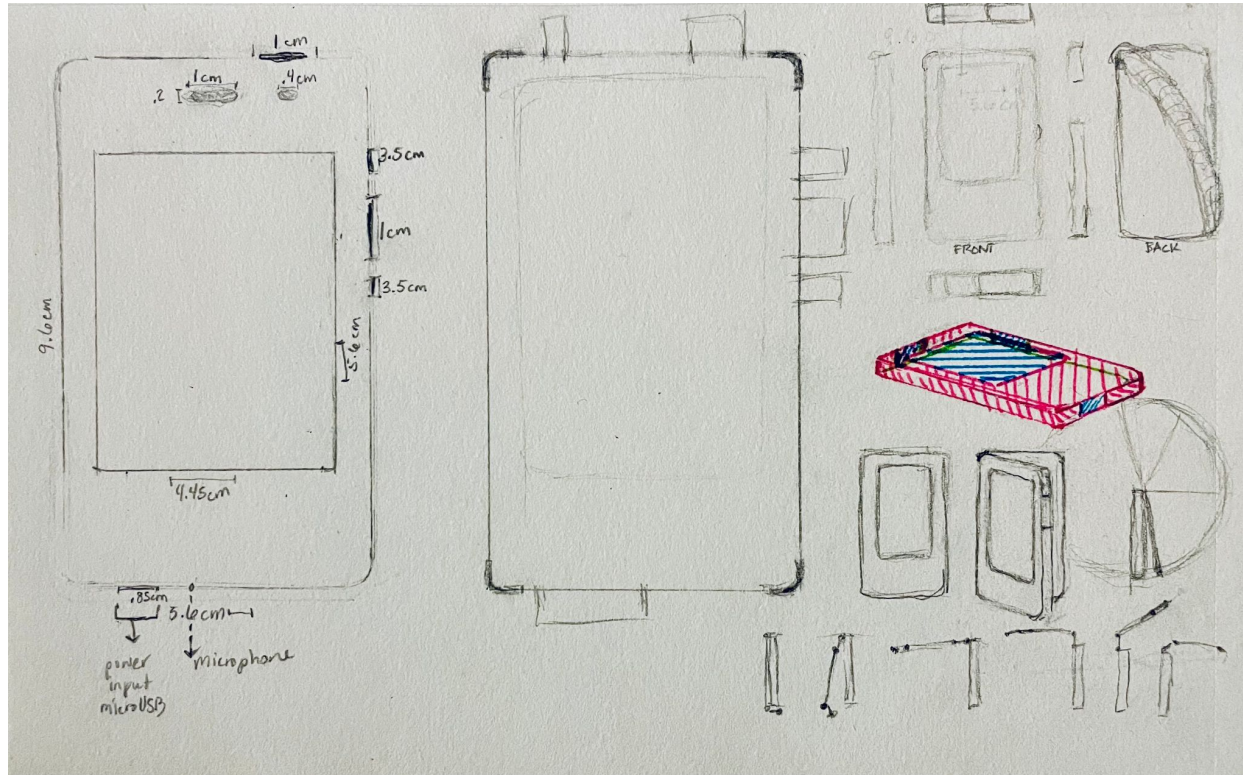


# It isn't, though.

The case I currently have affords awkward handling and the size of the phone inhibits one hand use.

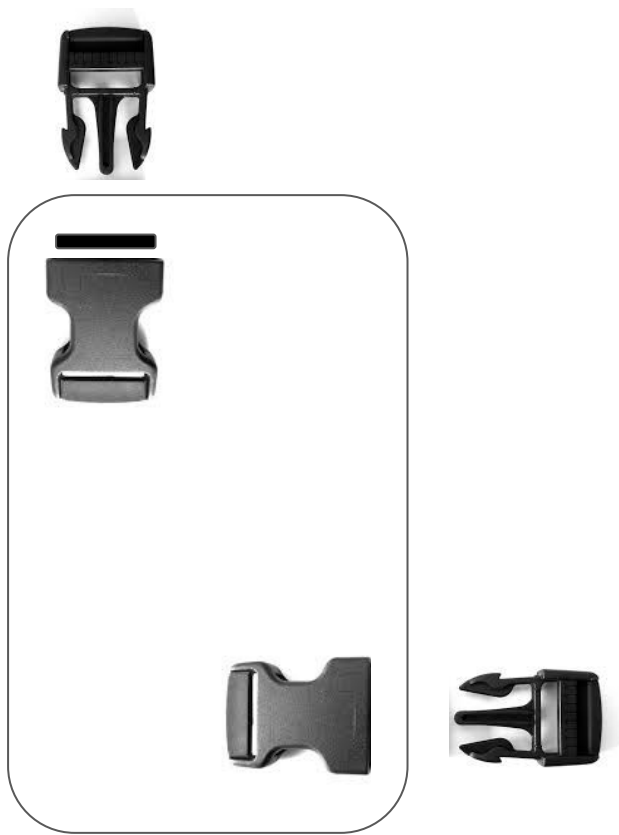


I want to design and  
fabricate a better  
case.

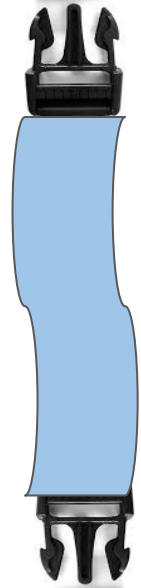


a strap to facilitate  
easy portrait to  
landscape switching

Possible  
flap/cover  
configurations



Variation!  
Variation!



Fuzzy Edge?



Mesh TPU?



# Bill of Materials

## Wood PLA

Crealitty CR-PLA WOOD, 1.75mm diameter, 1KG

## Rhino - CAD application software

Version 8.1

## Laser Engraver Access

CR-Falcon 10W Diode Laser Cutter and Engraver

## 3D Printer Access

Ender 3 S1 Pro

## Linen Strapping + clips/buckles-Pickup

To create a strap on the back: Pickup by 5/19

## Steel Nozzle .5mm or .6mm

To work with the Wood PLA

## Stain - Pickup by 5/17

To work with the Wood PLA

Back up materials: casting material 

Stretch: Buckley clips!

# Task List

## Take measurements

Using our digital calipers, capture all dimensions of the phone and verify online with manufacturer details

## Create the model

Using Rhino, create a model for the casing. Use Grasshopper for easy adjustments if needed

## Print

Might need several prints with iterations. Check for perfect fit!

## Stain!

## Generate Designs

Create a design for the casing

## Engrave

Using the laser engraver, engrave the design onto the case!

## Mold & Cast for others if life is happy



Wednesday, May 15th

Thursday, May 16th

Friday, May 17th

Saturday, May 18th

Sunday, May 19th

Monday, May 20th

Tuesday, May 21th

Wednesday, May 22th

## CLASS

Verify  
Measurements

Start Model in  
Rhino

Start Modelling

Obtain Stain

Printing iteration

Printing iteration

Stain tests

Engraving tests

Engraving tests

Set up Final  
Documentation  
Template

Set up media  
files structure

Full first  
iteration

Ergonomic /  
handling  
iterations

More iterations

If life is good:  
consider mold

## CLASS

PRINT FAILS!?  
Switch to  
backup plan

Turn this into a  
cast!

Create mold  
model for the  
phone case.

Iterate!

Add clips and  
bucket as  
stretch JUST  
TRY IT

Documentation

Keep iterating!

Wednesday, May 22th

Thursday, May 23th

Friday, May 24th

Saturday, May 25th

Sunday, May 26th

Monday, May 27th

Tuesday, May 28th

Wednesday, May 29th

CLASS

Iteration

Work on  
documentation

Rhino mold if  
life is good

Finish Modelling  
mold

Last wood print

Mold Printing if  
life is still good

Stain

Finish  
Engraving  
design

Start Engraving

Document  
document  
document

Finish  
Documentation

Try to finish  
early!

Tuesday is left  
for worst case  
schedule issues

CLASS