Physical Computing

Designing Physical Interactions for a Digital World

ARTS 370
Fall 2019
Wednesday 1:40PM – 5:30PM
Klapper 107

Professor Danne Woo
pcomp.dannewoo.com
dwoo@qc.cuny.edu

Week 1-9

Week 1: What is Physical Computing?

Week 2: Introduction to Electronics

Week 3: Arduino, Hello World

Week 4: Analog Input and Output

Week 5: Digital and Analog Review

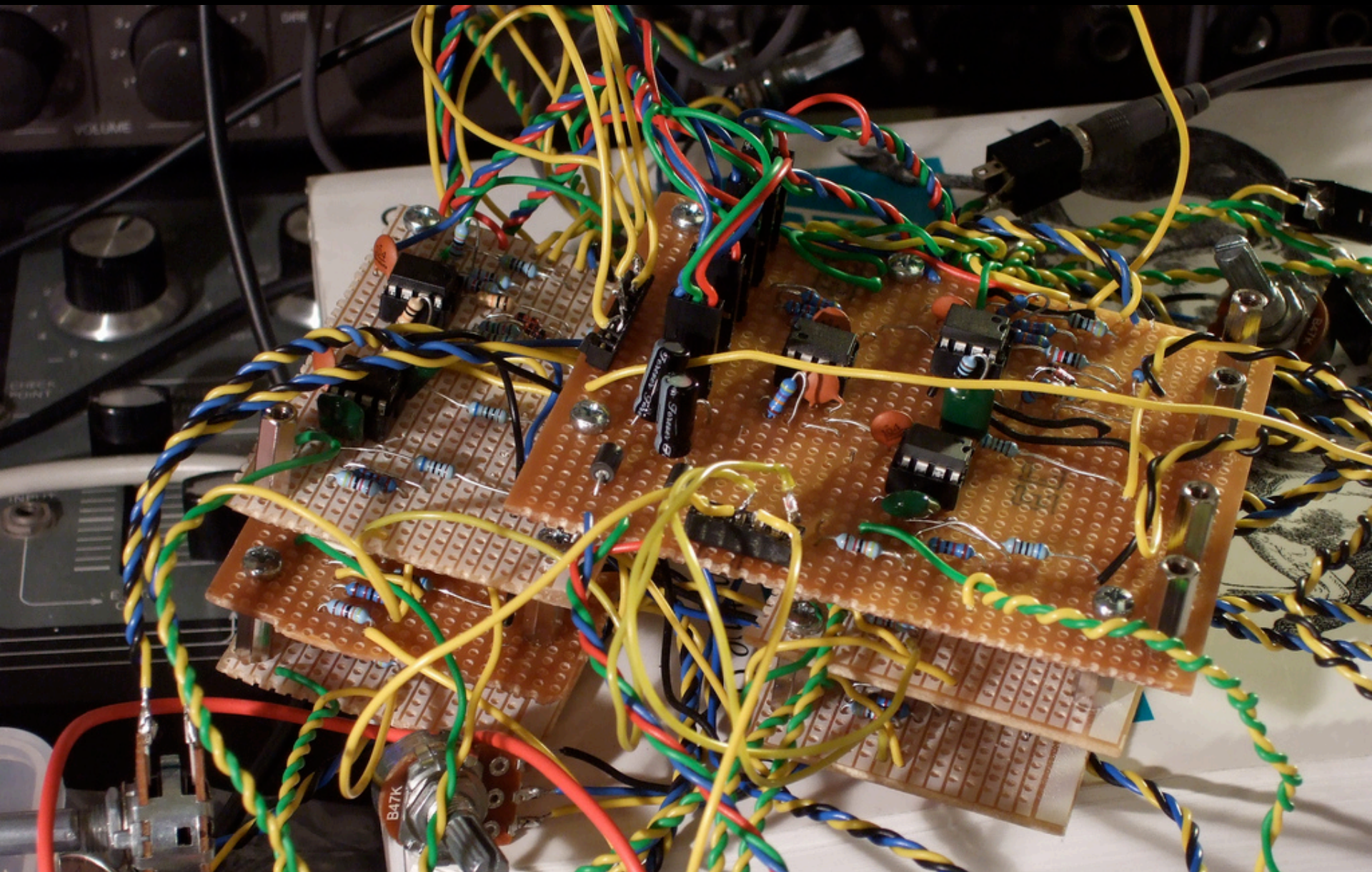
Week 6: Enclosures

Week 7: Serial Communication, Processing and p5.js

Week 8: Soldiering Workshop

Week 9: Midterm Presentation

Hiding This



User Interface and Enclosures

Enclosures for Prototypes

- Easy to open
- Easy to modify
- Easy to make multiples
- Cheap

Store Bought Enclosures

Store Bought Enclosures

Found Object Enclosures

Electrical Boxes

Found Object Enclosures

Hamster Ball

Found Object Enclosures

Guitar Pedal Case

Found Object Enclosures

Altoid Tins

Found Object Enclosures

Tin Cans

Found Object Enclosures

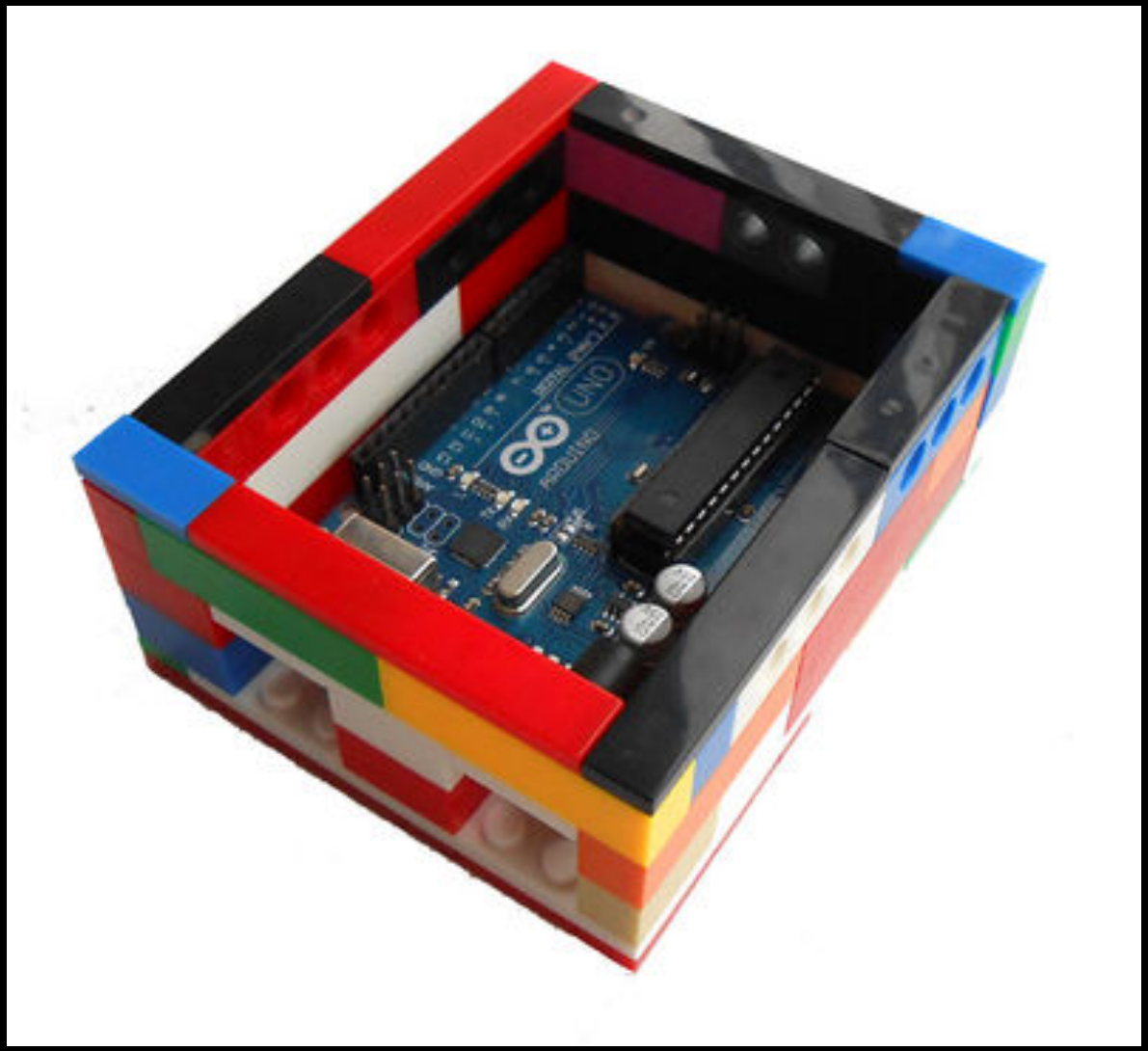
PVC Pipes

Found Object Enclosures

Old Toys

Build Your Own

LEGOs

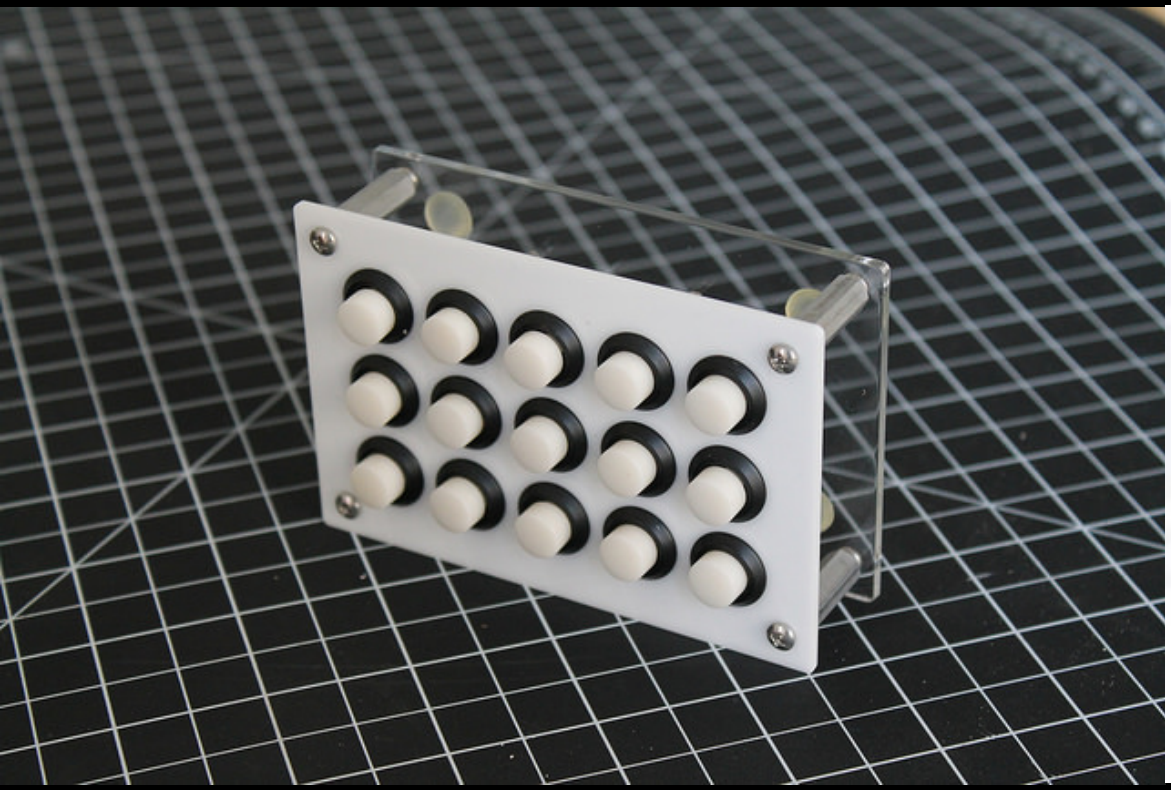


Build Your Own

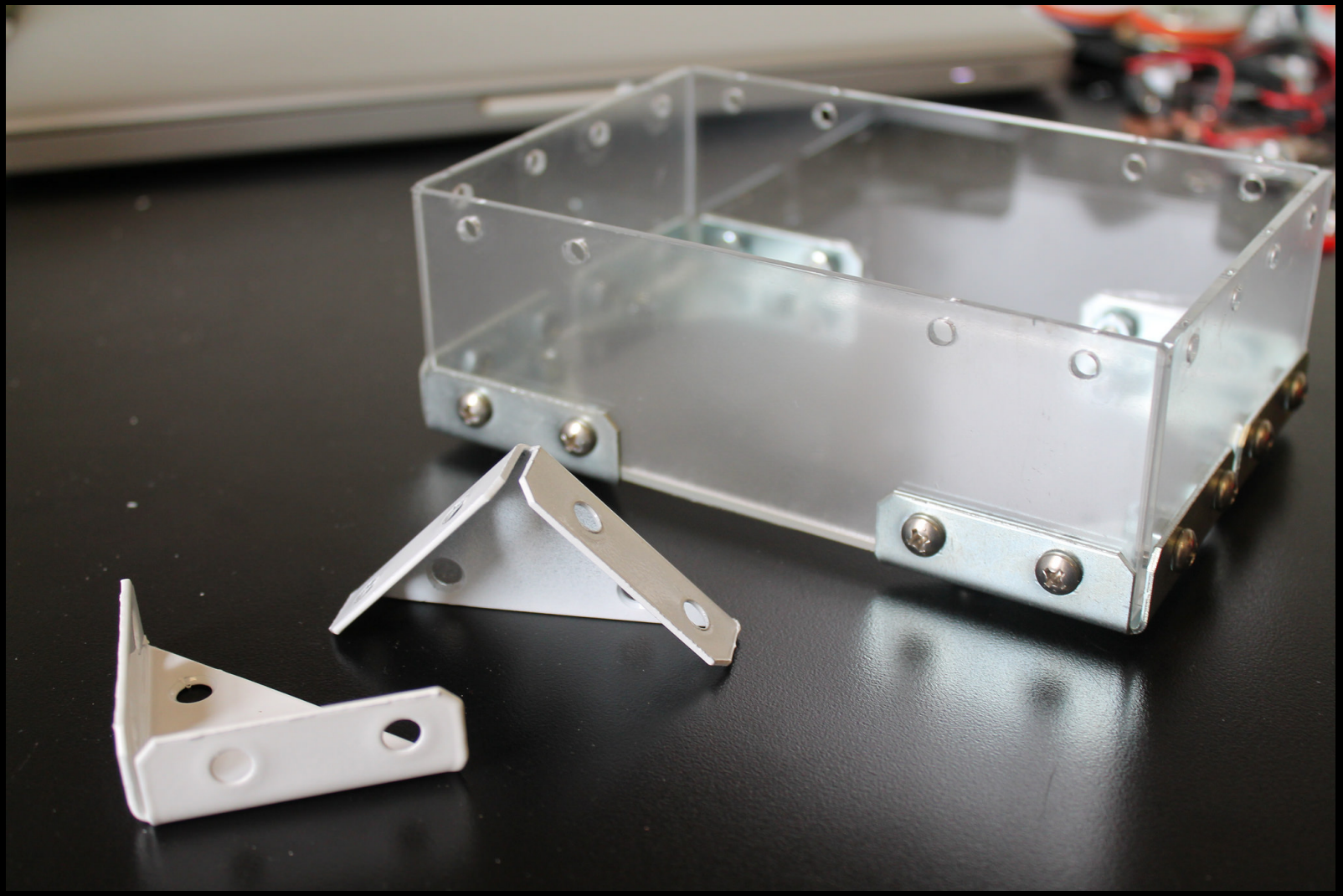
Cardboard

Laser Cut Enclosures

Standoffs



Corner Brackets



Stacked Material

Drawer Organizer + Laser Cut Top

Mason Jar + Laser Cut Top

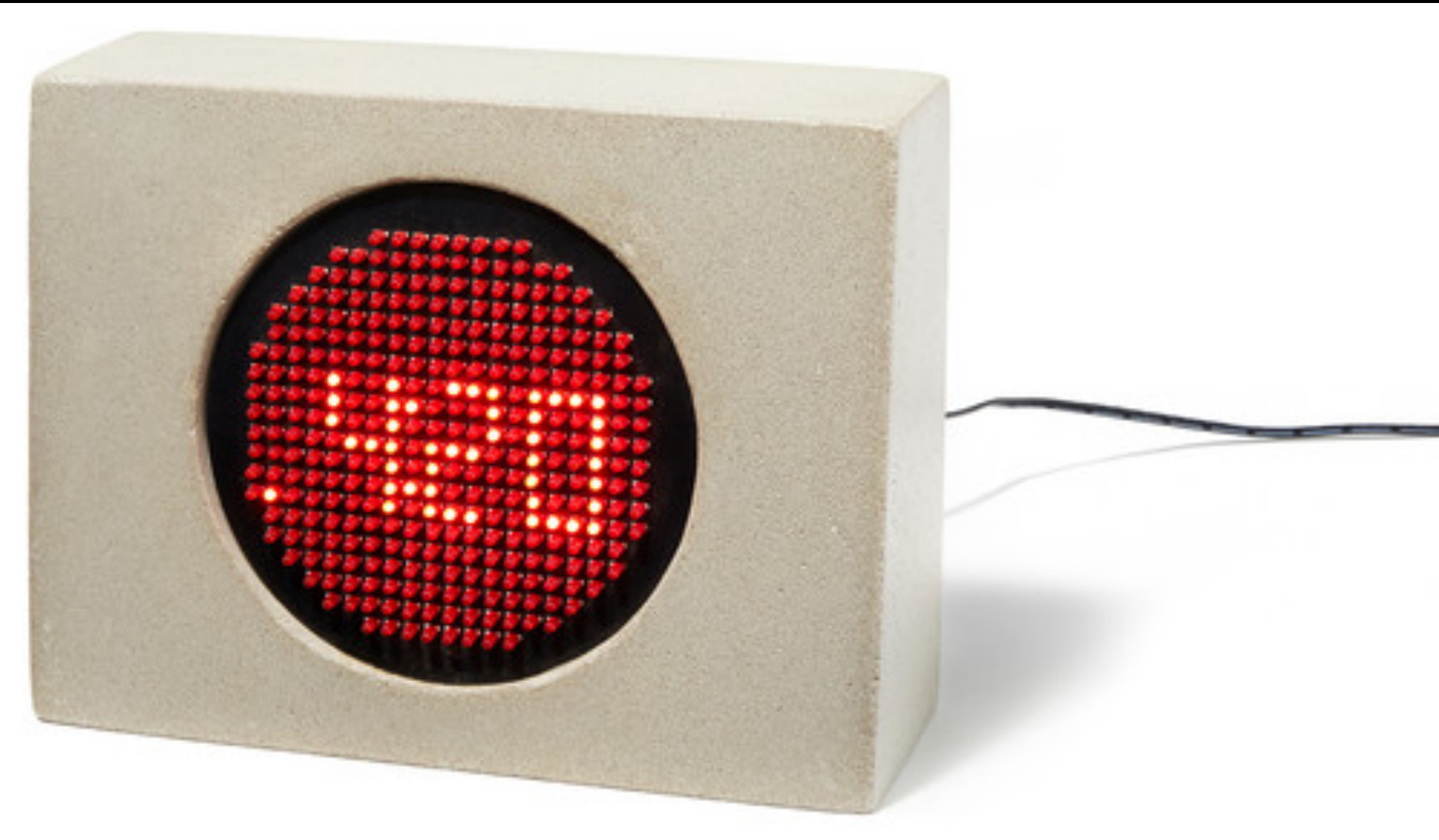
3D Printed Enclosures

Wooden Enclosures

2x4 Enclosure

Cast Enclosures

Concrete



Cast Enclosures

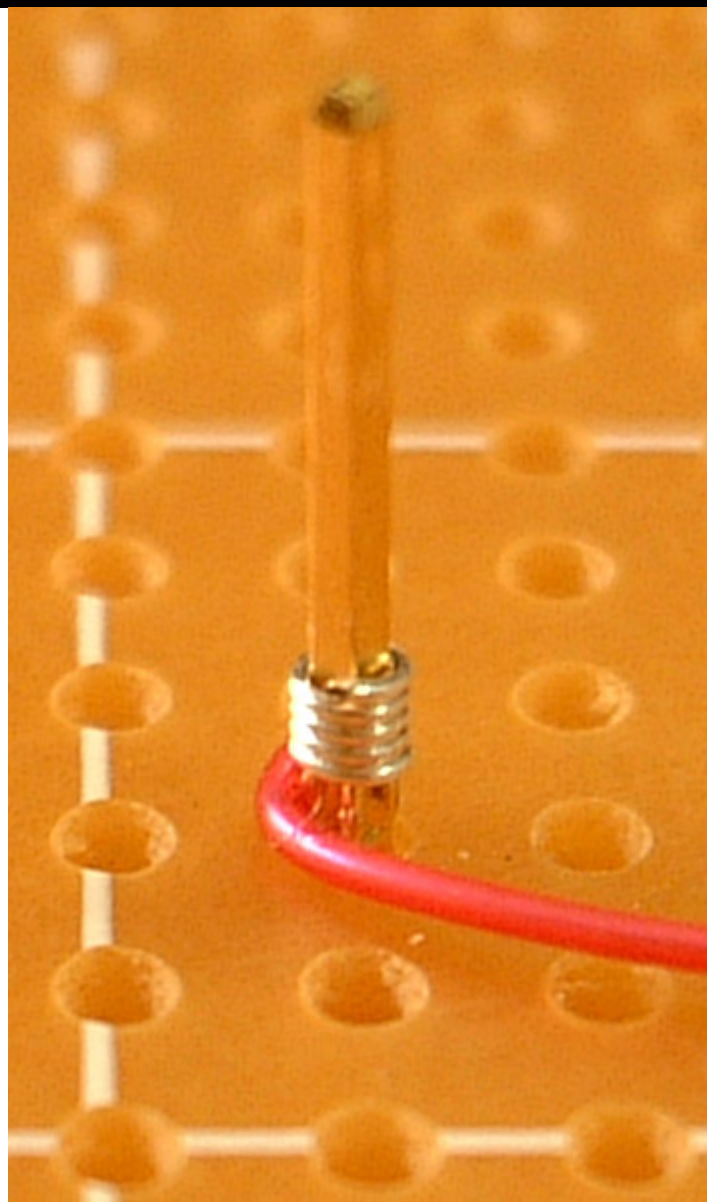
Resin

Rubber Feet

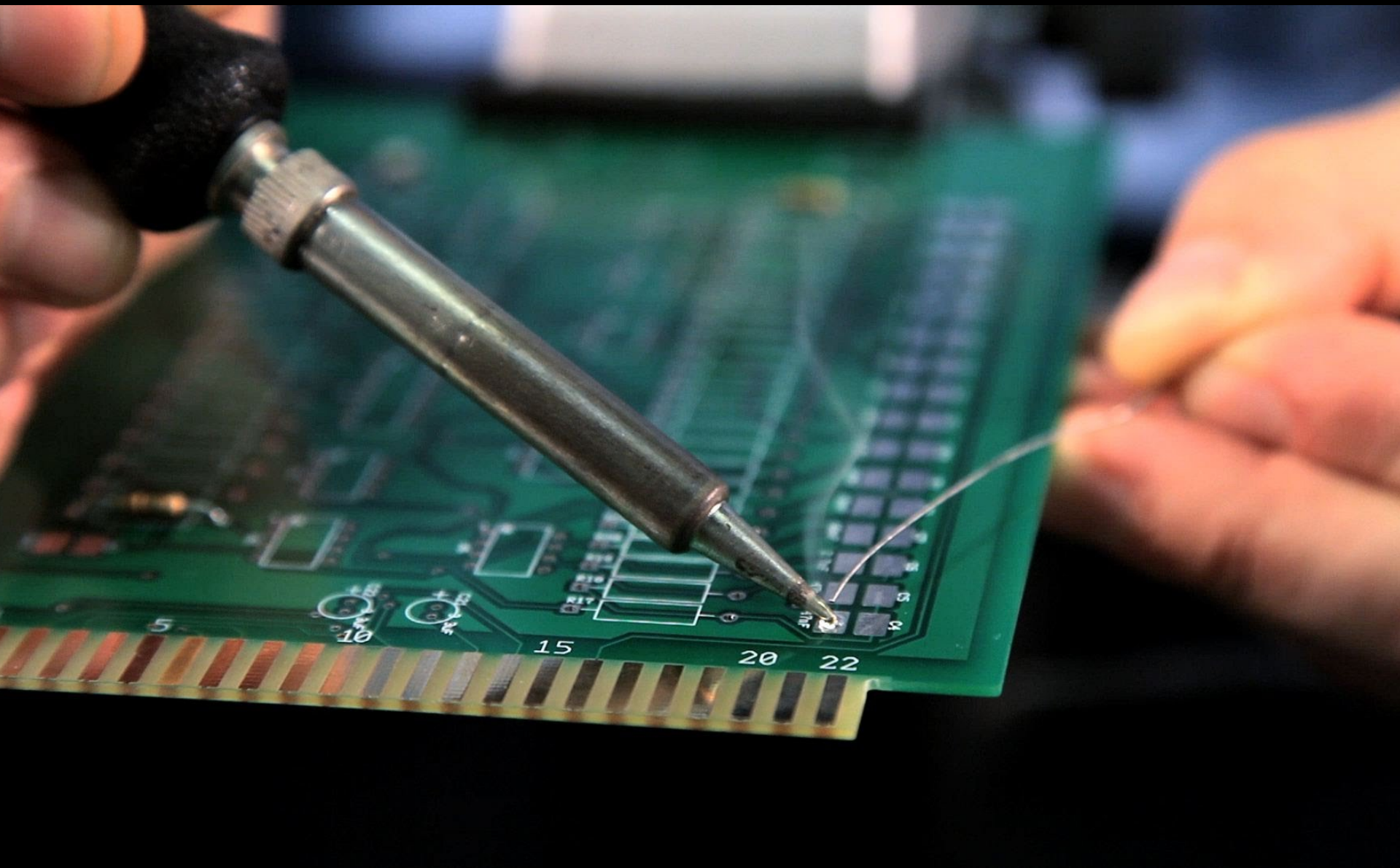
Surface Mount Components

Caliper

Wire Wrapping



Soldering



In Class/Homework

Start sketching out ideas for an enclosure and interface for your midterm project. Consider the materials you will be using to house your circuitry and how you will put it together.

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