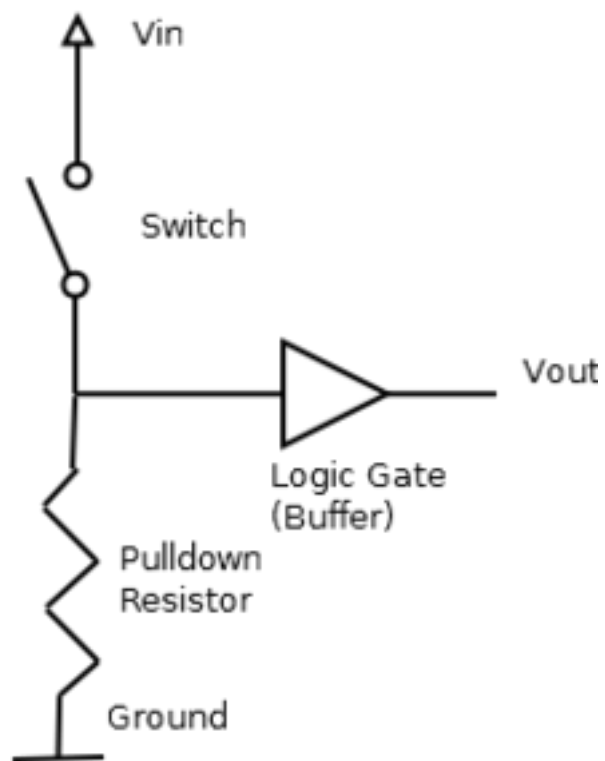


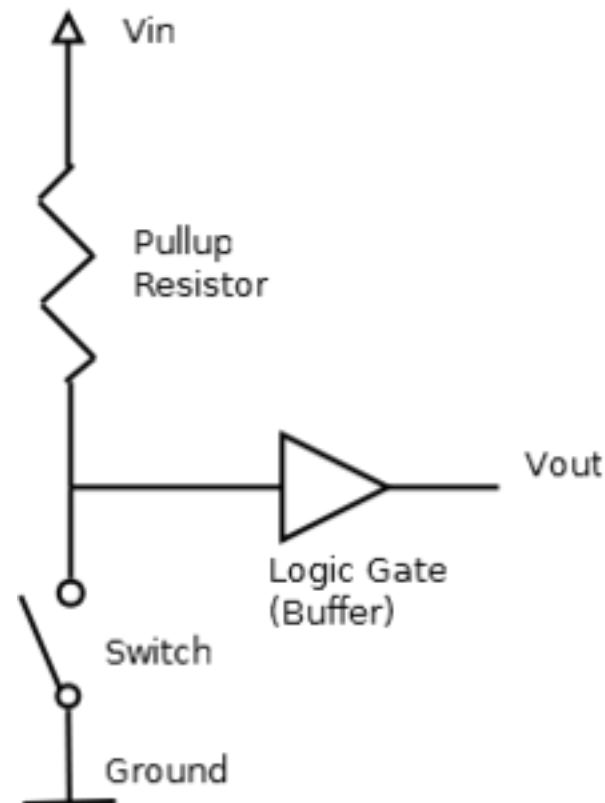
Ideation

Digital Modeling

Floating Inputs



pull-down
resistor



pull-up
resistor

```
void setup(){  
  //start serial connection  
  Serial.begin(9600);  
  //configure pin2 as an input  
  pinMode(2, INPUT_PULLUP);  
  pinMode(13, OUTPUT);  
}
```




WITH OUR LIFECYCLES?

AM BECAUSE YOU ARE

FLUSH C → AIRBUD

True Value through all Means

INDIVIDUAL

CHOICE COMMUNITY?

GUIDING PRINCIPLES

NEED DAY

BUILDING UP IDENTITY

DESIGN = ETHICS + AESTHETICS

Intelligent / Sophisticated Compassion

CUNY

NEW DESIGN PRINCIPLES

The hope lies in the individuals

HERITAGE

BIBLE (POCKET SIZE)
(a book of products)

MINIMALISM IN MAXIMALISM

EMPLOYMENT

Reclaim a New Story for Humanity - Grand Vision

FEEL EACH STUDENT

INTEGRATION THROUGH TEACHING

INDIVIDUAL = PERSONAL

PLUS sincere with you
BUILDING BACK BETTER

WORLD BRAIN

(1. 2 people manuals)
- 1 designer (big)
- map of Chile (A)
- Distribution explanation

FIND OUT

STUDENTS AS FACILITATORS

TWINKLED

ETCETERA

Small & Now

ENGAGED

WHY CONCERN GIVE TO SOCIETY?

TRANSFORM ECONOMY PRESERVING IDENTITY

cognition

everybody is compassionate about their children

ME

BEZON

DOING FORFEITURE

Putting on America's Voices of C

DIUSTNESS = ETHICS

HOUSE

IDENTITY

SMALL CAUSES
↓
BIG EFFECTS

STORY ZINE (CRAZYING)

REALISTIC RESPONSE

ANYBODY

GUIDING PRINCIPLES

BUSINESS DESIGN

GUEO!

GLOBAL PLAY



WORK PLACE

WHAT IS THE ROLE OF SMALL INNOVATIONS?

WHAT IS THE ROLE OF SMALL INNOVATIONS?

WHAT IS THE ROLE OF SMALL INNOVATIONS?

WHAT'S MISSING?

CHANGE

(CRITERIA, CHECK LISTS, REQUIREMENT SPECS.)

DO WE HAVE TO WORK?

GLOBAL

Brainstorming

- Defer Judgment
- Encourage Wild Ideas
- Build on the Ideas of Others
- Stay Focused on Topic
- One Conversation at a Time
- Be Visual
- Go for Quantity



IDEO

Brainstorming

- **Defer Judgment**
- **Encourage Wild Ideas**
- Build on the Ideas of Others
- Stay Focused on Topic
- One Conversation at a Time
- Be Visual
- Go for Quantity



IDEO

Turn off natural filter

Don't worry about
practicality / feasibility

Brainstorming

- Defer Judgment
- Encourage Wild Ideas
- **Build on the Ideas of Others**
- Stay Focused on Topic
- One Conversation at a Time
- Be Visual
- Go for Quantity



IDEO

Collective ideas (not individual)

Brainstorming

- Defer Judgment
- Encourage Wild Ideas
- Build on the Ideas of Others
- **Stay Focused on Topic**
- **One Conversation at a Time**
- Be Visual
- Go for Quantity



IDEO

Be polite

Get idea up quickly
and move on

Brainstorming

- Defer Judgment
- Encourage Wild Ideas
- Build on the Ideas of Others
- Stay Focused on Topic
- One Conversation at a Time
- **Be Visual**
- **Go for Quantity**



IDEO

Keep ideas visible
(sharpies, one idea
per sheet)

Quantity -> quality

Exercise: Brainstorming



What would be the **worst**
Valentines gift ever?

Exercise: Brainstorming



What would be the **worst**
Valentines gift ever?

Exercise: Brainstorming



What would be the **worst**
Valentines gift ever?

Exercise: Brainstorming



What would be the **worst** Valentines gift ever?

- Defer Judgment
- Encourage Wild Ideas
- Build on the Ideas of Others
- Stay Focused on Topic
- One Conversation at a Time
- Be Visual
- Go for Quantity

7 minutes

Exercise: Brainstorming

How many ideas did your group come up with?

Exercise: Categorize

What categories exist?

As a group, rearrange your ideas into potential categories.

Label each categories with a post-it note.

3 minutes

T u r n i n g o b s e r v a t i o n s i n t o b r a i n s t o r m i n g
p r o m p t s



messy
multipurpose
personalized



T u r n i n g o b s e r v a t i o n s i n t o b r a i n s t o r m i n g p r o m p t s

messy

How can the space encourage organization?

multipurpose

In what ways can the space transition from work to recreational activities?

personalized

Are there other means to support personalization in the space?

E x e r c i s e : G e n e r a t e B r a i n s t o r m Q u e s t i o n s

Share additional insights from observation assignment within your group

Use these insights to generate 4+ brainstorming questions

10 minutes

C o m p o s i t e C h a r a c t e r

Synthesize insights from observations

Highlight characteristics and needs your group wants to focus on



Name: Tiffany Tseng

Age: 27 years old

Occupation: Grad Student

Rarely cleans room

Primarily works outside of room (desk used as storage)

Likes to decorate space with memorabilia (restaurant cards collage)

Exercise: Create Composite Character

Generate 3 composite characters based on insights from your observations

Post each character profile on a separate 8.5x11 sheet and pin it up.

7 minutes

E x e r c i s e : B r a i n w r i t i n g

Individually, come up with 3+ ideas based on the brainstorming questions you generated.

Use black sharpie
One idea per sheet

5 minutes

E x e r c i s e : B r a i n s t o r m

Go around and share your ideas. Pin each to the wall.

If you want to build on any idea, feel free to do so after its introduced (small add-ons on post-its)

Go through each of your brainstorming questions and generate as many ideas as you can

Use black sharpie
One idea per sheet

15 minutes

E x e r c i s e : B r a i n s t o r m

How many ideas did your group come up with?

What are ways you can categorize the different ideas?

E x e r c i s e : C a t e g o r i z e

Using colored post-its, create categories and sort your ideas according to these categories

3 minutes

E x e r c i s e : V o t e

Each person on the team gets 3 votes.

Place a vote on the idea you're supporting

3 minutes

A s s i g n m e n t

Generate at least 3 more ideas and create sketches for each idea. Post them and a description to Build in Progress.

S w i t c h i n g g e a r s ...

D i g i t a l F a b r i c a t i o n

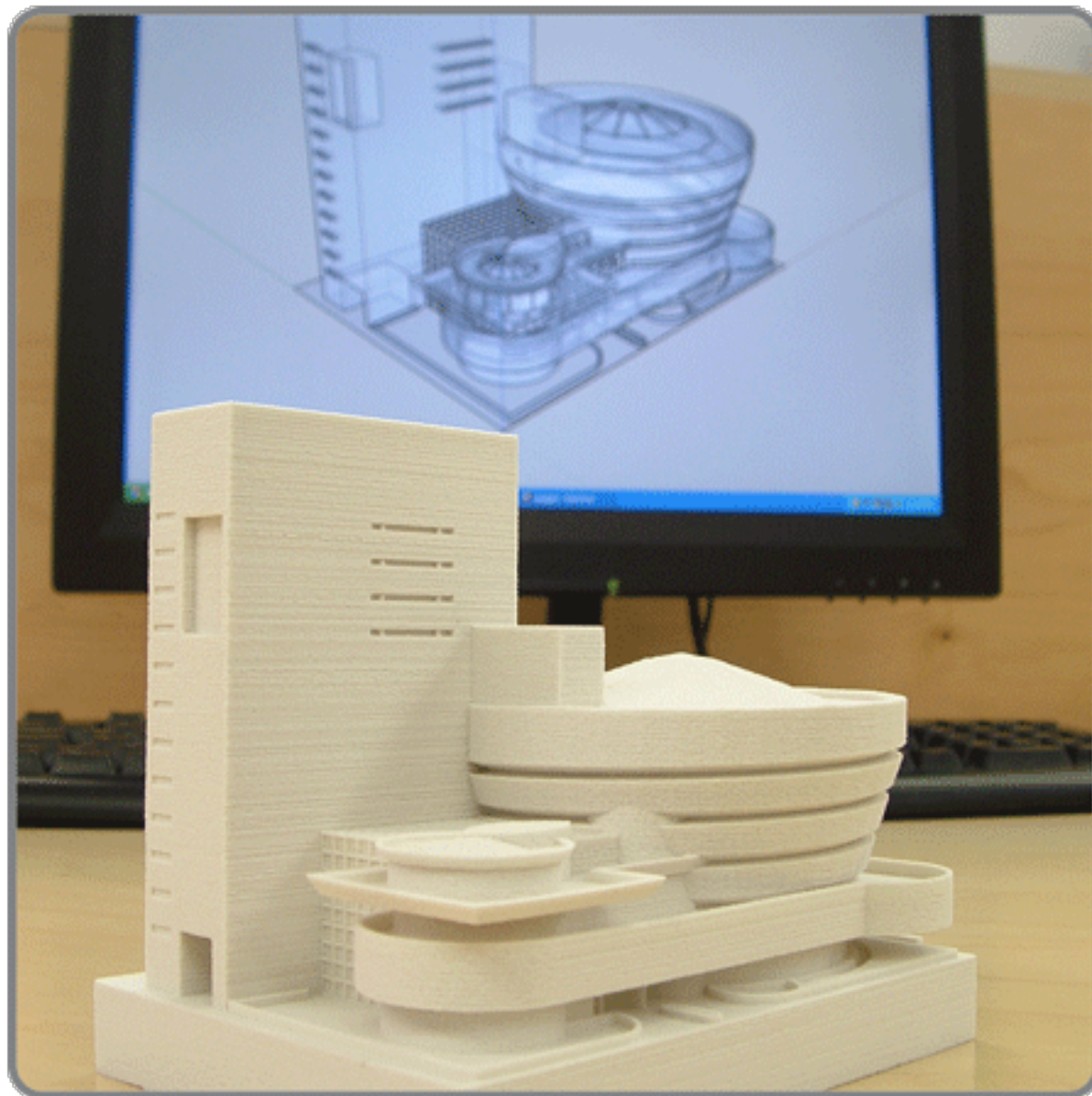


3D Printing



Laser Cutting

D i g i t a l F a b r i c a t i o n



Digital Model

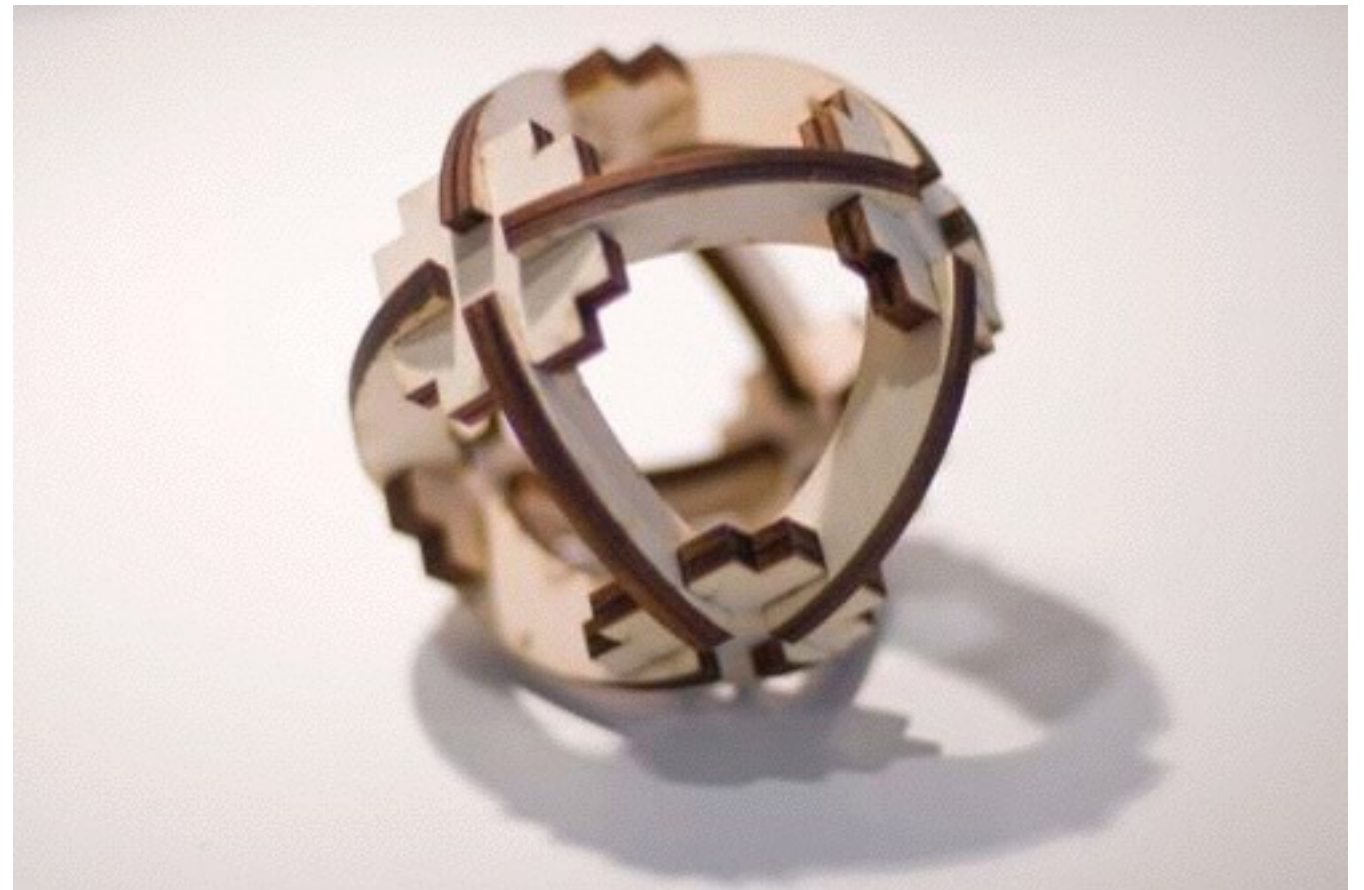
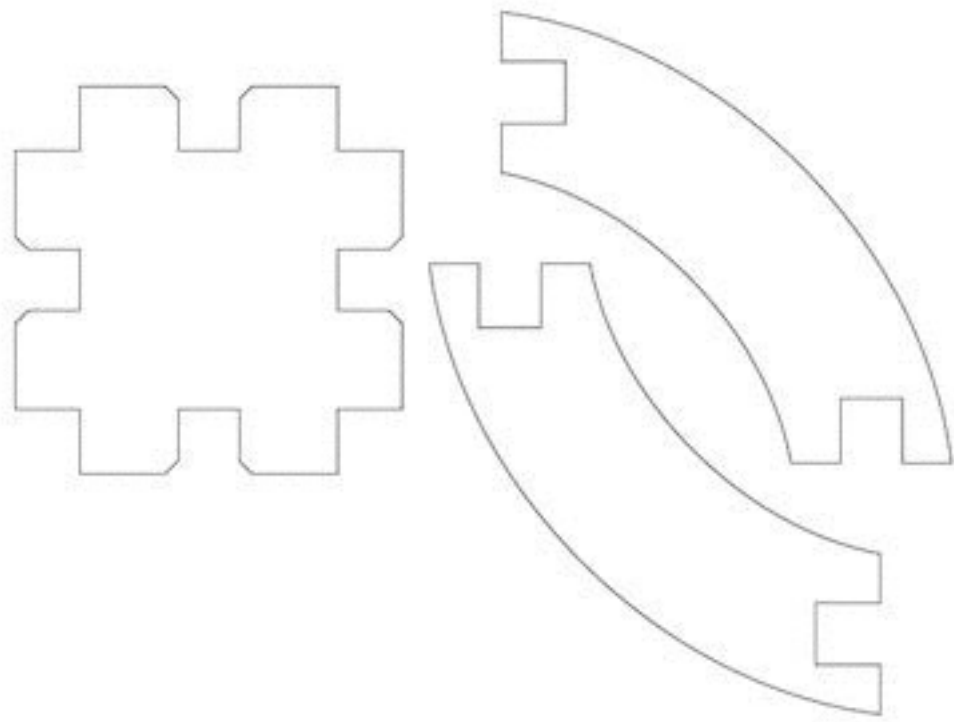


Physical Part

D i g i t a l F a b r i c a t i o n



Laser Cutting



D i g i t a l F a b r i c a t i o n



Laser Cutting

Safe Materials

Paper
Foamcore
Wood
Acrylic
Fabric

Unsafe Materials

ABS
Vinyl
Polycarbonate

NOTE: We have 1/8" acrylic and 3/16" foamcore you can use

D i g i t a l F a b r i c a t i o n



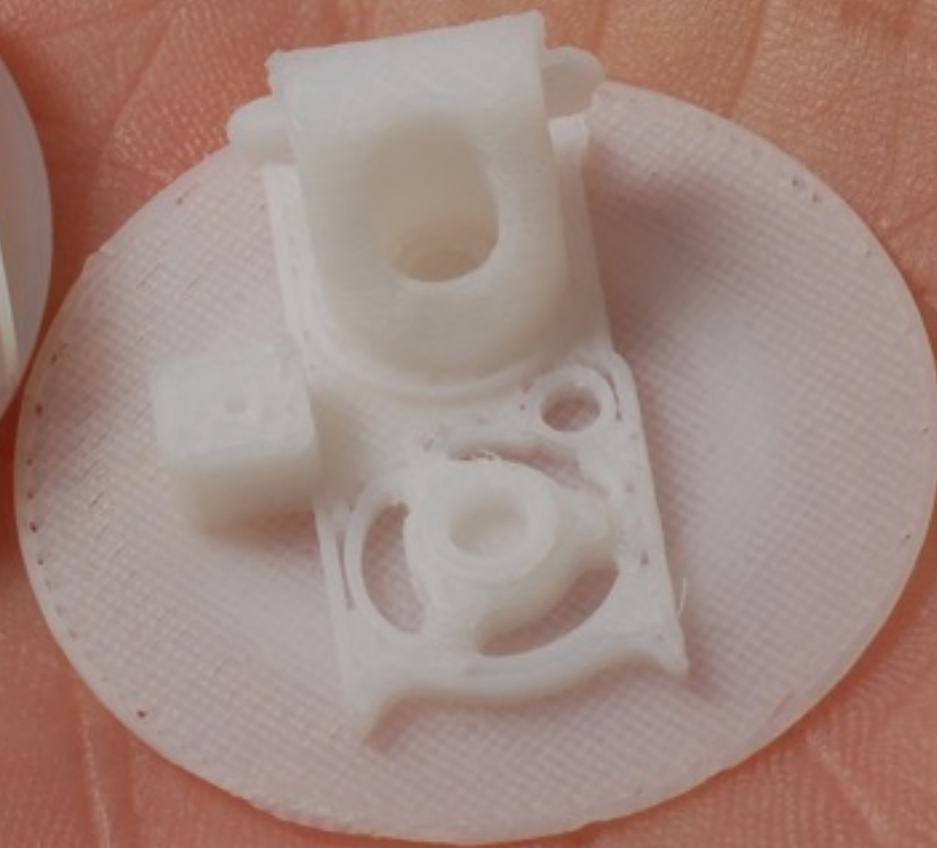
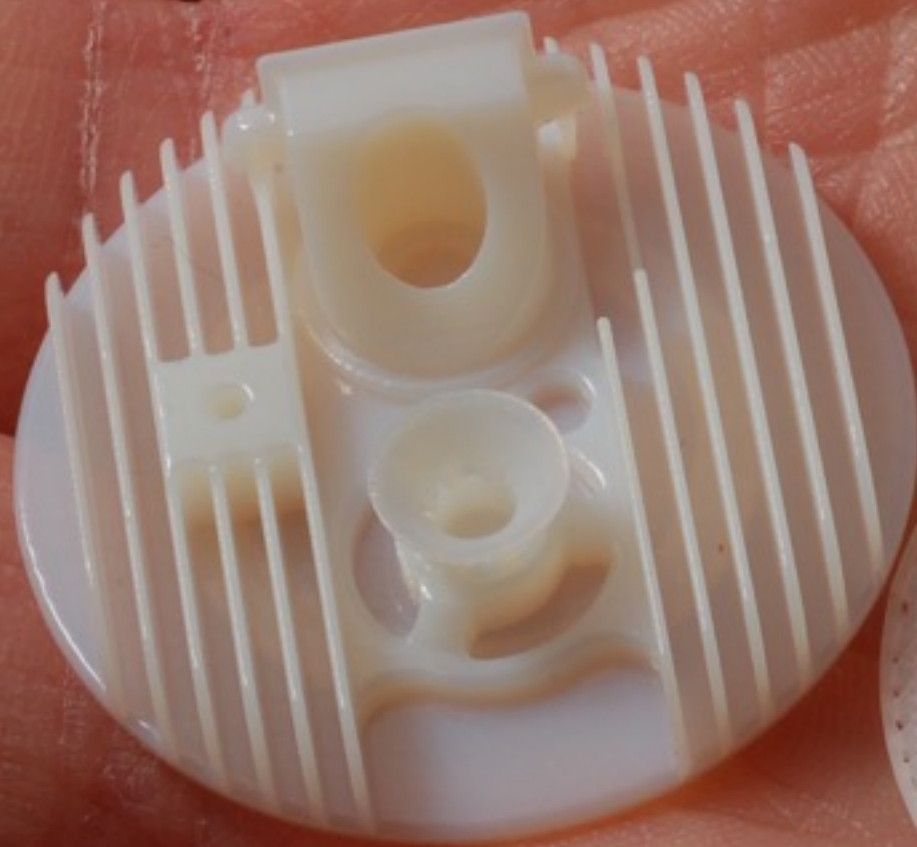
3D Printing

High resolution components

For LP, your part must be no larger than 2"x2"x2"

(Bed size is 11.57" x 7.72" x 5.9" WxHxL)

Digital models must be turned in and approved by 7PM
Thursday evening



A s s i g n m e n t : D u e T o m o r r o w

On your own, brainstorm and sketch an additional 3 ideas and post them on BiP

Use SolidWorks to design any 2D or 3D models you may want to fabricate tomorrow using the laser cutter or 3D printer

- * Note: 3D printed part may be no larger than 2"x2"
- * 3D printed part must be received and approved by a TA by 7PM Thursday night

D i g i t a l M o d e l i n g

U s i n g S o l i d W o r k s

Department Laptops with SolidWorks pre-installed

Must be used in class or during office hours