

Flavormix Machine

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Project Outline

Introduction

Hardware & Tools Used

**System Architecture &
Functionality**

Constraints

Future Enhancements

Introduction

The FlavorMix Machine is an automated beverage preparation system developed to provide precise and efficient juice mixing.

By enabling the combination of one or two juice flavors with water, the system ensures accuracy, reliability, and user convenience, making it suitable for everyday use in home and office environments

Hardware & Tools Used

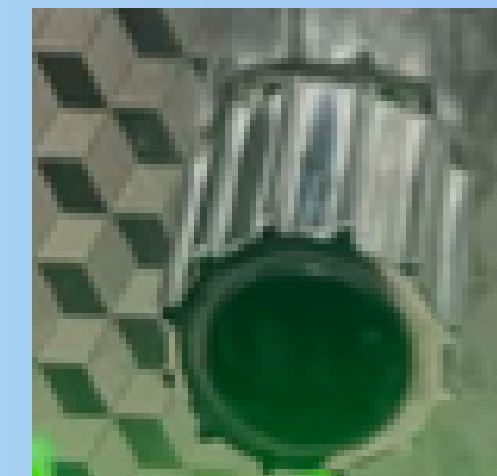
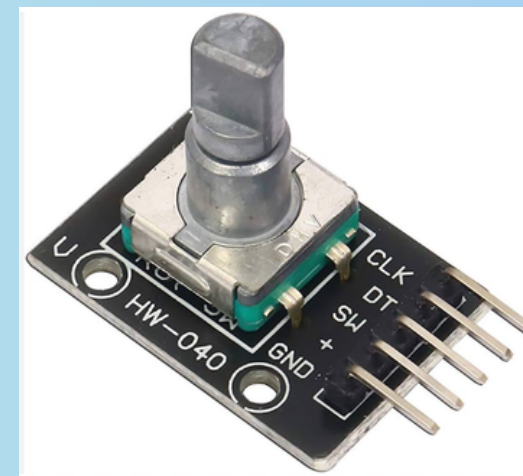
LCD 20*4



KeyPad 4*4



Rotary encoder & plastic

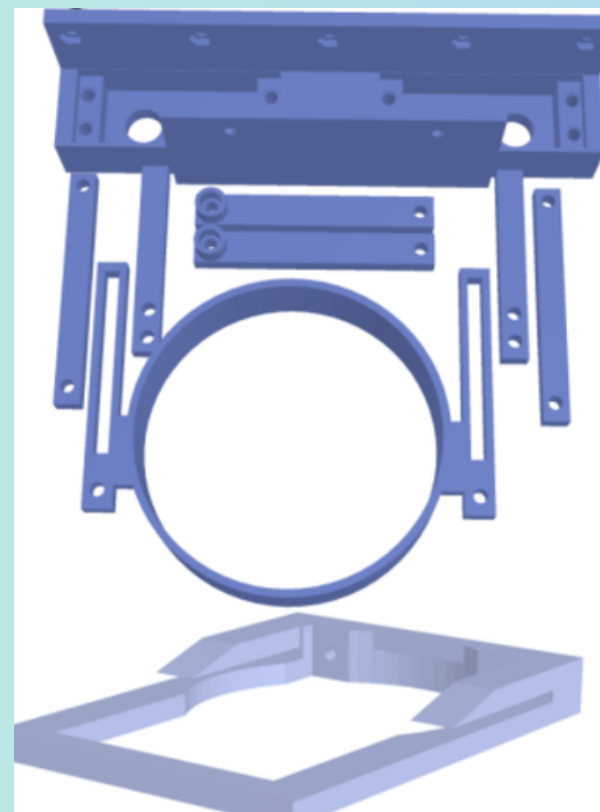
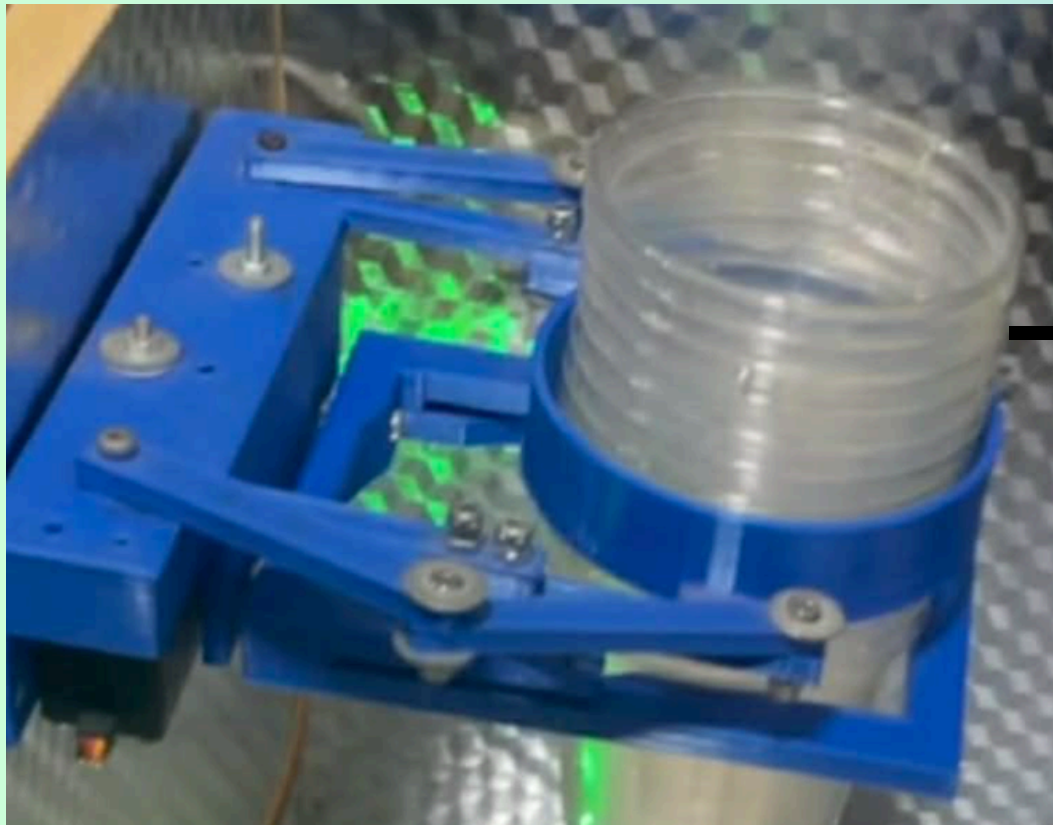


LEDs



Hardware Equipment's

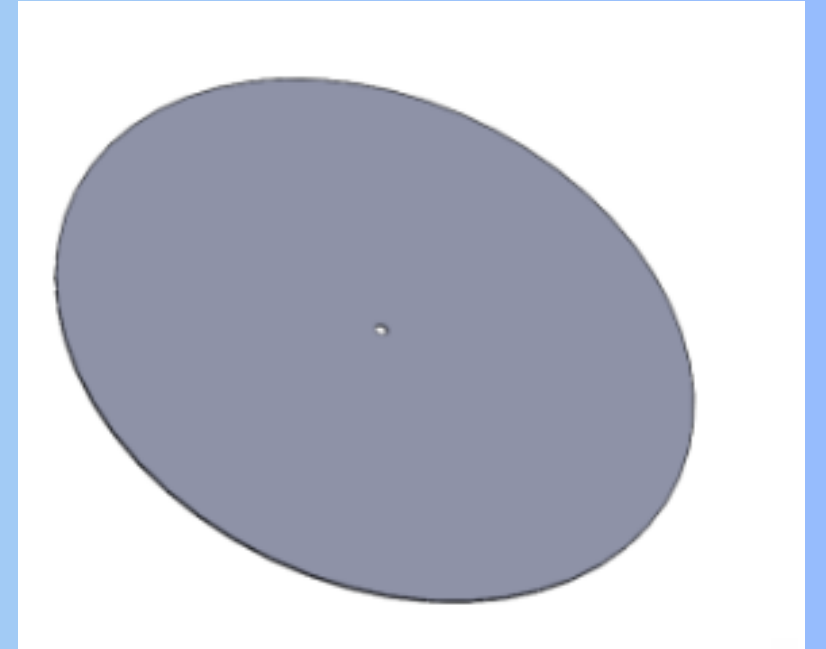
2 MG966R Servo



**3D Printer
to cups**

Hardware Equipment's

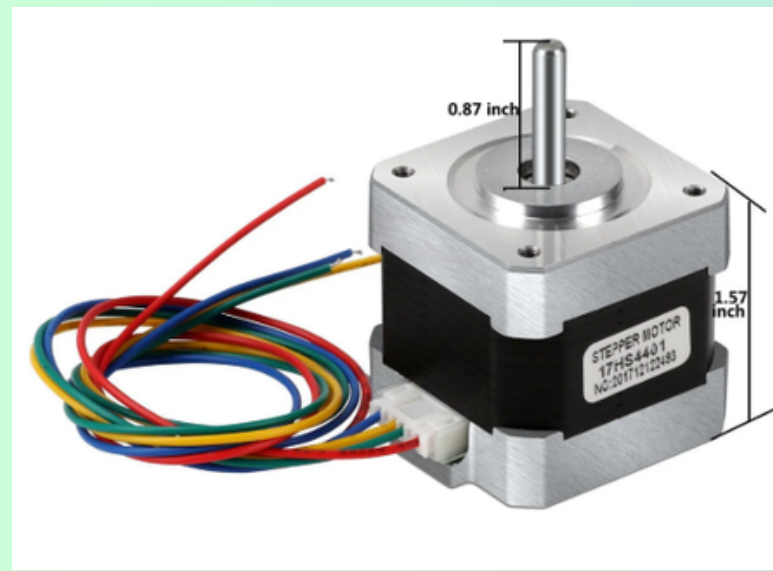
1 MG996R Servo



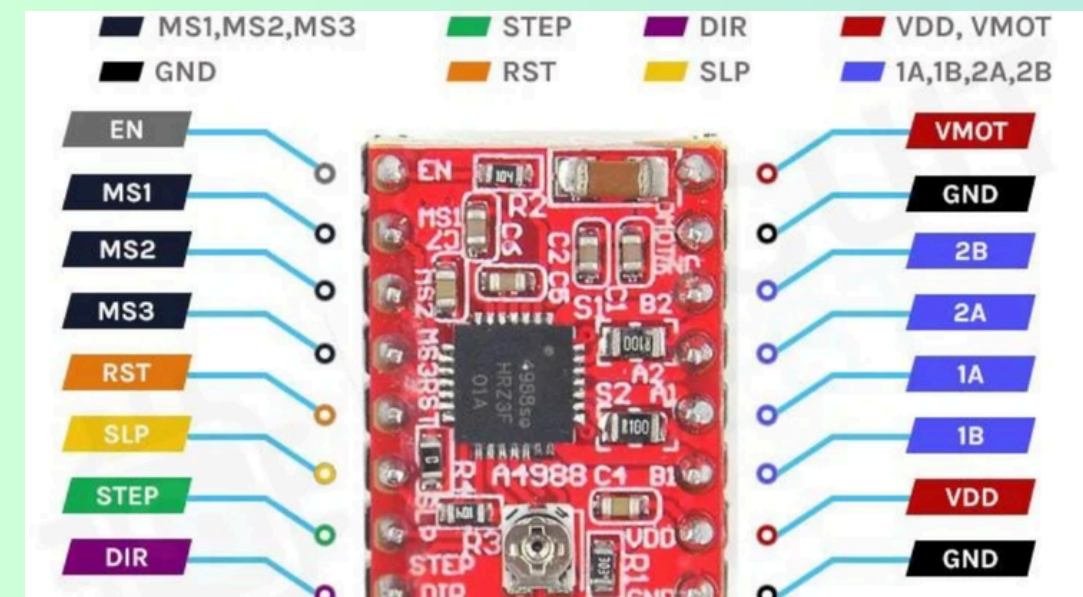
3D Printer for Juice straws



CNC Plate



Nema 17 stteper motor



A4988 Steppper Driver

12v DC Pumps
3



Water Pipe Tubes



5v Relays

3



Ultrasonics

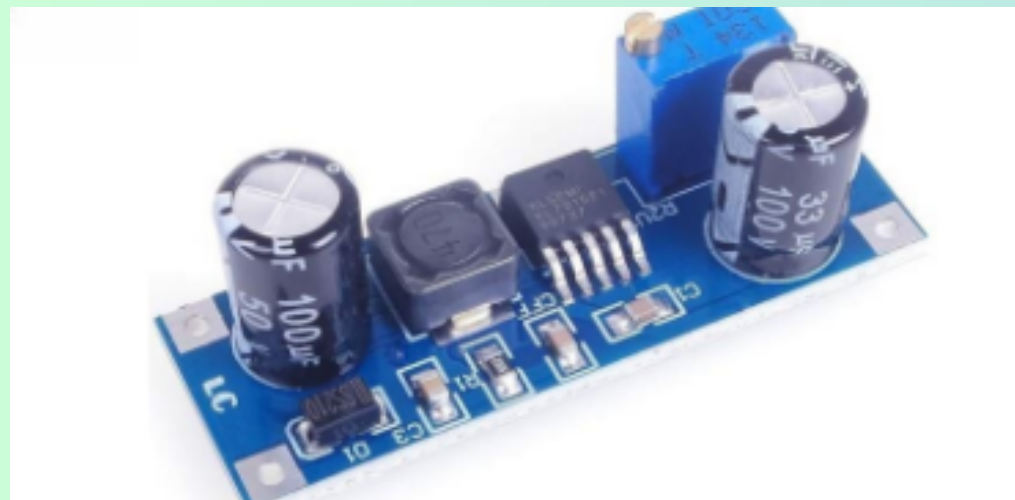
3



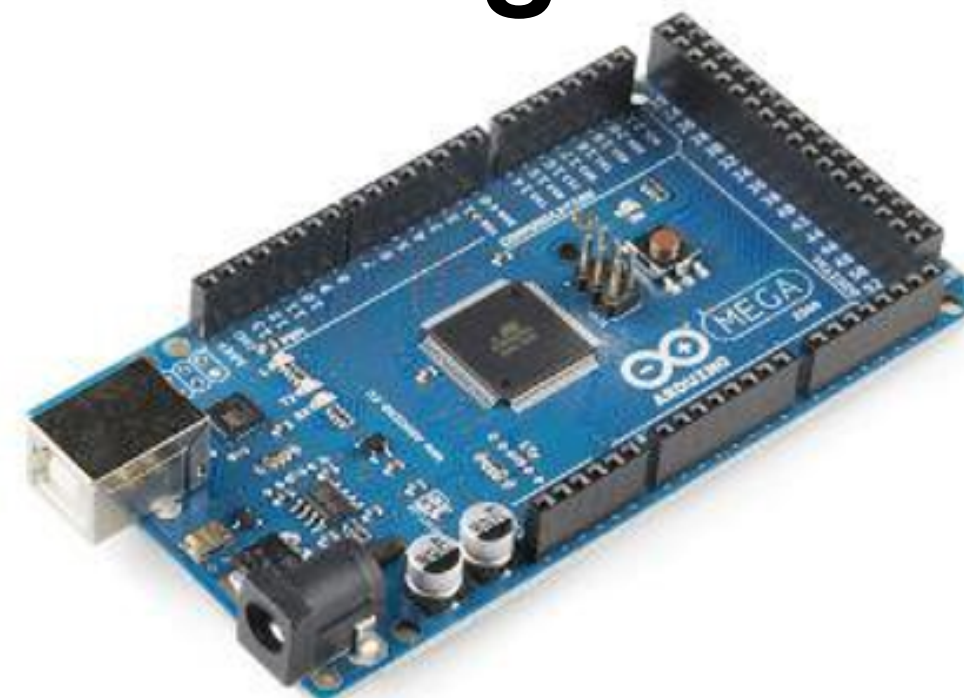
12v Power Adapter



DC Voltage Regulator



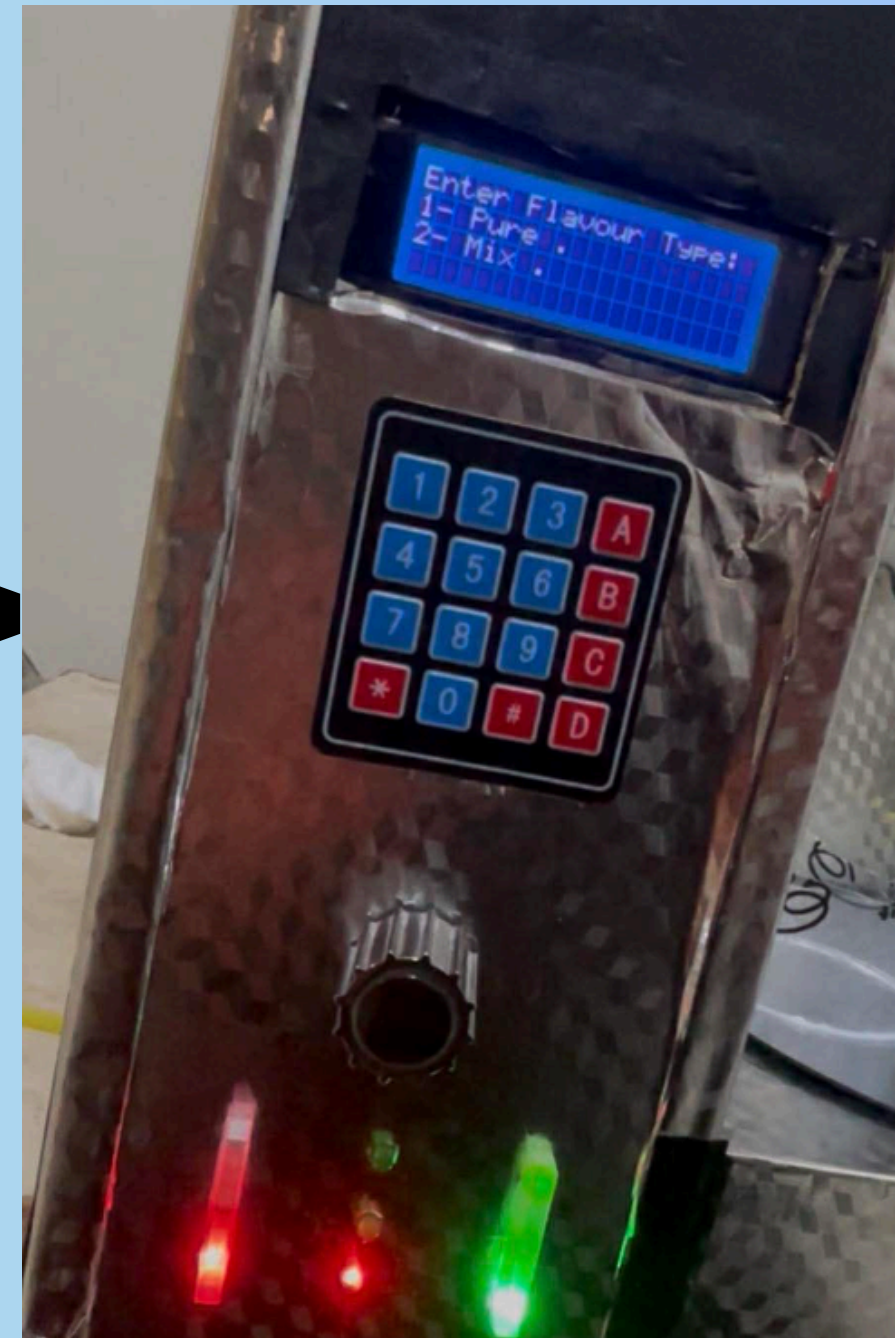
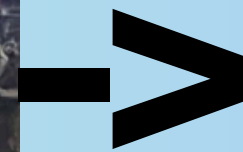
Arduino mega



System Architecture & Functionality

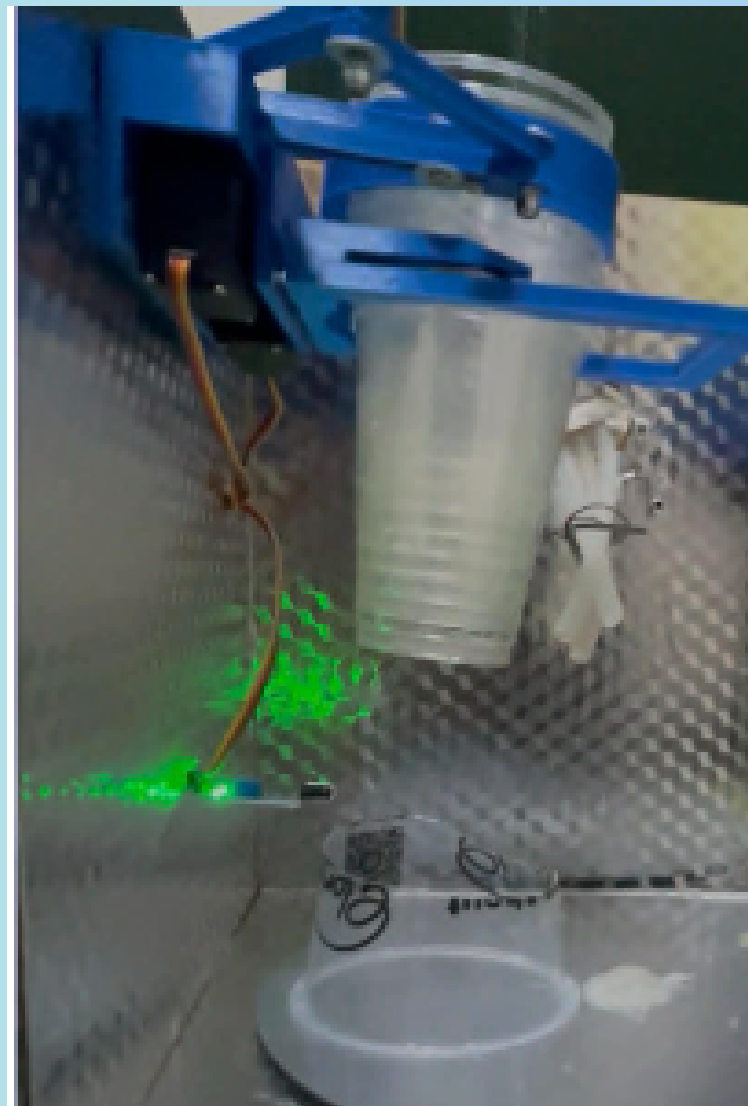
1) First Step

We Request The order by keypad and lcd

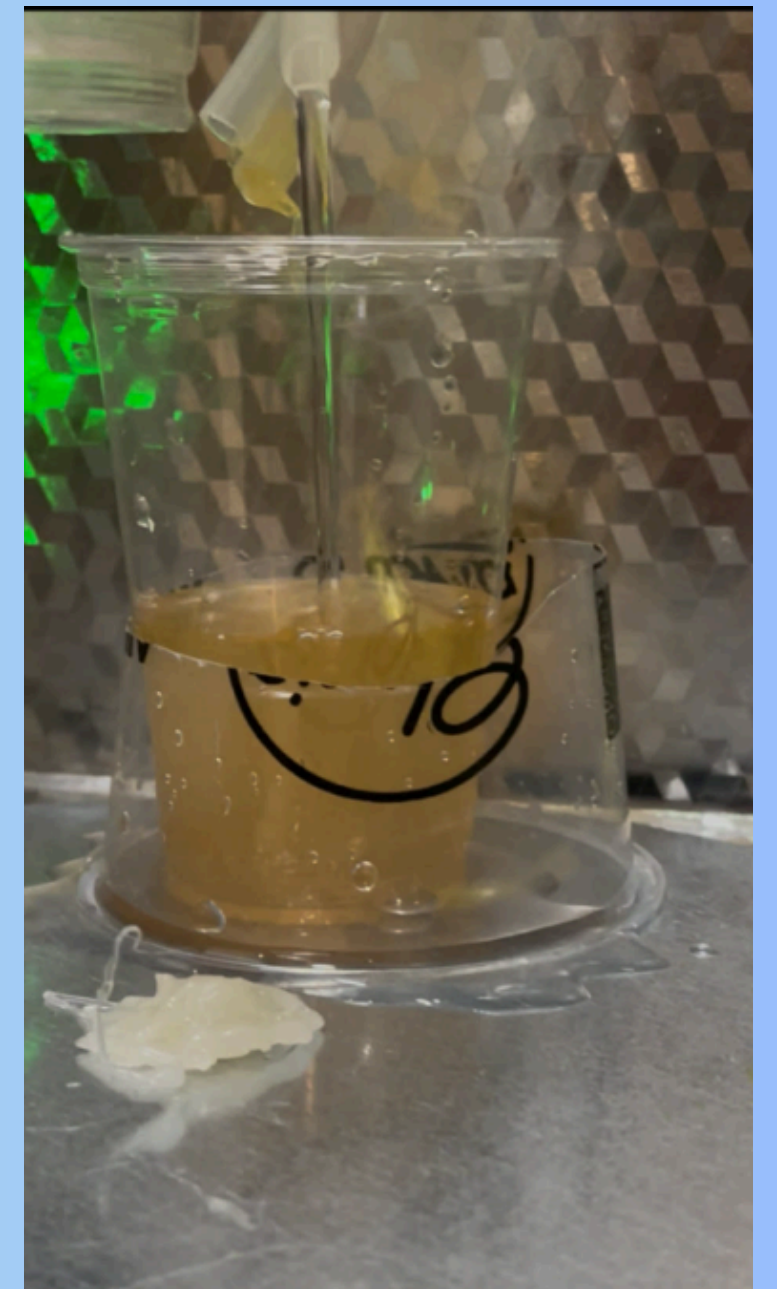


Step2 :

The cup will droped and the stteper will move 90 dergree

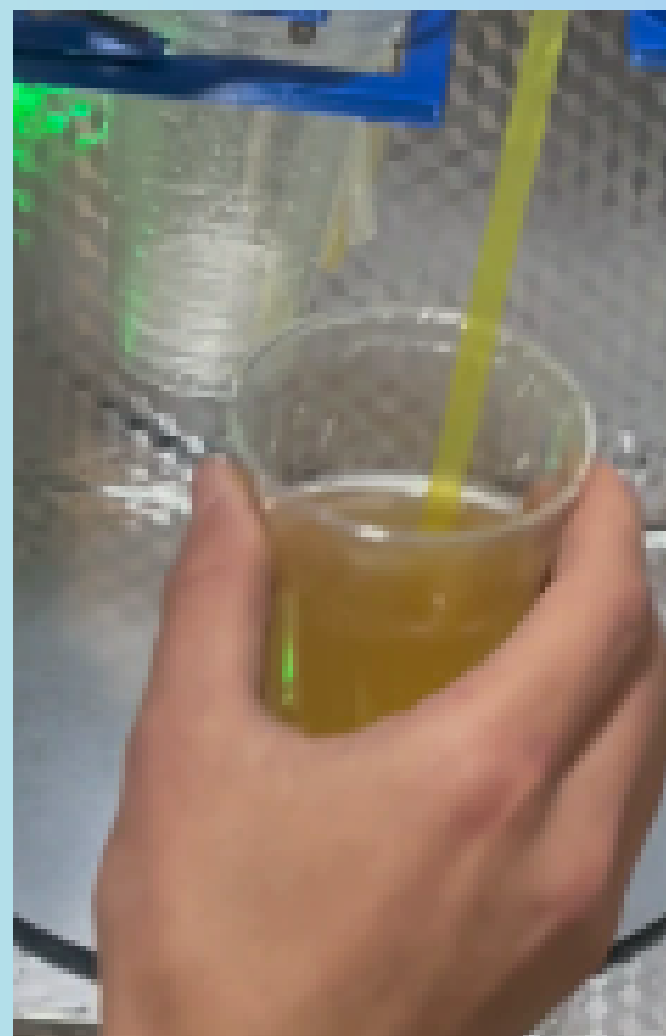


step3





dropping straw



**last finish and
take your juice**

how we can empty the gallon

By the keypad we go to the adminpage and select number 4 for eater gallon and 5 to the juice gallon

Constraints

-We lack of the time

- Poor component quality led to frequent failures, increasing the overall cost.**

The lack of experience with wood forced us to seek assistance, and there is a shortage of expertise with the 3D printer.

Future Work

Adding new types of cups

**Adding a cooling or
heating system**

Any Question?