
Mechatronics Design Review

-Automized Morning Coffee Service-

Mechatronics (001) Team 2

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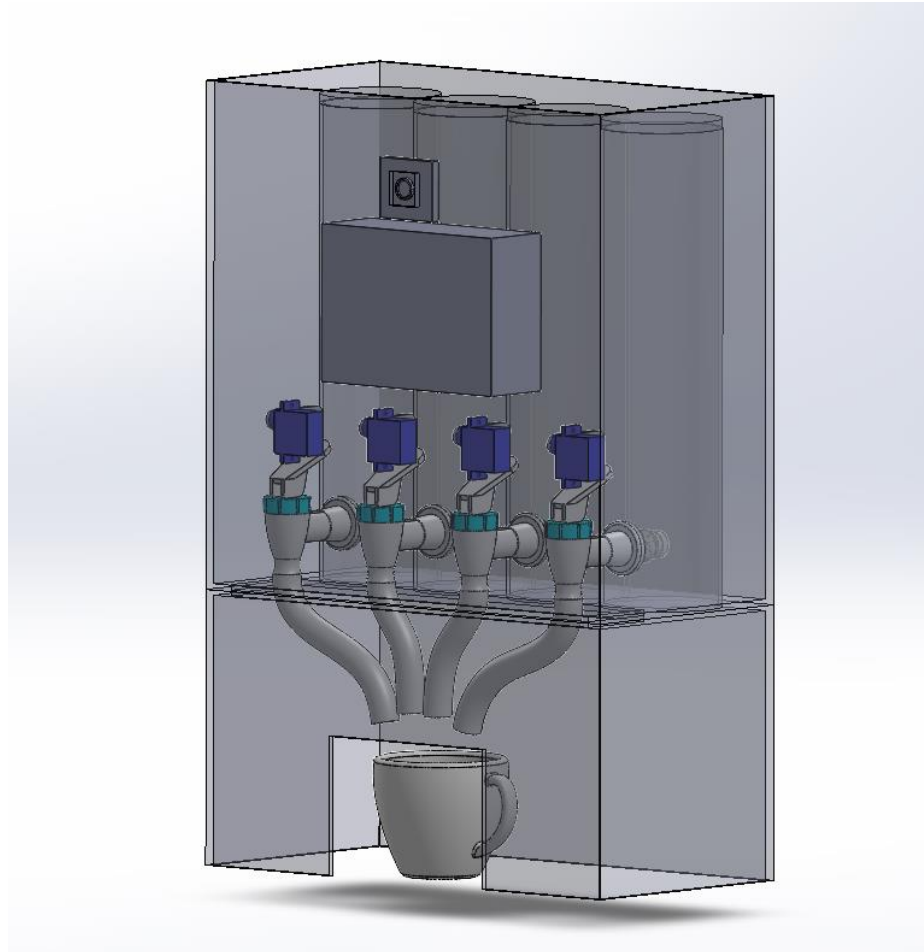
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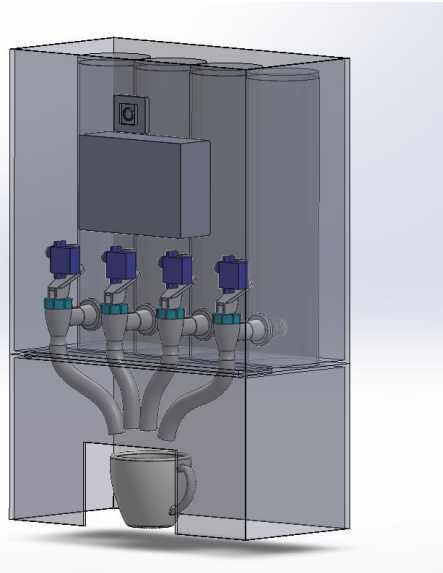
1. Automized Morning Coffee Service
2. Mechanism Introduction
 - 2-1. CAD Outline
 - 2-2. Operation simulation
3. Why do I need Automized Morning Coffee Service?
4. Why is our product so special?
5. Commercial strength
6. Q&A

Automized Morning Coffee Service



How about creating a machine that brews coffee in various styles?
After all, everyone has their unique preferences!

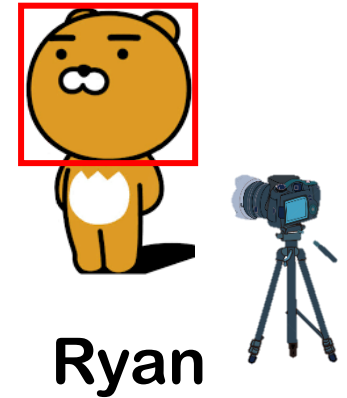




Pikachu



Loopy



Ryan



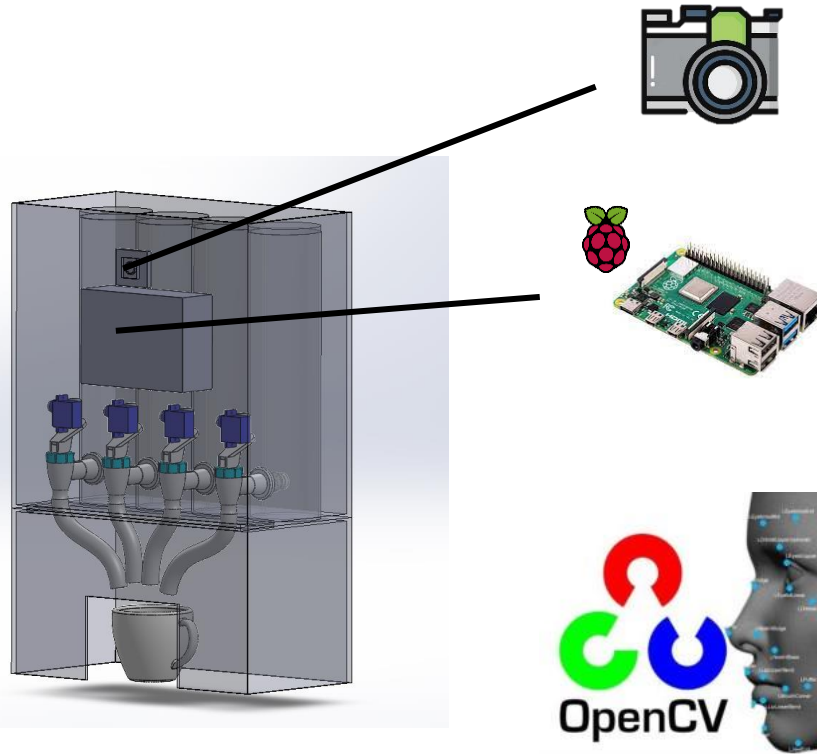
Coffee



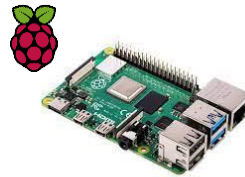
Ice tea



Lemon ade



Camera



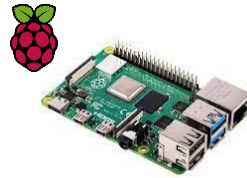
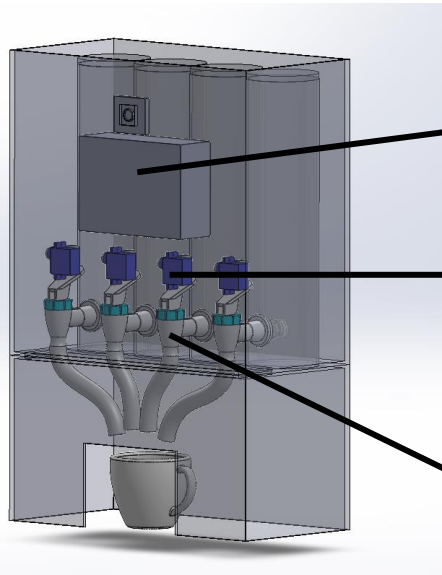
Raspberry Pi



Library

Face Recognition

Face detection and face recognition using Deep Learning



Raspberry Pi



Servo Motor x 4



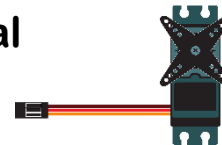
Pipe valve x 4



User
Information



Customized
Control Signal



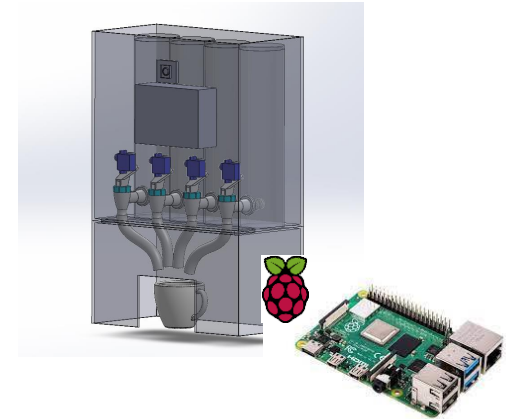
Control Valve
Open / Close





**Smartphone
Application**

**User
Information**



Raspberry Pi

- Register User
- Write One Face Image
- Write User name / taste

- Store User Information
- Store Face Image
- Store name / taste

Why Do I need 9시커피물?

In Korea, as of 2018, each adult drinks 353 cups of coffee every year.^[1] This is 2.7 times the amount of coffee consumed per adult (132 cups per year) in the world.

Tastes in coffee are as diverse as can be.

Imagine a workplace where a machine crafts morning coffee just the way you like it—what a splendid start to a day that would be!

국내 성인 1인당 커피 소비량

※()안은 세계 성인 평균 대비

연간 353잔(약 2.7배)



국내 성인 평균

자료: 현대경제연구원

연간 132잔



세계 성인 평균

The JoongAng



Why 9시커피 so special?

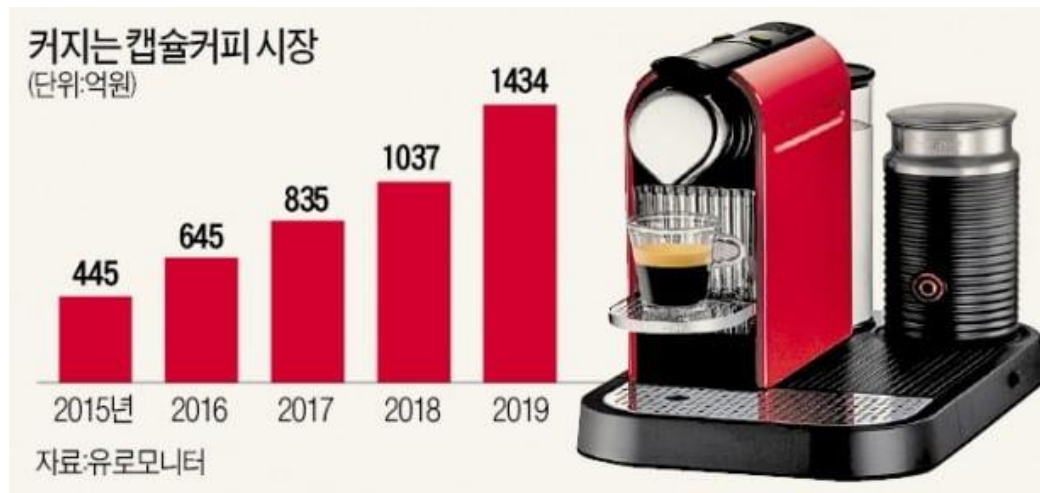


capsule coffee machine



Automatic espresso machine

The domestic coffee market in 2021 recorded a total sales volume of 3.1168 trillion won. The coffee market has shown a compound annual growth rate of 6.6% from 2018 to 2021.^[2]





맥널티 반자동 커피머신 SET (+원두+유리샷잔2개)

₩149,000
바나나빌딩
무료 배송



러셀 홀스 전자동 커피 머신

₩689,700
Interpark Shopping
무료 배송



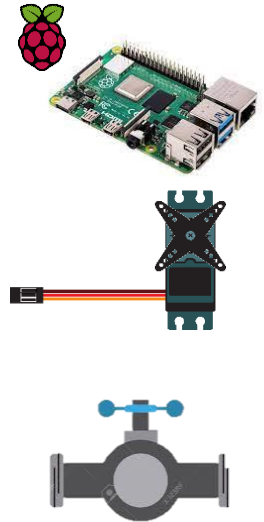
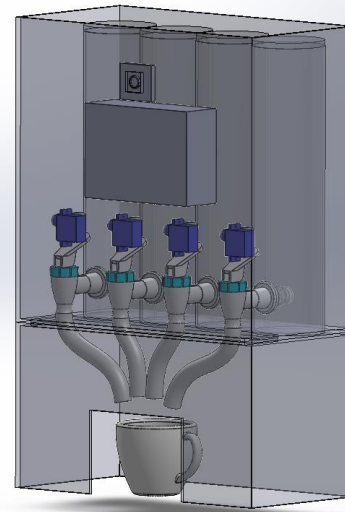
반자동 커피머신기 가정용 원두 커피 기계 홈카페

₩151,800



반자동 카페 커피 머신기 가정용 회사 사무실 브루잉

₩400,000



Commercial Coffee Machine
150000won or higher

Our Product
At most 100000 won

- [1] 백민정, "1인당 연간 커피 353잔 마셔...코로나 후 입맛 더욱 고급화" 중앙일보, 2021.11.08
- [2] 정태권, "커피 시장 지속 성장... 지난해 3조1168억 원 규모", 식품외식경제, 2023.03.20

Thank you~