

THERMAL SCANNING SECURITY SYSTEM

WITH TICKET VALIDATOR

Presentation by Lazy Bots

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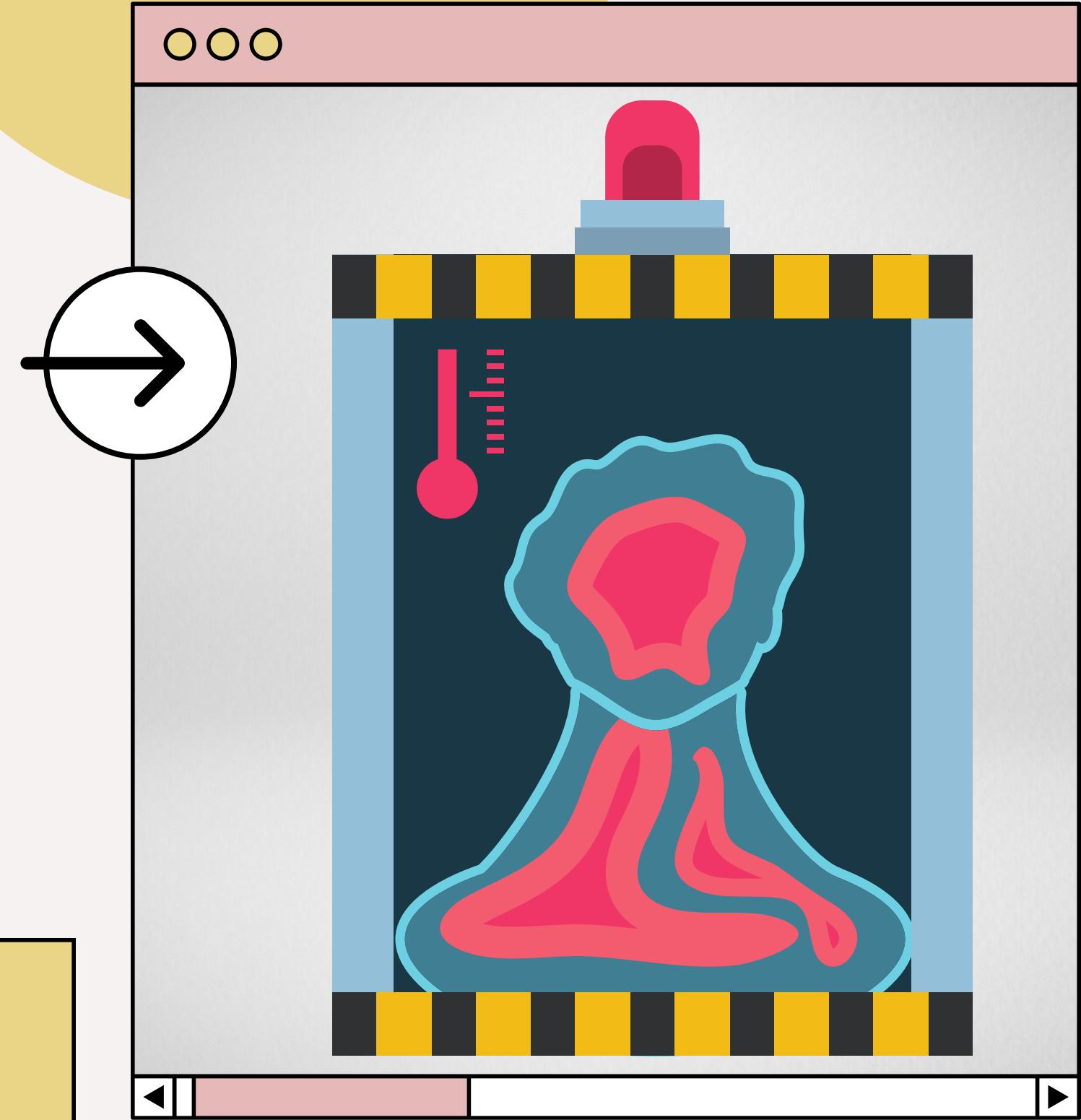
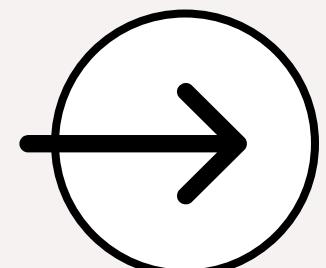
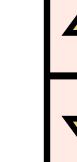




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What?

Our project is to integrate automatic temperature pass system in heavily congested places like railway stations, malls, temples etc. People are allowed inside only when their body temperature is within the safe temperature range.

This project can be used as a safety measure in daily life by integrating it with instruments like a doorbell or peep hole at homes and thus notifying people inside about the temperature status of the visitor.



Why?



HUMAN ERRORS

Humans cannot constantly work with same efficiency and concentration which lead to errors.



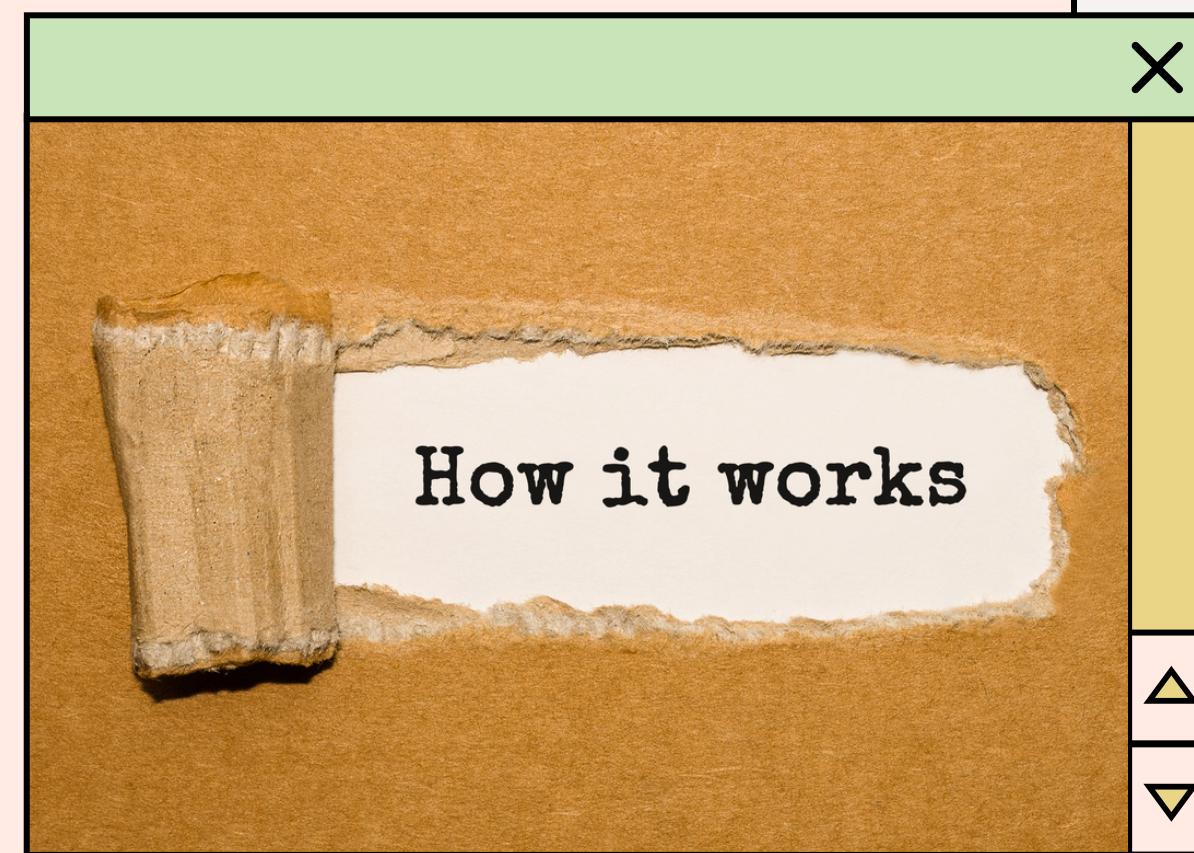
COSTLY FOR DAILY USE

Other products require some human hand to operate constantly. Hence when salary added to cost product it becomes too expensive.



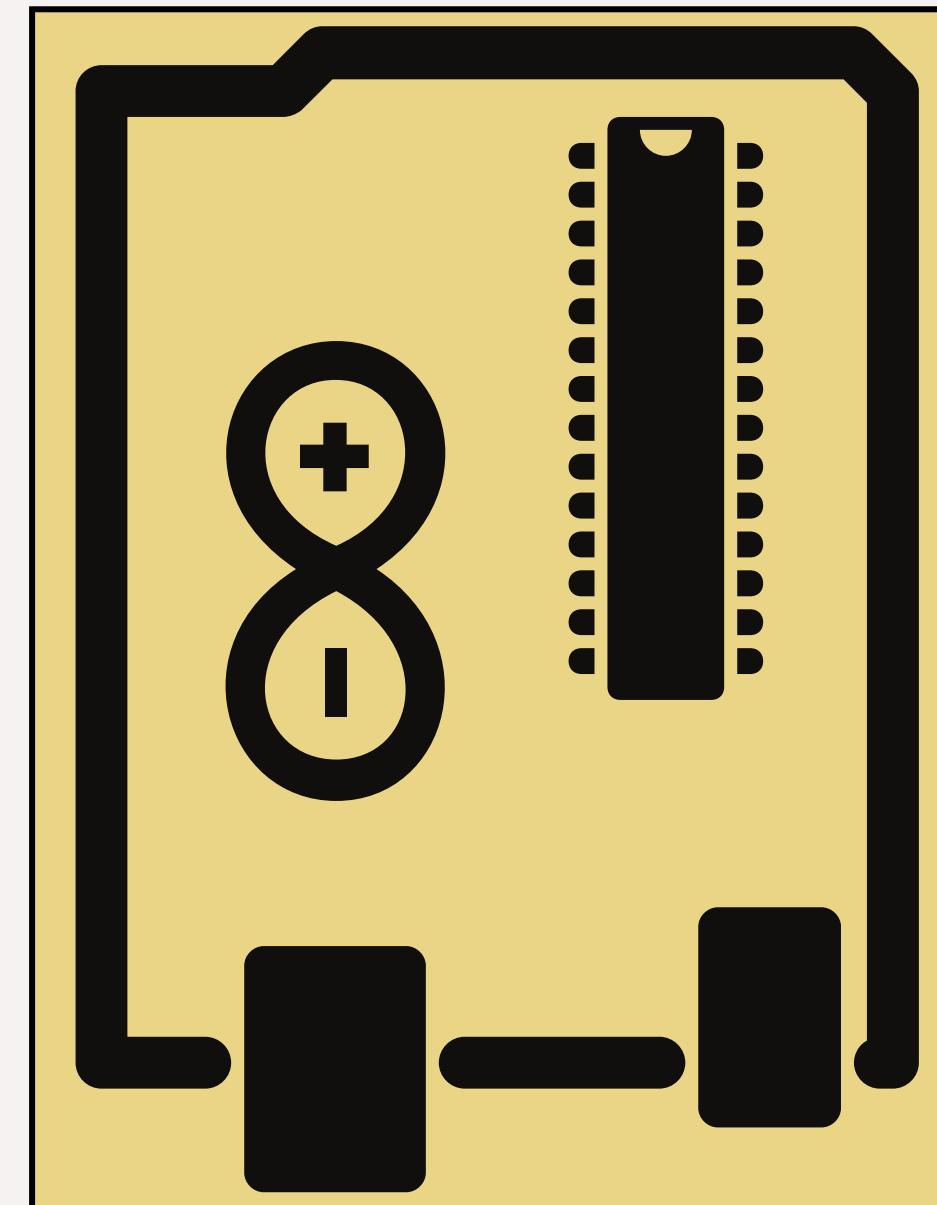
TIME CONSUMING

When same work is done manually it generally takes 20 sec to record temperature and note it down. But with this machine this will take fractions of second.

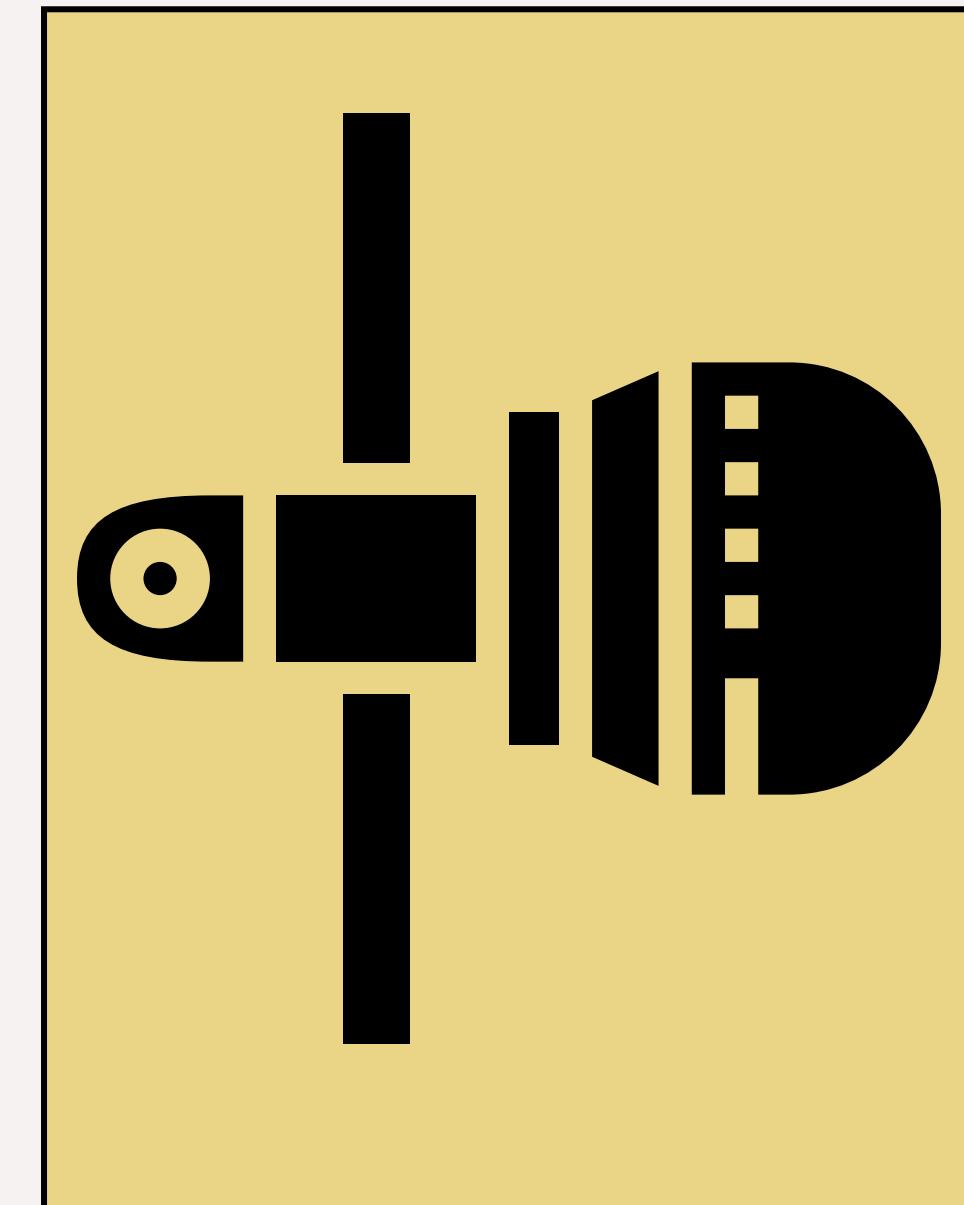


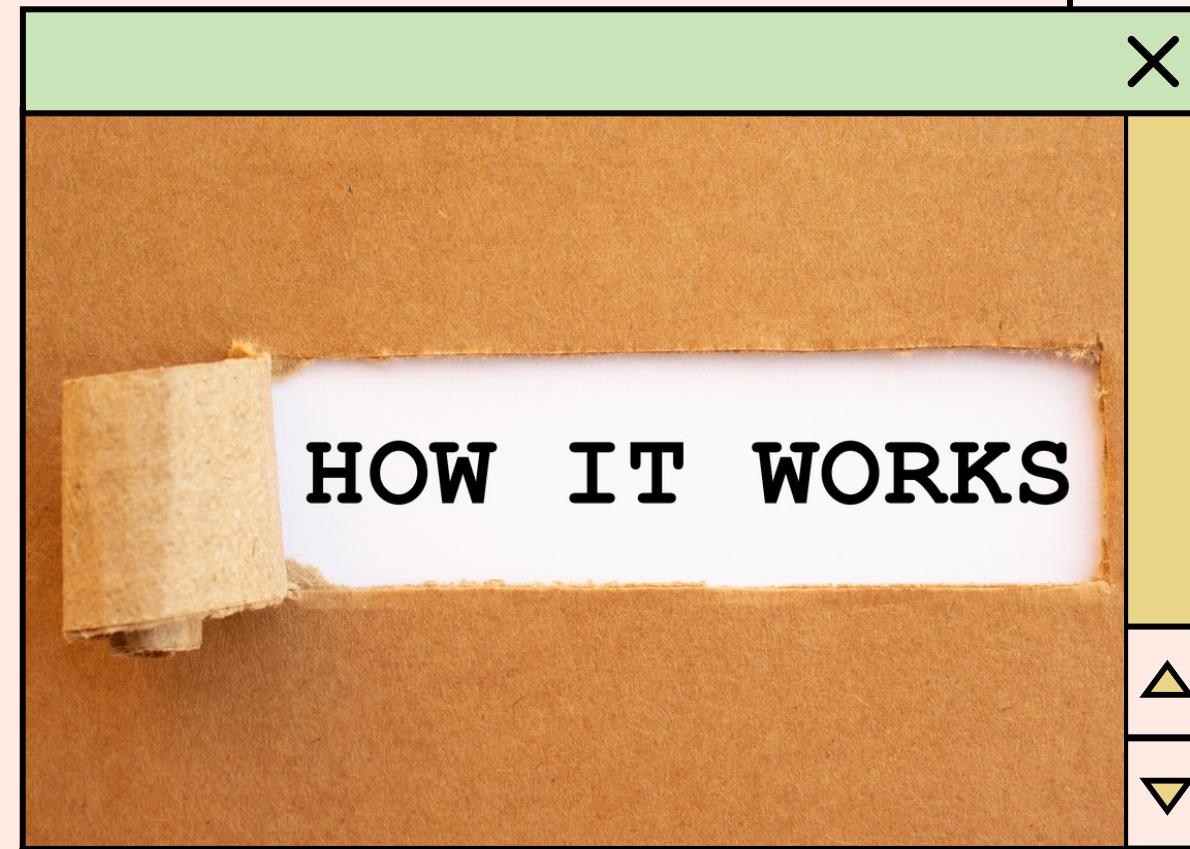
HOW?

→ ARDUNINO UNO



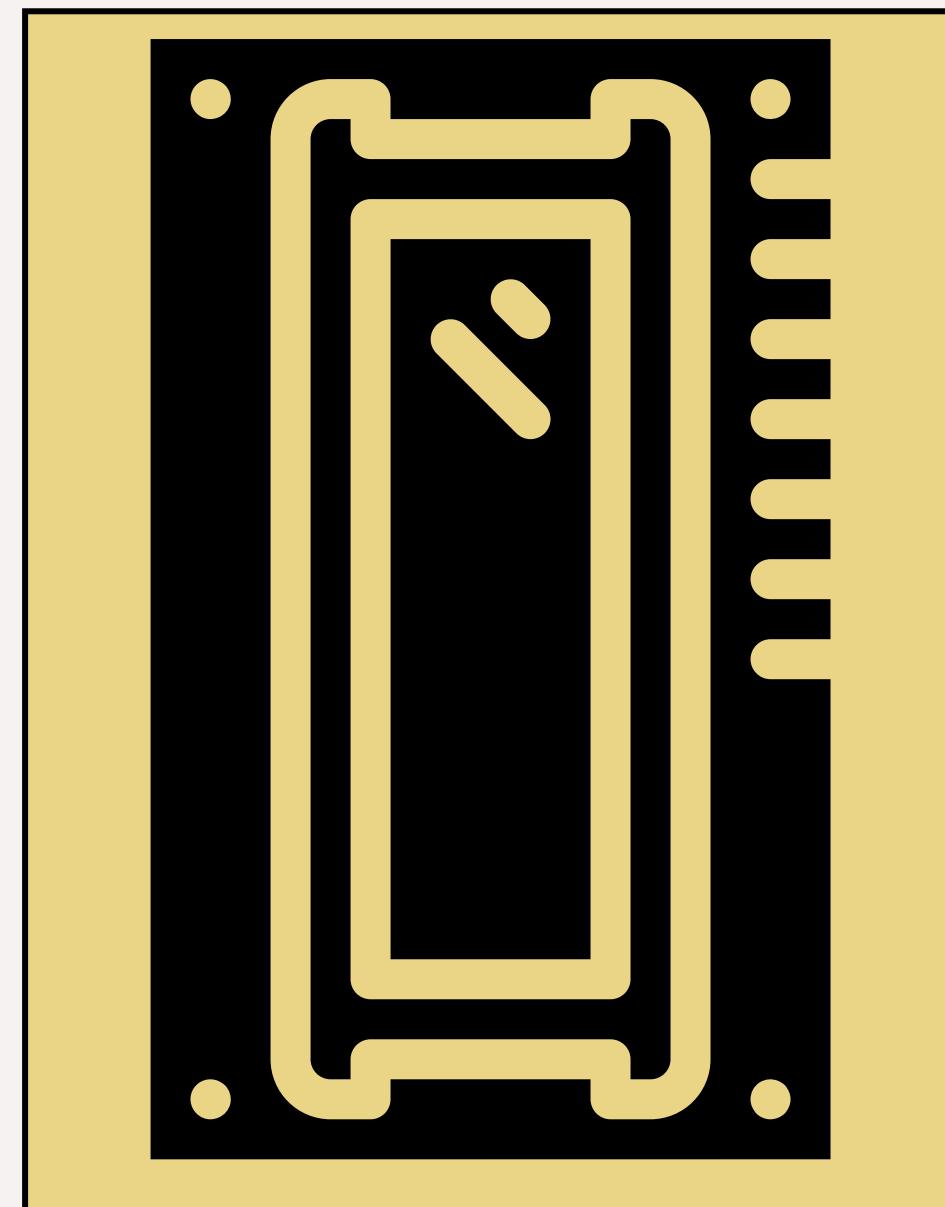
→ SERVO MOTOR



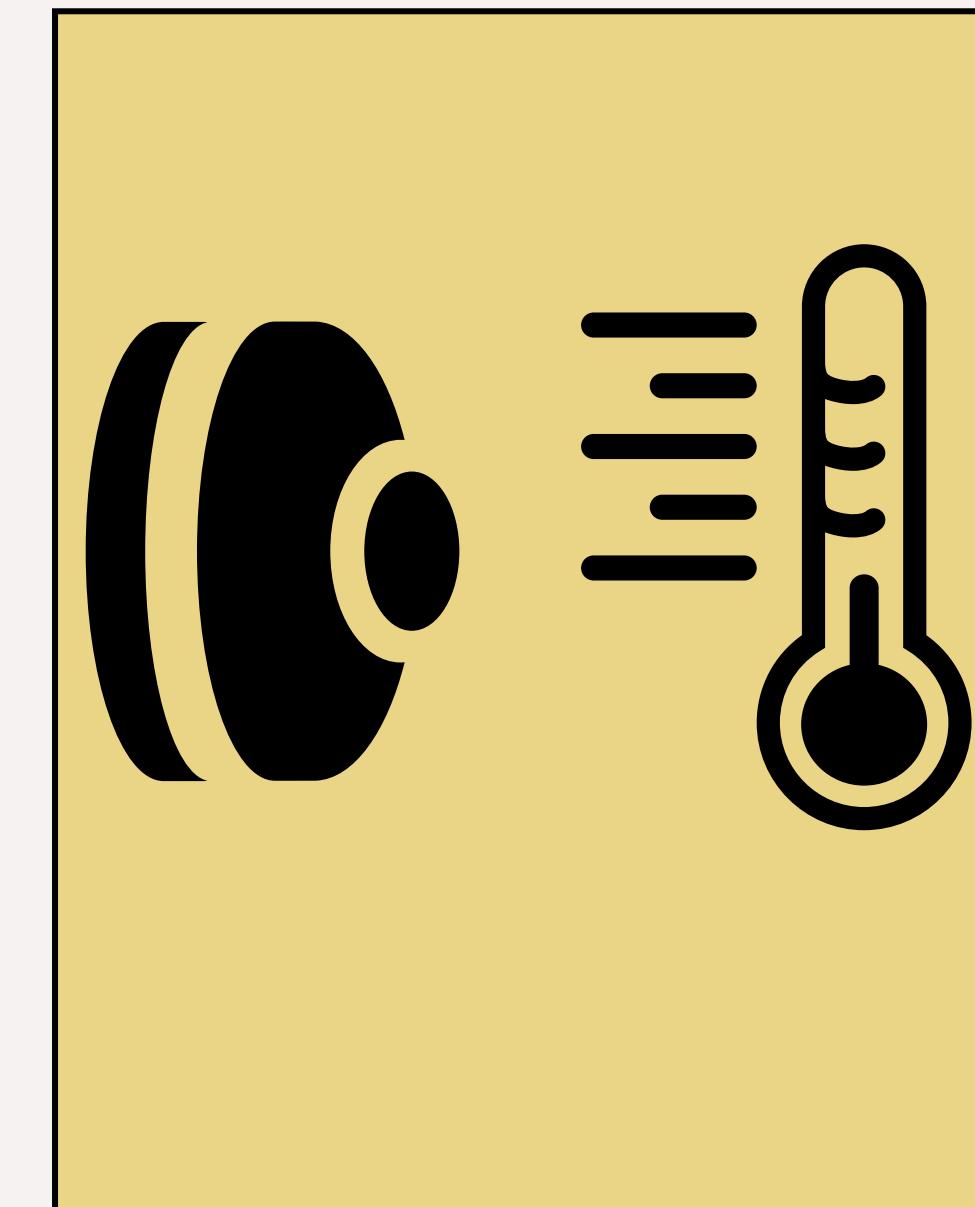


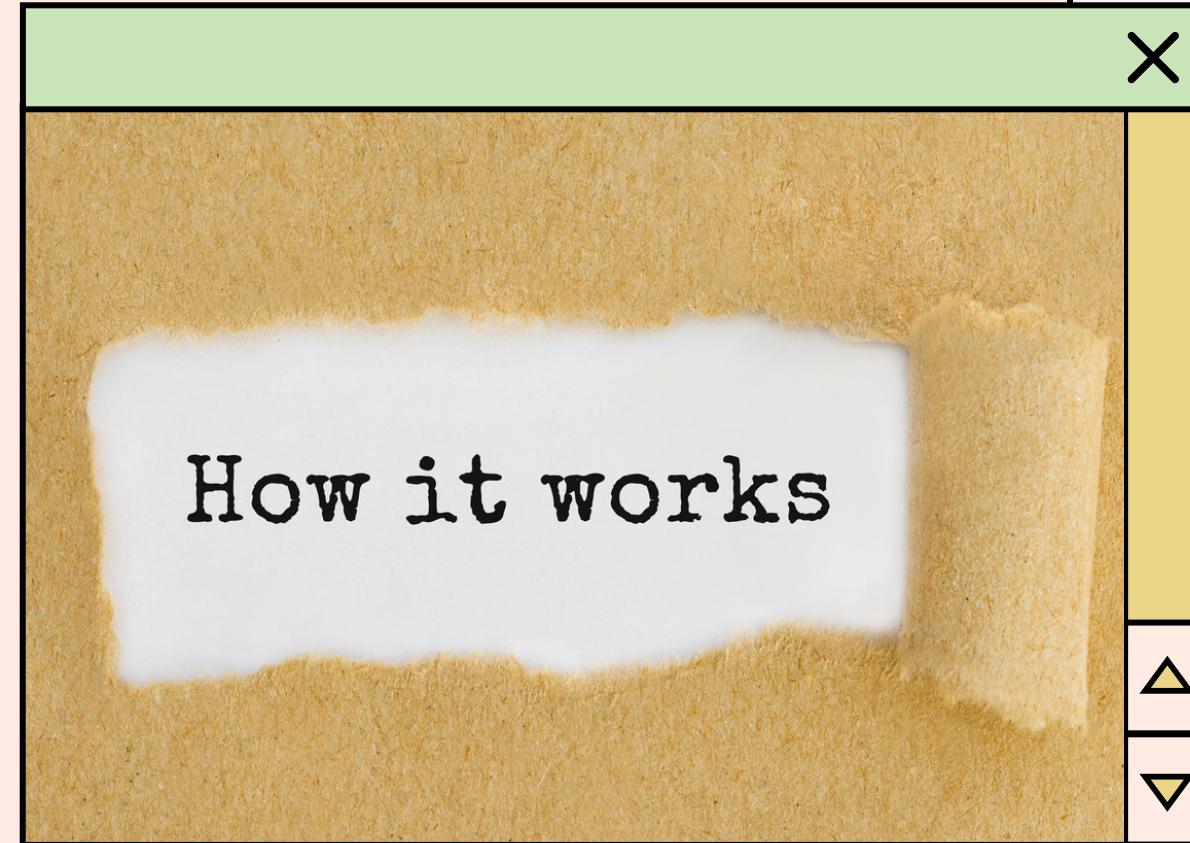
HOW?

→ LCD DISPLAY



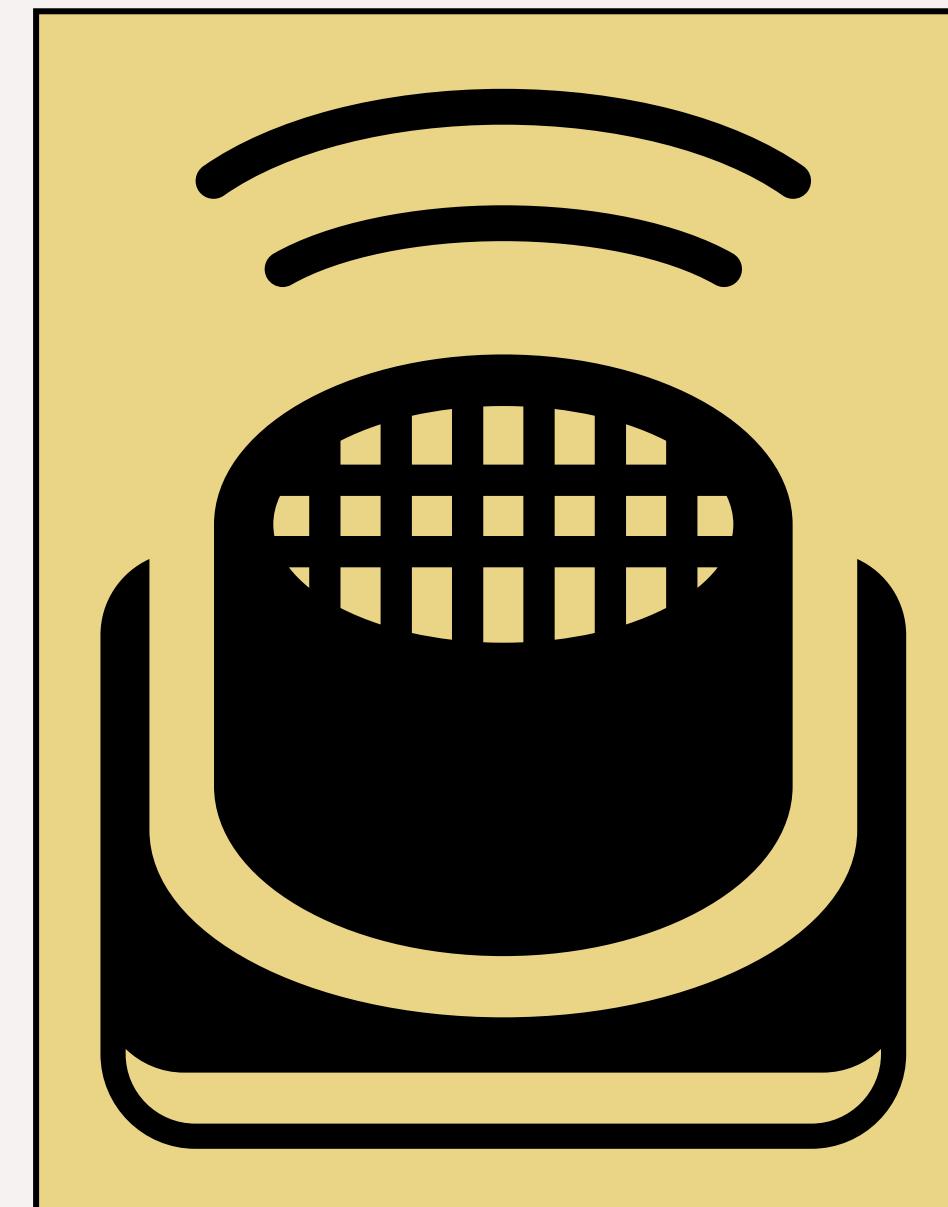
→ TEMPERATURE
SENSOR(MLX90614)



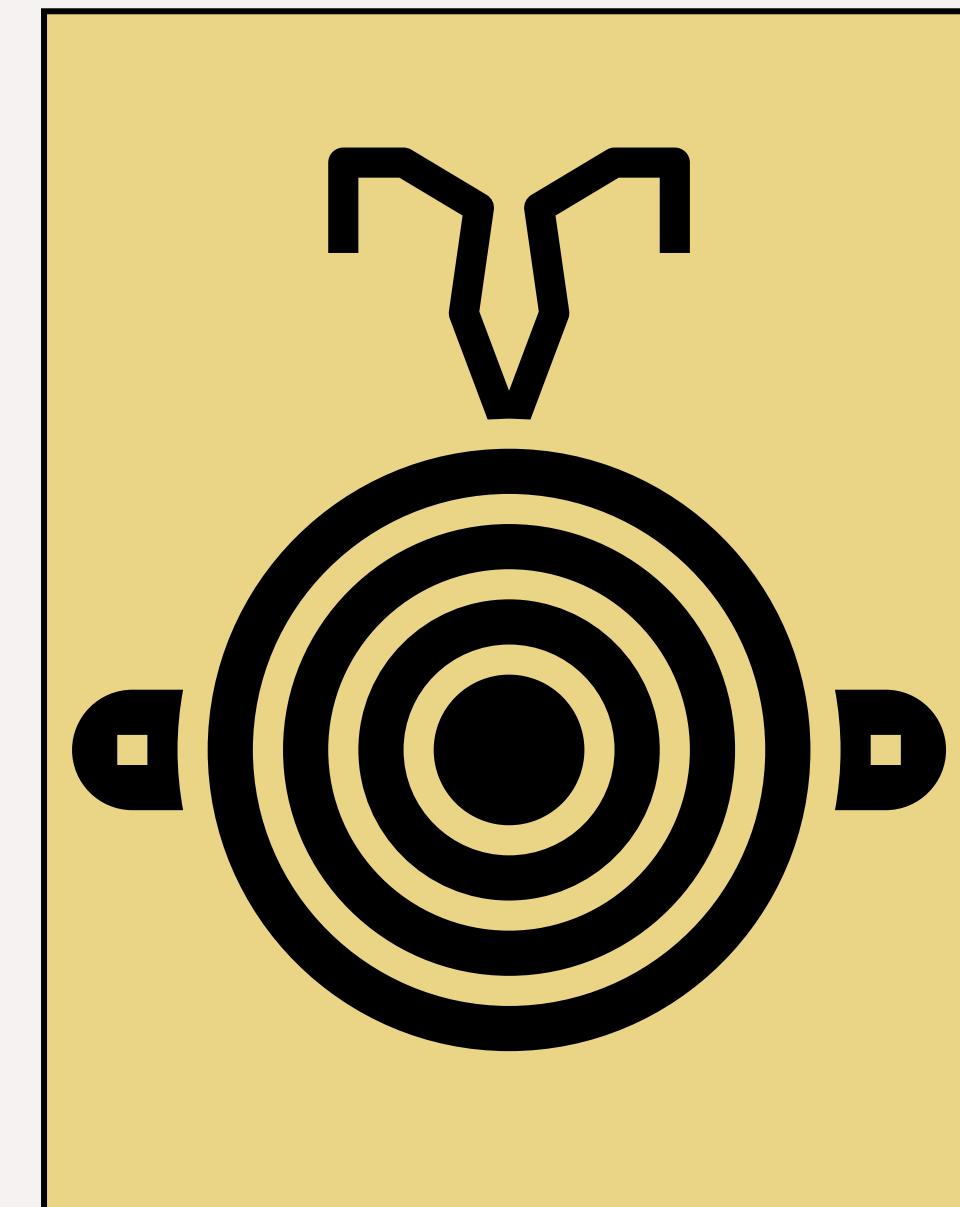


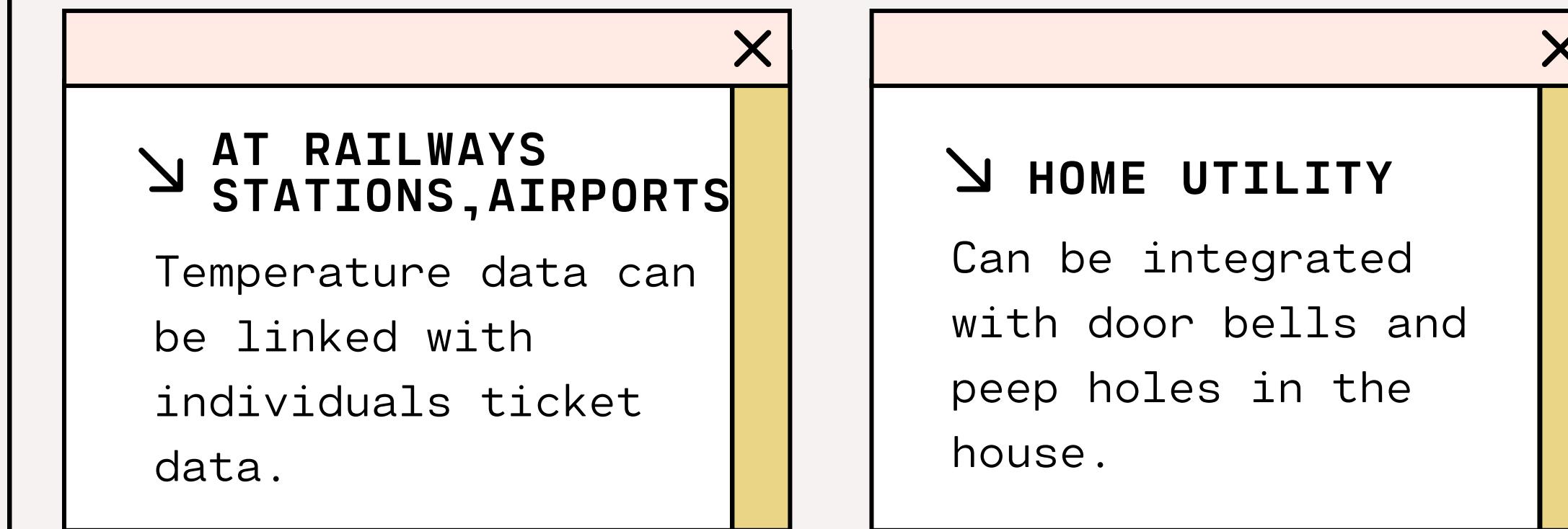
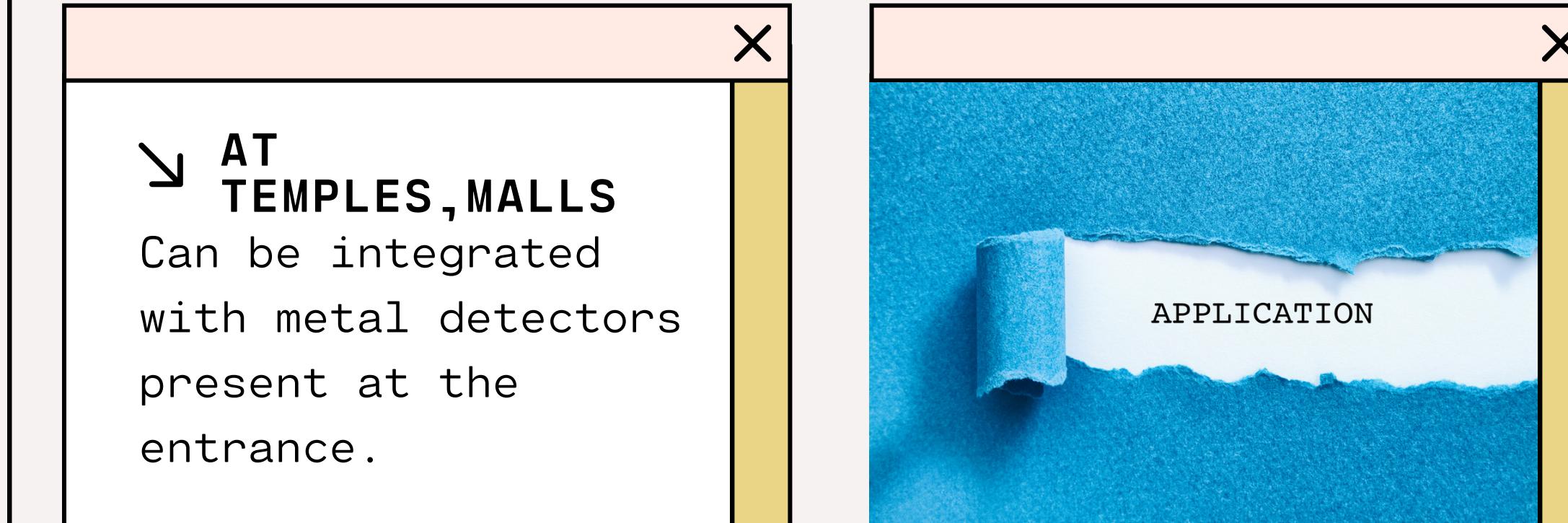
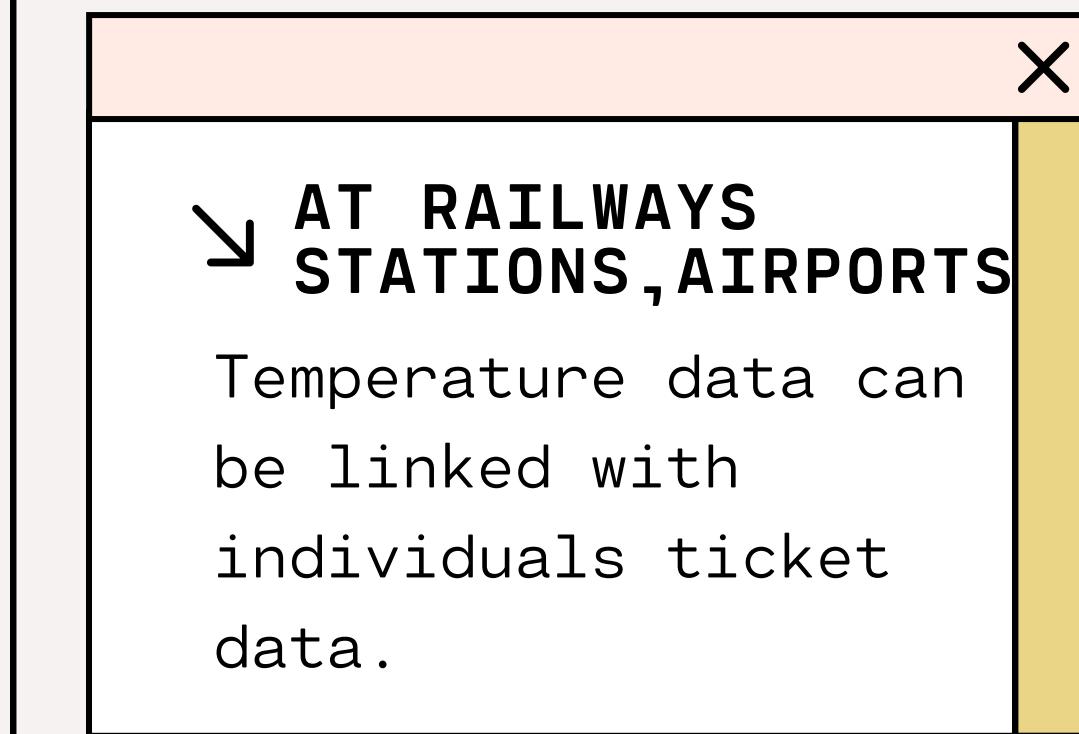
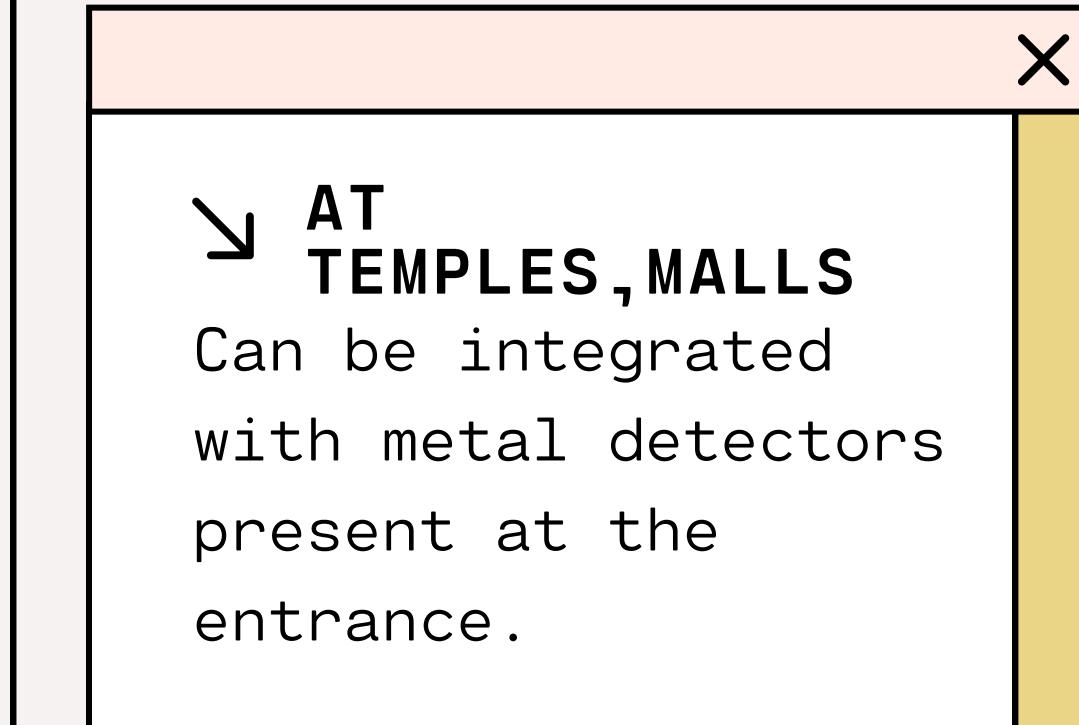
HOW?

ULTRASONIC
SENSOR



BUZZER



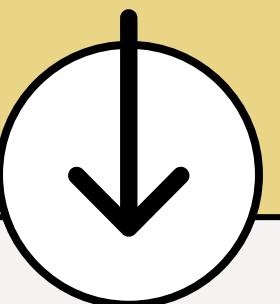


Application

This Automatic Thermal Scanner Pass System can be widely used from home utility to heavily congested places.



Future Plans



• We can integrate this scanner with an automated gate barrier and ticket validator at locations where ticketing system is installed, through which we can track a covid symptomatic person by linking their body temperature with the ticket data. Along with this, the problem of ticketless travel in Indian Railways can also be solved.

• In home utility We can also combine this automated thermal scanner with an AI face recognition. Also a notification can be sent through mobile application about visitors face and temperature

As of now we are not able to add some features due to lack of technical knowledge and unavailability of some components.



- Thermal guns costs around Rs 2000 to Rs 10000.
- Overall cost increases when we salaryed (minimum Rs 20000) the human resources for manual working.
- For large scale our Automated Security Electric Gate system costs about Rs 50000 and other required components will cost about Rs3000 overall approx Rs 53000 which will be a one time investment.
- For home utility our Automated system will cost about Rs 500-700.





Constraints!

Only one person can pass through the automatic gate at a time, so this may take time if there are a large number of people.

Solution

We can solve this problem by increasing the number of gates and response time of the system.

Constraints! And Solutions





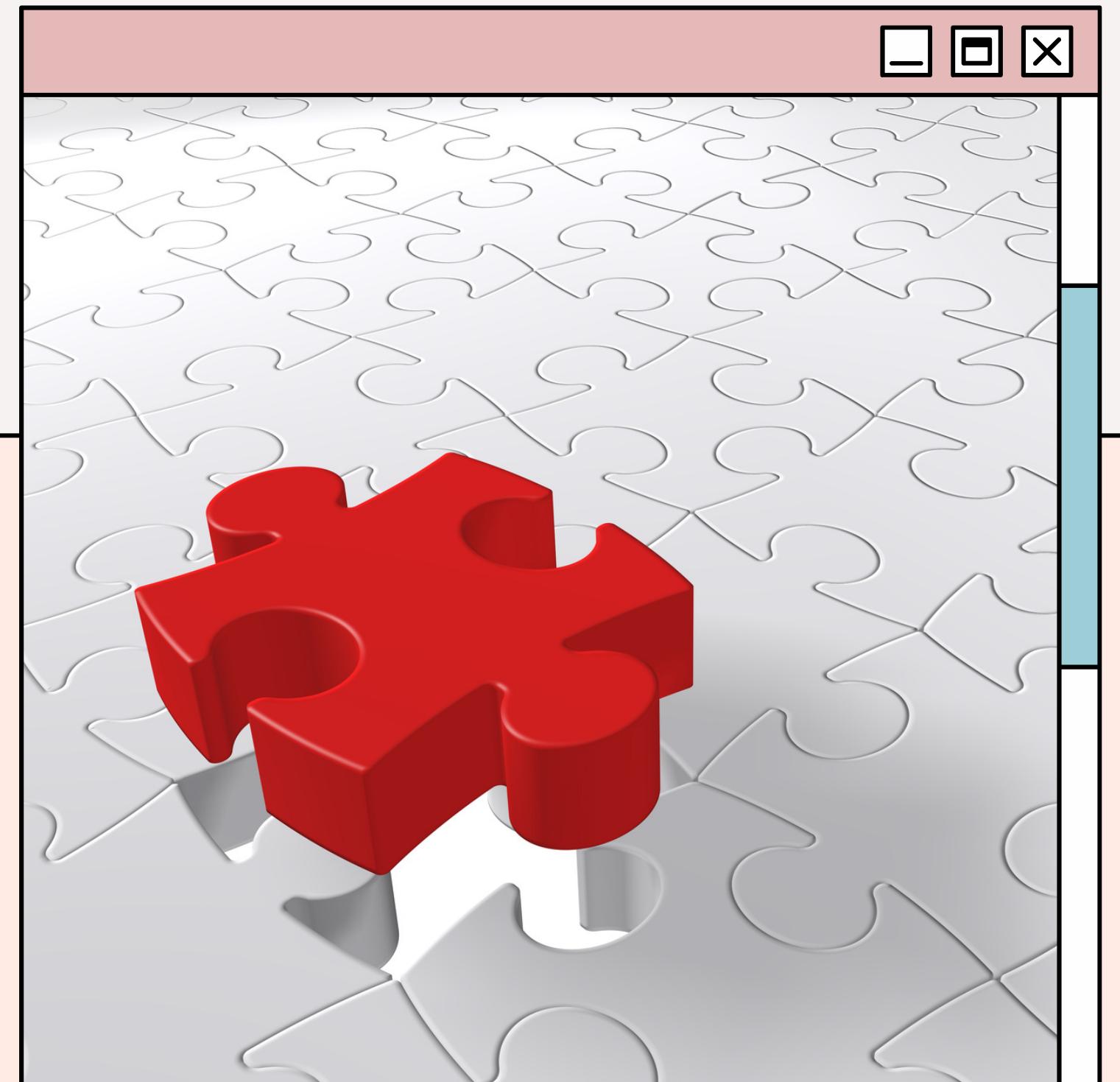
CONCLUSION

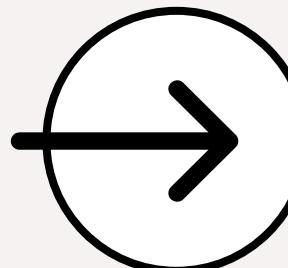
→ POINT ONE

If we are able to implement this idea then we can reduce the problem of free travel in railways and can also insure our health security.

→ POINT TWO

By implementing this idea we can overcome problems like high cost, human errors.





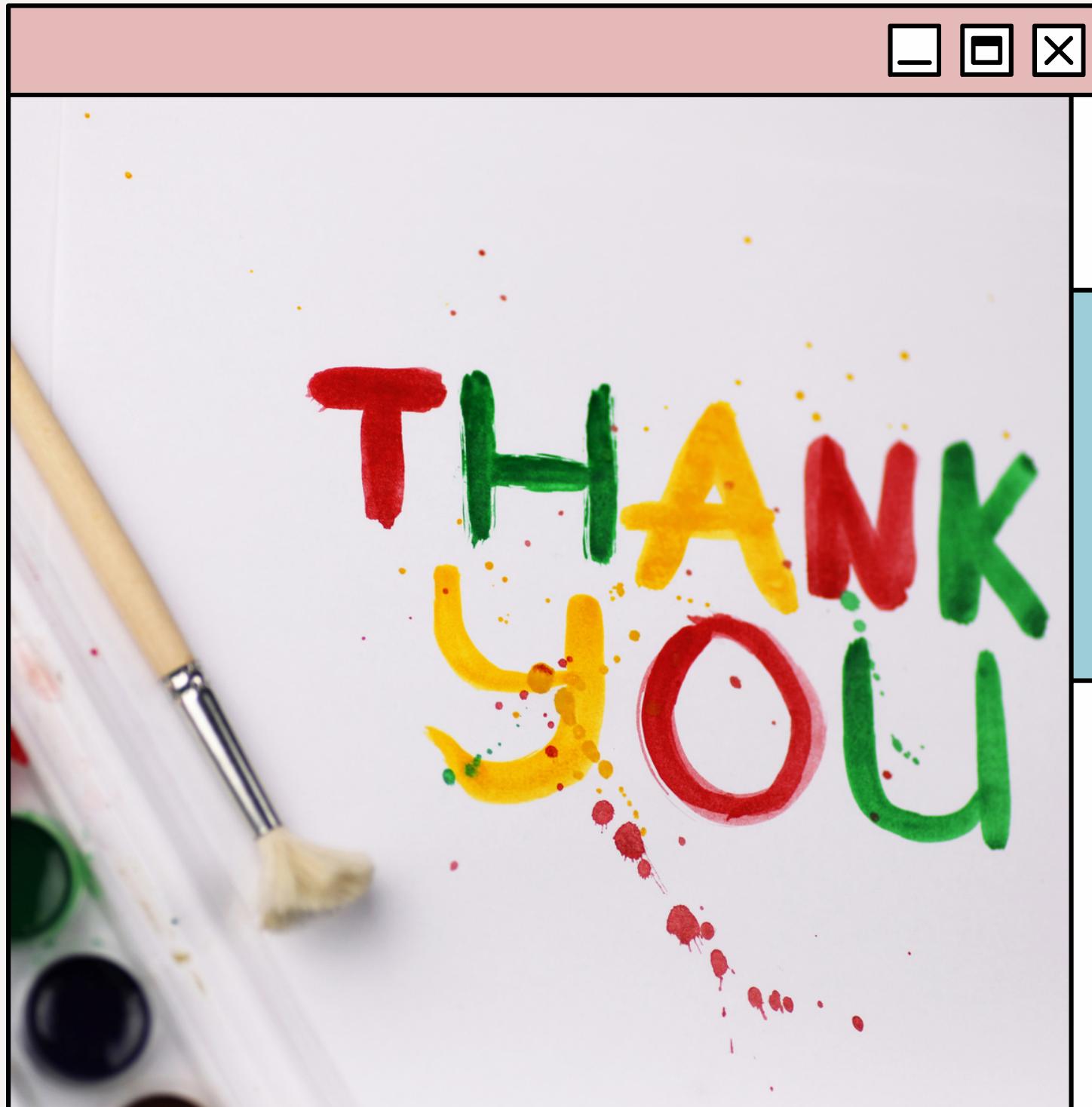
Queries/ Questions

We welcome your questions !!

Your idea is really great! but tell me one thing how will you approach to market so that your system can replace those already existing ways?

Type a message...





Thank You

SEE YOU NEXT TIME

↓ GET IN TOUCH

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