

Lab of IoT
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Project Presentation

SBM

Smart Beverage Machine

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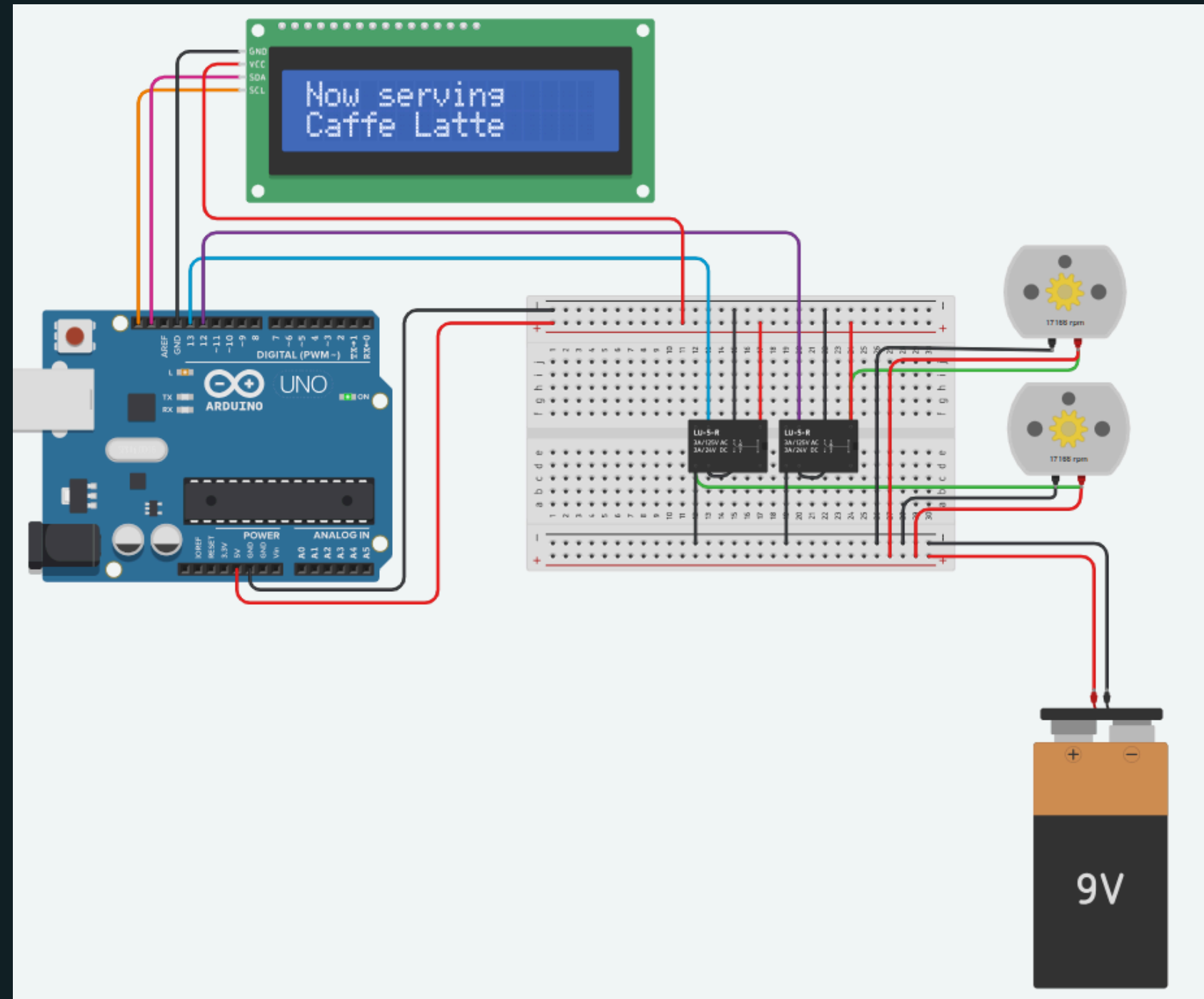
Sections

- What is it?

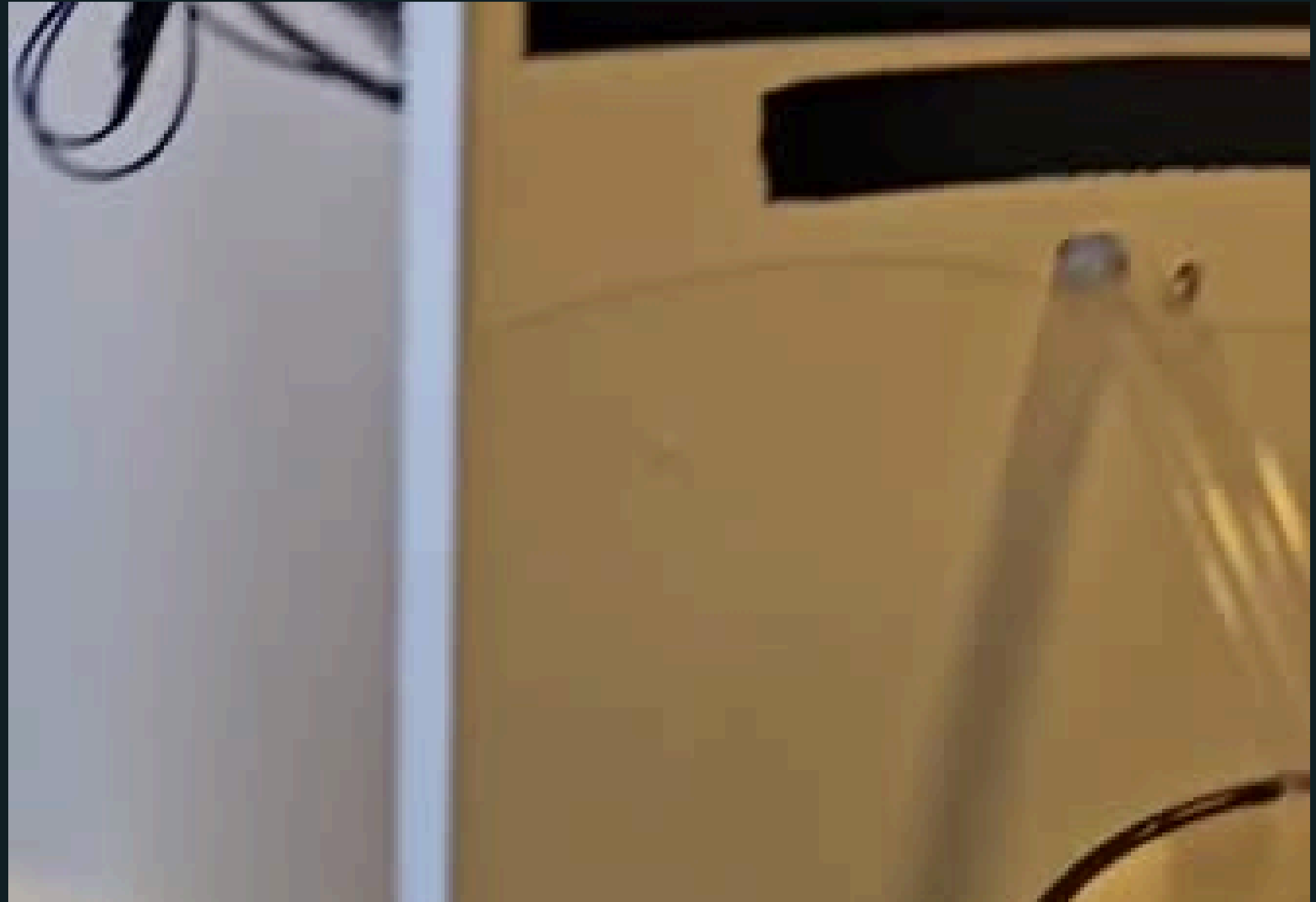
- How does it work?

- Why?

¿What is it?



Demo



¿How does it work?



Python

Gestures detection,
workflow control & DB
Management (MySQL)



MQTT

Establish connection between
device and gesture detection



Arduino

CameraServer, Pumps
Control & Display - UI

Workflow

Workflow

ESP32CAM (Camserver)
(Arduino)

Video Stream

PyCode

HTTP-GET Video Stream

Gestures detection (CV2 lib) + workflow control + DB Management (MySQL)

MQTTS broker.hivemq.com



MQTT PUB

Message

MQTT PubSubClient client

Callback()

.Actions

.Pumps & Display

Message



Hardware

ESP32-CAM

Pumps

Relays

LCD Display

Power Module

Breadboard

Jumpwires

Wall Connector

¿Why?

- Hygiene

- Efficiency

- Engaging

Thank You