Lab of IoT
Prof. Massimo Ficco
University of Salerno

Project Presentation

SBM

Smart Beverage Machine

JOHAN CHICUE

MARTIN CARDACI
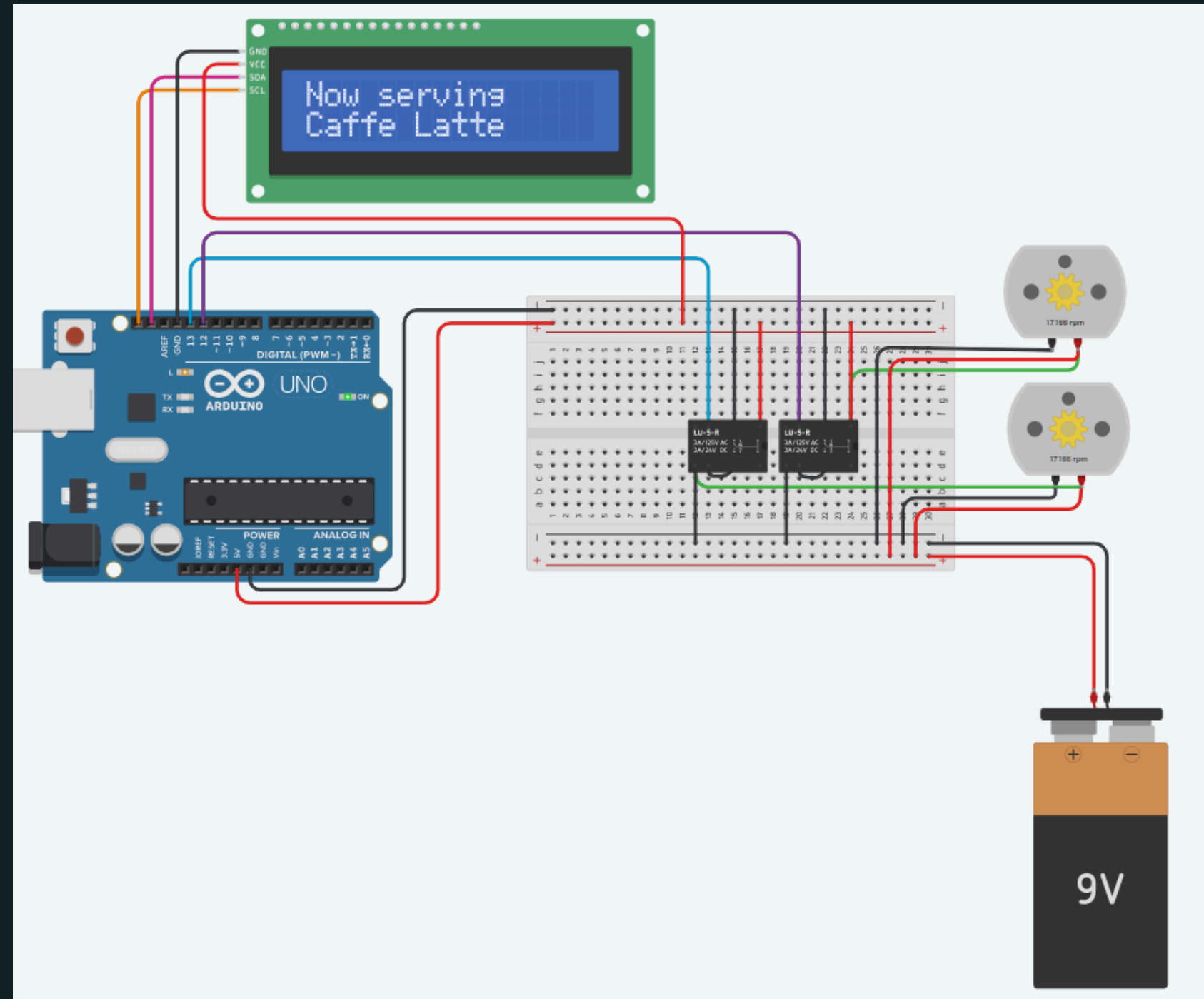
Sections

- 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)   **PyCode**   **MQTTS broker.hivemq.com**
(Arduino)

Video Stream ———————————▶   HTTP-GET Video Stream

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

MQTT PUB ——————————▶   Message

MQTT PubSubClient client ◀——————————————   Message
Callback()
.Actions
 .Pumps & Display

Hardware

ESP32-CAM

Pumps

Relays

LCD Display

Power Module

Breadboard

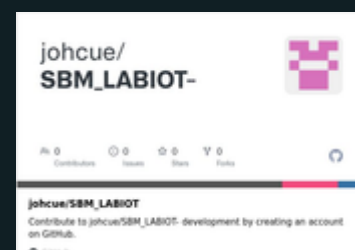Jumpwires

Wall Connector

¿Why?

- Hygiene

- Efficiency

- Engaging

Thank You

Project Repository