A black background with grey leaves

AI-generated content may be incorrect.

Iot color detection control board

Designed by abbas ghadiri

A grey logo on a black background

AI-generated content may be incorrect.

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Abstract:

Design an IoT board based on ESP32-S to detect color ranges and send result to server through JSON file by HTTP (post method).

Requirements:

* Hardware:
* ESP32-s (or ESP32CAM)
* OV2640 camera
* FFC 24 pin connector and cable (right cable and bottom connector)
* 5V to 3.3V AMS117 regulator
* 4-pin phoenix connector
* Micro USB SMD 4-pin-holder
* Relay 5V
* Buzzer 5V
* IPUS PSRAM
* CH340G
* 12.000MHZ oscillator
* TAC switch.
* Software:
* VScode, platform IO extension.
* Arduino IDE
* Python (or PHP)
* XAMPP (or APACHE and MYSQL)