TEAM : CLOUDIZ

MAKE SKILLED
EARN THE SKILL
WITH MAKING

SMART PET FEEDER

UNDER THE GUIDANCE OF

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PRESENTED BY:

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ABSTRACT

The SMART PET FEEDER is a revolutionary Internet of Things (IoT) Project designed to help pet owners feed their Pets on a regular basis, even when they are not at Home.

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SMART PET FEEDER

The system utilizes the ESP8266 microcontroller and the Google Assistant to communicate with the Adafruit.io server and dispense food for the pets.

A camera module is also included to monitor the pets' food intake and send an SMS notification to the owner's mobile phone if the food container becomes empty.

This helps pet owners to ensure that their pets are well-fed and taken care of, even when they are not around.

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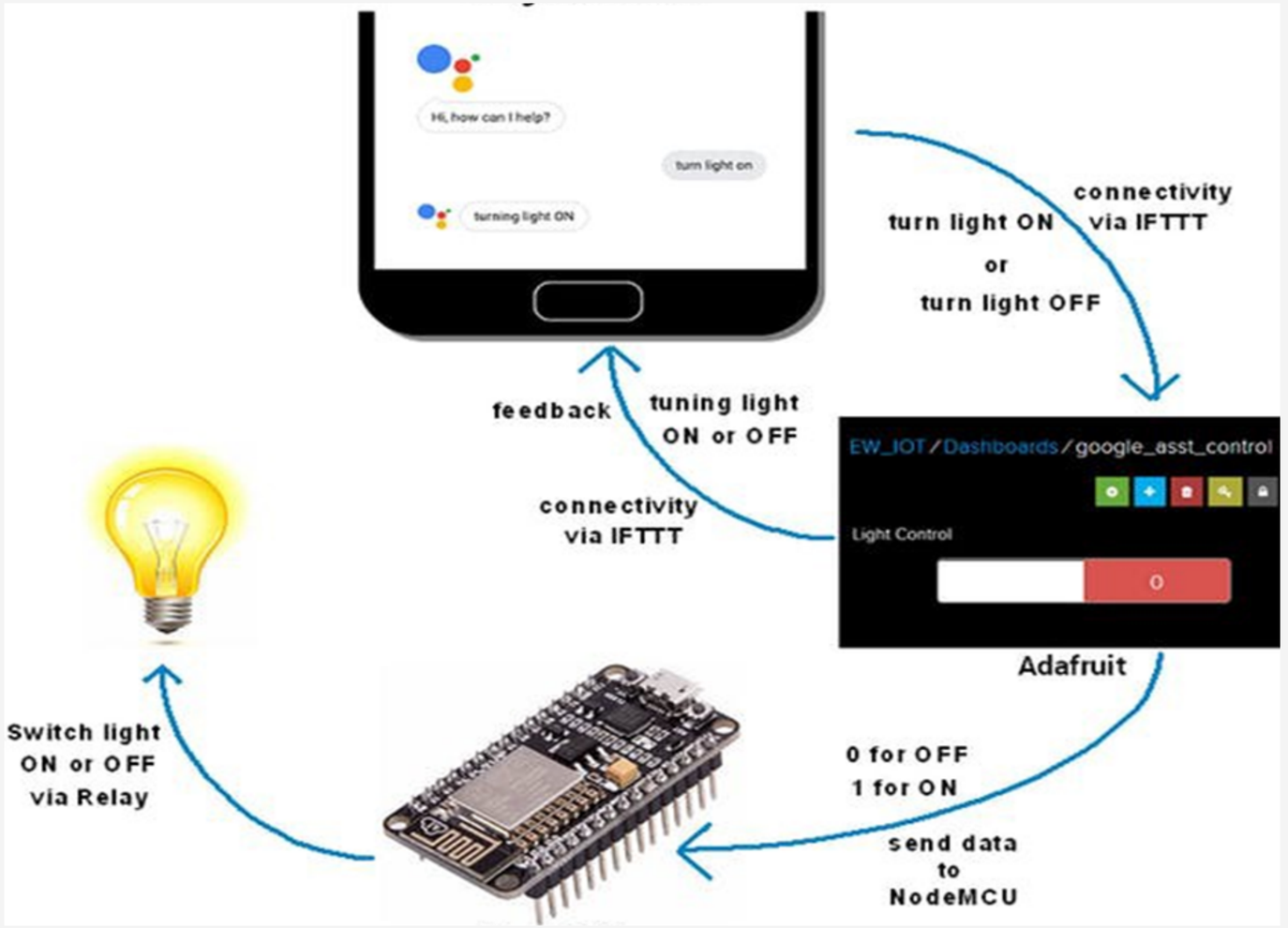
DIAGRAM :



COMPONENTS

- Esp8266 Microcontroller
- Google Assistant
- Adafruit.io Server
- Camera Module
- GSM Module
- Ultrosonic Sensor
- Servo Motor
- Jumper Wires

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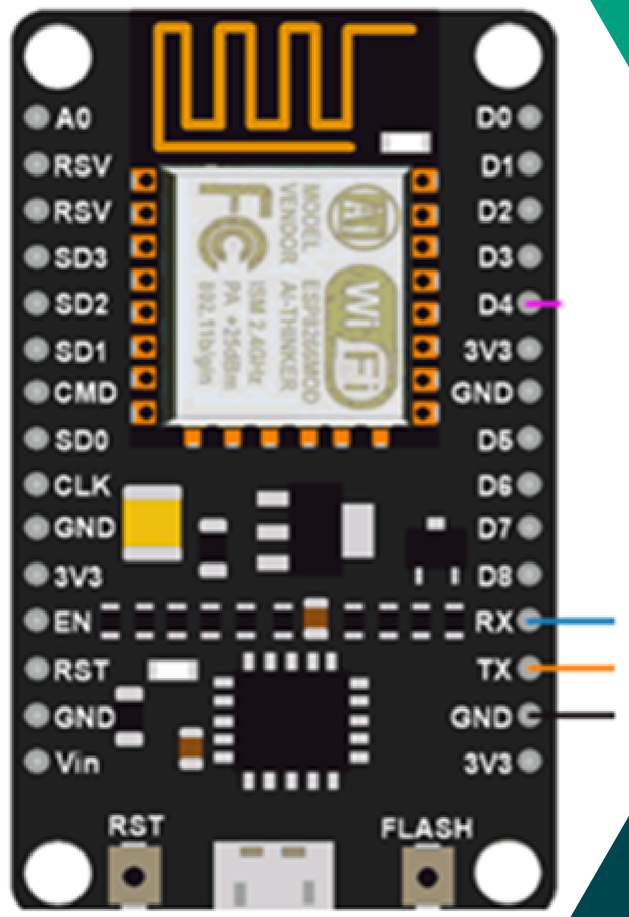
ESP 8266 MICROCONTROLLER

The ESP8266 microcontroller is connected to the Google Assistant and the Adafruit.io server and is used to receive commands and communicate with these components. It is also connected to the servo motor, which it controls to dispense food for the pets.



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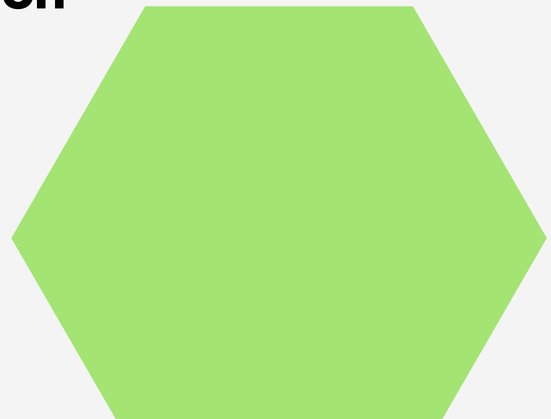
GOOGLE ASSISTANT

- The Google Assistant is connected to the ESP8266 microcontroller and is used to send commands to the ESP8266, such as to dispense food for the pets. It is also connected to the Adafruit.io server, which it uses to communicate with the ESP8266.

- IFTTT is short for 'If This Then That', and is pronounced like 'Gift' without the 'G'. We used to be called 'if this, then that' because Applets would have one trigger and one action



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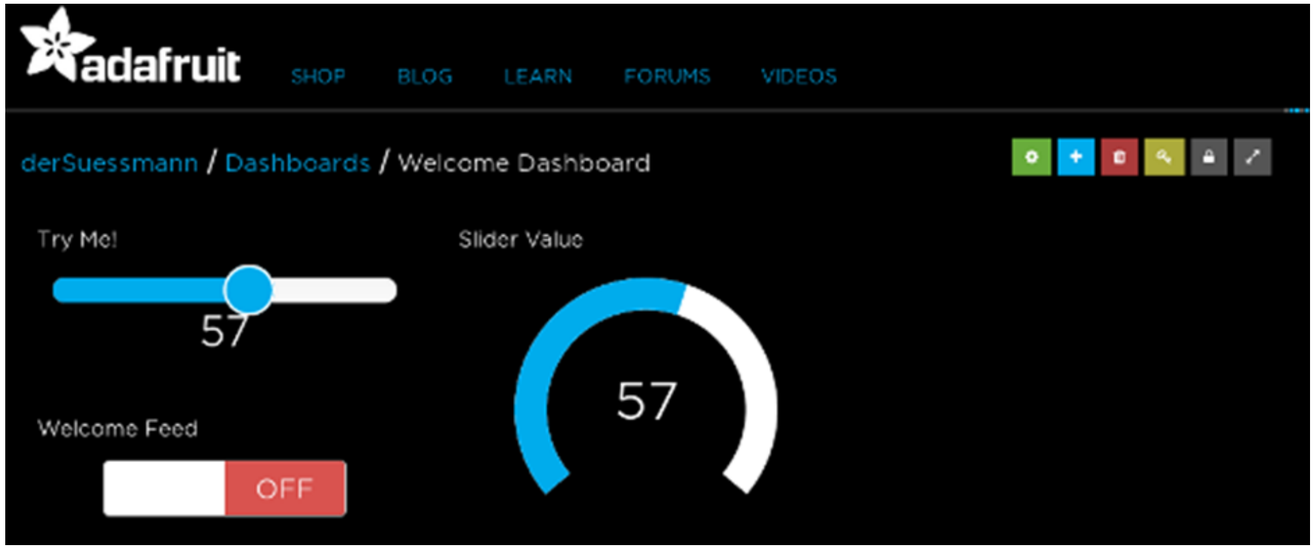
ADAFRUIT.IO SERVER

The Adafruit.io server is connected to the Google Assistant and the ESP8266 microcontroller and is used to facilitate communication between these components. It receives commands from the Google Assistant and sends them to the ESP8266, and also receives data from the ESP8266 and sends it to the Google Assistant.



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CAMERA MODULE

The camera module is connected to the ESP8266 microcontroller and is used to monitor the pets' food intake. It sends data to the ESP8266, which is used to determine whether the food container is empty and whether a notification should be sent to the owner's mobile phone.

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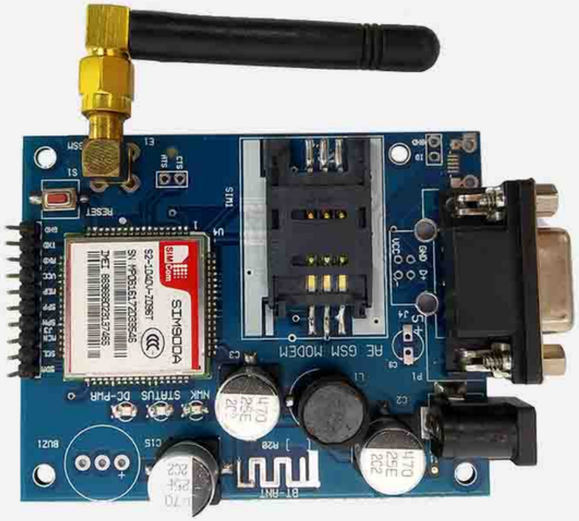
GSM MODULE



The GSM module is connected to the ESP8266 microcontroller and is used to send SMS notifications to the owner's mobile phone. It receives commands from the ESP8266 and sends the notifications accordingly.

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ULTRASONIC SENSOR

The An ultrasonic sensor is an instrument that measures the distance to an object using ultrasonic sound waves. The Ultrasonic sensor is connected with microcontroller. When ever the container goes empty then it alerts the owner.

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SERVO MOTOR

A servomotor is a rotary actuator or linear actuator that allows for precise control of angular or linear position, velocity, and acceleration. The servomotor is connected with microcontroller. When ever the owner gives the instructions then the food will fall down from the container.

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BLOCK DIAGRAM

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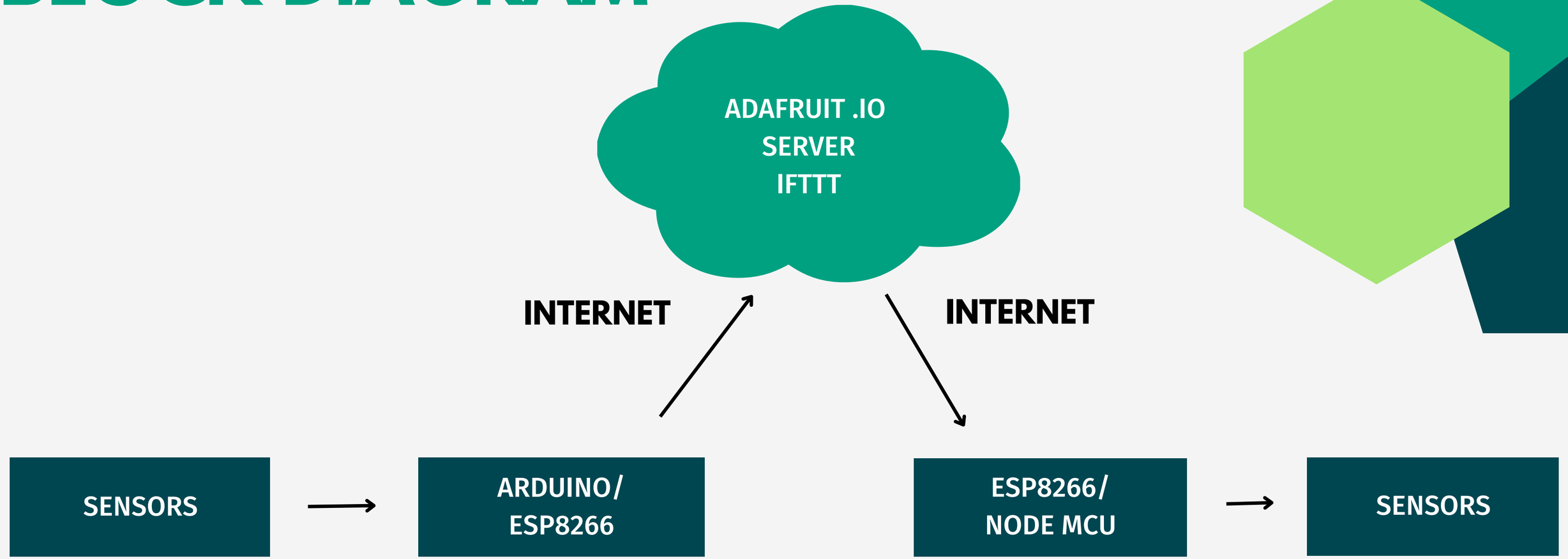

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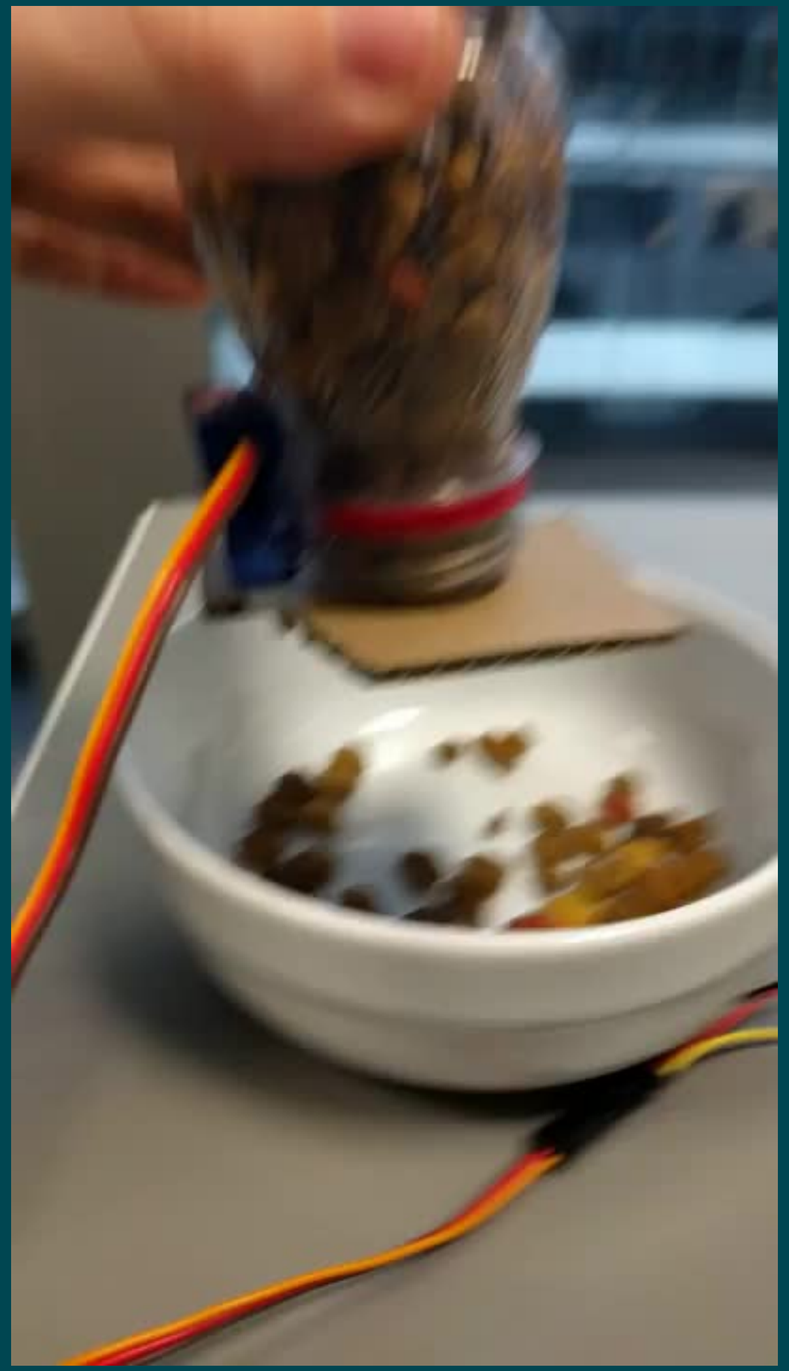
EXISTING ONE



OUR UNIQUENESS

ADVANTAGES

- Convenience: The SMART PET FEEDER provides a convenient solution for pet owners who are frequently away from home and if you want to ensure that their pets are well-fed.

- Cost-effective: The system can help to reduce the cost and it provides an automated and cost-effective solution for feeding pets.

- Peace of mind: The system's remote monitoring capabilities give pet owners peace of mind, as they can be assured that their pets are being taken care of even when they are not at home.

- Improved pet health: By ensuring that pets are fed on a regular basis, the SMART PET FEEDER can help to improve their overall health and well-being.

DISADVANTAGES

- Internet connectivity: The Internet connection is lost or disrupted, the system may not be able to communicate with the Adafruit.io server or the Google Assistant.

- Power failure: If there is a power failure or the system runs out of power, the SMART PET FEEDER may not be able to operate, which could be a problem if the pets are dependent on the system for their food.

- Hardware failure: If any of the hardware components of the SMART PET FEEDER fail, such as the ESP8266 microcontroller or the camera module, the system may not be able to function properly.

CONCLUSION

- The Smart Pet Feeder project is a useful and innovative solution for feeding pets on a regular basis, and it has the potential to significantly improve the lives of pets and their owners.

- The Smart Pet Feeder is an IoT project that is designed to provide convenient , reliable and cost-effective solution for feeding pets.

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THANK YOU

HAVE A NICE DAY...

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