IOT BASED SMART WAY OF WATERING PLANTS AND FEEDING PETS

- GUIDE NAME : Mr. RVH PRASAD

- BATCH NO : A12
- ROLL NO :

1) 198W1A0458
2) 198W1A0452
3) 198W1A0431
4) 198W1A0416

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AIM, OBJECTIVES & BENEFITS TO THE COMMUNITY

The AIM of the project is to

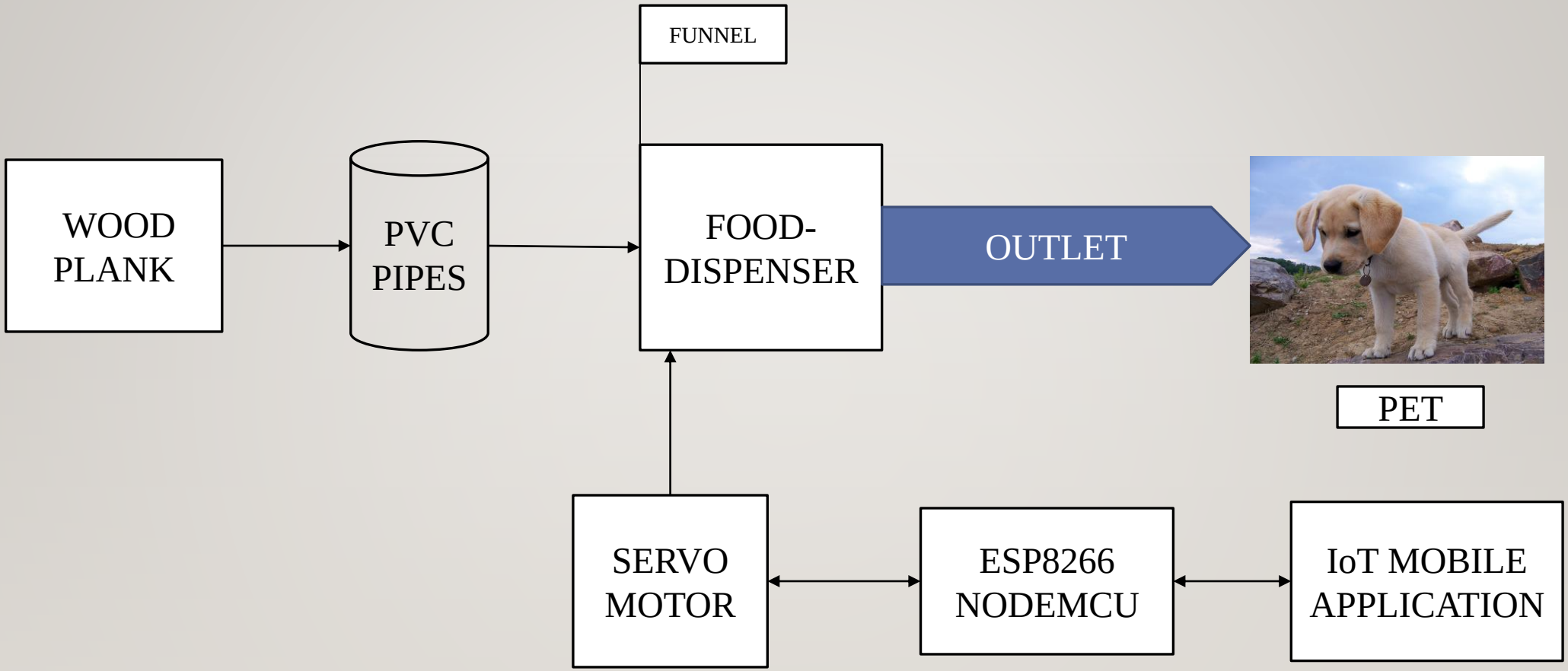
- provide food for the pet in a smart way
- provide water for the plant in a smart way

OBJECTIVES :

- The objective of our project is to design a smart pet feeding machine using IoT.
- It is designed to help all the pet owners to feed their pets remotely and smartly.

BENEFITS :

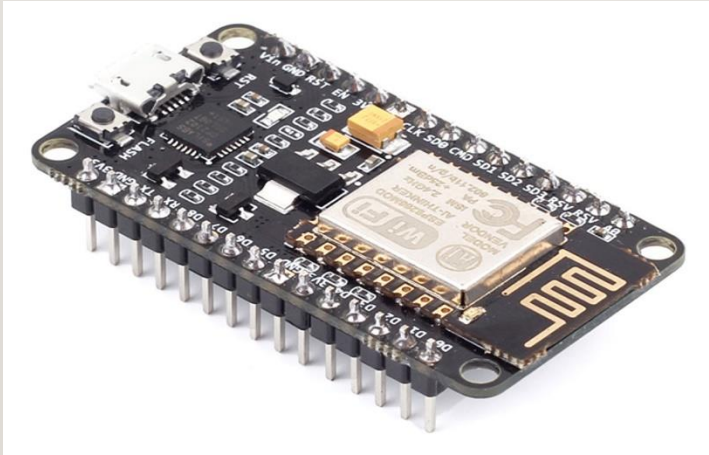
- Clear to take care of the pets at the shortfall of the owner.
- Owners will be able to monitor their pet’s health condition via consumption of food recorded by the app.


FUNNEL
WOOD PLANK
PVC PIPES
FOOD-DISPENSER
OUTLET
PET
SERVO MOTOR
ESP8266 NODEMCU
IoT MOBILE APPLICATION

MODULES - DESCRIPTION

- ESP8266 Node MCU

Node MCU is a low-cost open source IoT plat form. It initially included firmware which runs on the ESP8266 Wi-Fi SoC Espressif Systems, and hardware which was based on the ESP-12 module. Later, support for the ESP32 32-bit MCU was added.



MODULES - DESCRIPTION

- Servomotor

A Servomotor (or servo motor) is a rotary actuator or linear actuator that allows for precise control of angular or linear position, velocity and acceleration. It consists of a suitable motor coupled to a sensor for position feedback.

HARDWARE AND SOFTWARE REQUIREMENTS

HARDWARE :

- ESP8266 Node MCU
- Servomotor
- Wood Plank
- Food dispenser
- PVC Pipes
- Funnel
- Mobile phone

SOFTWARE :

- IoT Mobile Application
- Arduino UNO

BRIEF METHOD OR ANALYSIS

- Literature survey about the neighborhood’s problems
- Getting an idea about circuit design
- Dividing the system into software and hardware modules
- Developing and executing individual modules
- Testing the design system that includes hardware and software modules
- Combining hardware and software into a system
- Testing the final prototype system
- Modifying the system into a portable gadget

BUDGET

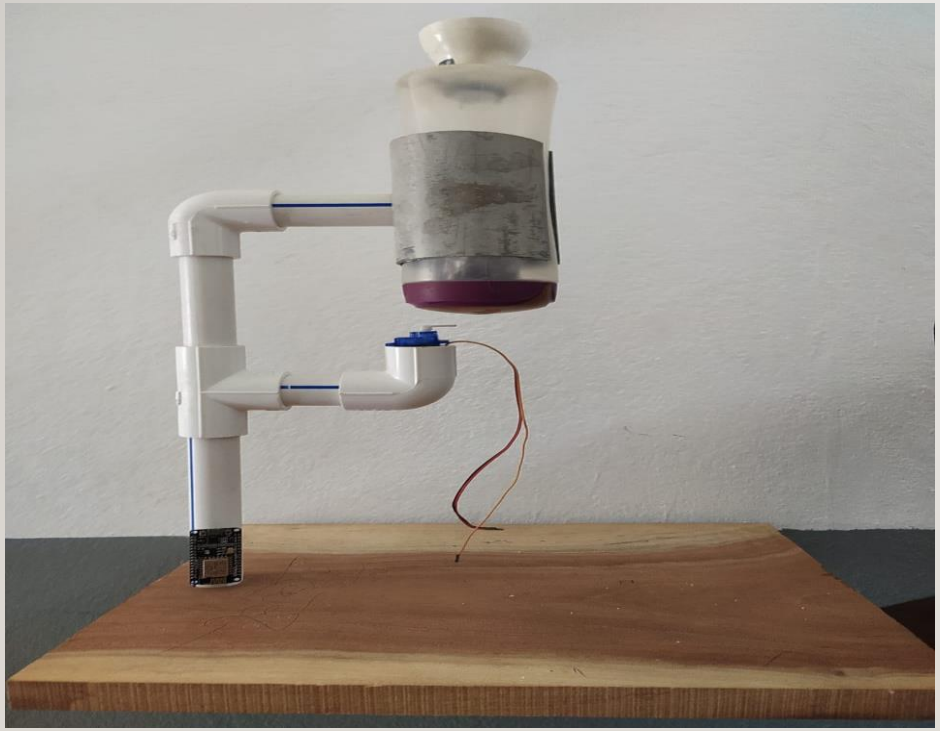
The budget causes for this project is:

- NODE MCU = Rs399
- Servo motor = Rs150
- PVC pipes = Rs200
- And some necessities like cardboard, glue, mobile, power bank, data cable and food dispensing jar which can be available in regular.

REFERENCES

- First we give a signal to the NODE MCU through blynk app, it reaches to the router through wi-fi.
- By this operation the servo motor works and food will be dispensed into the jar for the pet.
- We took reference from some of the websites like IEEE , Google scholar, Elsevier.
- NODE MCU: https://en.m.wikipedia.org/wiki/NodeMCUthe
- SERVO MOTOR :https://en.m.wikipedia.org/wiki/Servomotor

PROTOTYPE MODEL



THANK YOU