Abstract

The implementation of a user-friendly Blynk application is a critical component of this IoT-based technique. This application acts as a conduit for vital data on each of the monitored parameters to be conveyed to the user. Garden enthusiasts can utilize this interface to gain comprehensive insights into the condition of their indoor garden, allowing them to make better informed decisions. The combination of technology and gardening through this IoT framework dramatically improves the practice of indoor gardening. It frees individuals from the constraints of time and distance, creating the path for healthy indoor gardens to develop even in the absence of their caregivers.

Objectives:

 To protect the plant from excess heat, by sensing the temperature and watering the

plants without wasting by checking the moisture in the soil.

 To ensure plant's survival and growth, the elimination of bird activity is being

performed with buzzer sound.

 To ensure plant's survival and growth, the buzzer sound is used to drive away bird

activity.

Proposed System:

 We will use a Blynk application to track sunshine, temperature and bird activity in order to get around the shortcomings of the current system. Plant related information and any bird activity will result in a notification and a beeping alert.

 The proposed system uses ESP8266 WIFI module, ESP32 camera module and Blynk application.

Literature Survey

 This paper includes integrating the NodeMCU (ESP8266) microcontroller as the core component, serving as a unifying element for the entire module. This consolidation incorporates an array of sensors include the temperature sensor, humidity sensor and moisture sensor that are linked to the microcontroller. The integration of these technologies provides a foundation for efficient resource management, enhanced plant growth, and automation.