

PEST CONTROL APP

- Pest Heatmap
- Pest Classification
- NLP on Sentiment Analysis
- IoT for Anomaly Detection
- Recommender on Products
- Carnivorous Plants

IoT Components

Basic Setup Components

- **ESP8266/ESP32**

Description: Wi-Fi-enabled microcontroller for data collection and transmission.

Cost: \$5–\$10

Notes: ESP32 is recommended for better performance and flexibility.

- **DHT22 Sensor**

Description: Measures temperature and humidity.

Cost: \$2–\$4

Notes: For basic use; upgrade to DHT22 (\$5–\$7) for more accuracy.

- **Soil Moisture Sensor**

Description: Detects soil moisture levels (optional for specific pest conditions).

Cost: \$2–\$3

Notes: Useful for environments like farms or gardens.

- **LDR Sensor**

Description: Measures light intensity, which can indicate conditions favorable to some pests.

Cost: \$2–\$3

Notes: Simple and effective for basic light monitoring.

- **Power Source**

Description: USB power adapter or a battery pack.

Cost: \$5–\$15

Notes: Consider a rechargeable battery pack for portability.

- **Breadboard and Wires**

Description: For connecting components.

Cost: \$5

Notes: Include resistors and jumper wires for assembly.

- **IoT Platform**

Description: Platform for visualizing data and alerts (e.g., Thingspeak, Adafruit IO).

Cost: Free–\$10

Notes: Free options are available; paid plans offer more storage and features.