

IOT-BASED LEFTOVER FOOD DONATION SOLUTION

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**WE RISE BY LIFTING
OTHERS.**



-Robert Ingersoll

INTRODUCTION:

Brief overview of the project :

Developed an IoT-based solution to donate leftover food efficiently and effectively.

STEPS TO USE IOT BASED FOOD DONATION PORTAL



Step 1 ●

Food Detection



Step 2 ●

Notification
System (LED
Light)



Step 3 ●

Assistance for
Non-Mobile
Users



Step 4 ●

Web Interface



Step 5 ●

Food Collection

HOW IT WORKS

Step 1: Food Detection

- Place leftover food in a designated box with an ESP8266 microcontroller and ultrasonic sensor.
- If food is detected, data is sent to the server.

HOW IT WORKS (CONT.)

Step 2: Notification System

- The server informs food box indicators with LED lights.
- "If food is available within a 2 km range, the LED turns on; otherwise, it stays off."

HOW IT WORKS (CONT.)

Step 3: Assistance for Non-Mobile Users

- individuals without mobile or internet access can request help from others to check for nearby food availability within a 2 km range.

HOW IT WORKS (CONT.)

Step 4: Web Interface

- A user-friendly web interface displays images, locations, landmarks, contact details, addresses, and descriptions of available food.

HOW IT WORKS (CONT.)

Step 5: Food Collection

- Once food is taken from a box, the LED light turns off, and the data is automatically removed from the website.

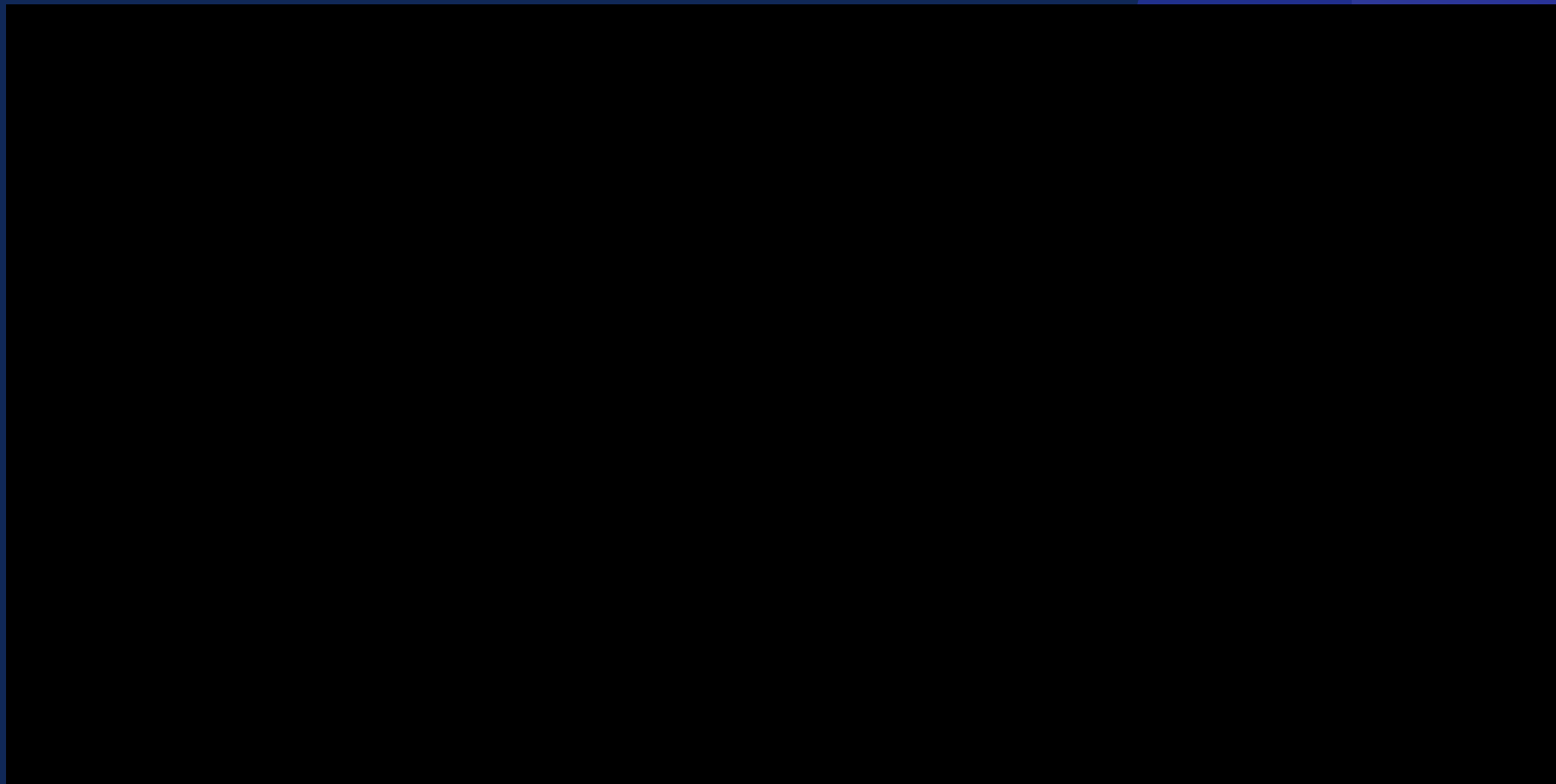
STORY BEHIND THE PROJECT

- Inspired by a documentary on the global food crisis, I decided to create a solution for better food management and distribution
- Approximately 800,000,000 people lack adequate food, and 300,000,000 are children kid

FEATURES OF THE WEBSITE

- **Code Generation:** Generate and paste a code for your food donation box.
- **Location-Based Search:** Search for available food within a 2 km range.
- **User-Friendly Design:** Easy and intuitive interface.
- **Automated Records:** Records generated and maintained by IoT devices.
- **Embedded System Design:** Integration of IoT and web technology for seamless operation.

DEMO



FUTURE ASPIRATIONS

Feeding India

- A non-profit organization that provides meals to people in need across India, with a focus on reducing hunger and malnutrition among underserved communities.

Akshaya Patra Foundation

- A non-profit organization that provides mid-day meals to children studying in government schools and government-aided schools, with the aim of countering malnutrition and supporting the Right to Education.

CONCLUSION

- Continuously enhancing features like using loudspeakers instead of LED lights.
- Integrating AI models to predict the correct amount of food to cook for events.
- Committed to making a difference in food management and distribution.

THANK YOU

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