# IOT-BASED LEFTOVER FOOD DONATION SOLUTION

-- Sandeep Prajapati

#### CONTENTS

- o Introduction
- o How It Works
- o Story Behind the Project
- o Technology Used
- o Features of the Website
- o Future Aspirations
- o Demo
- o Conclusion



## WE RISE BY LIFTING OTHERS.

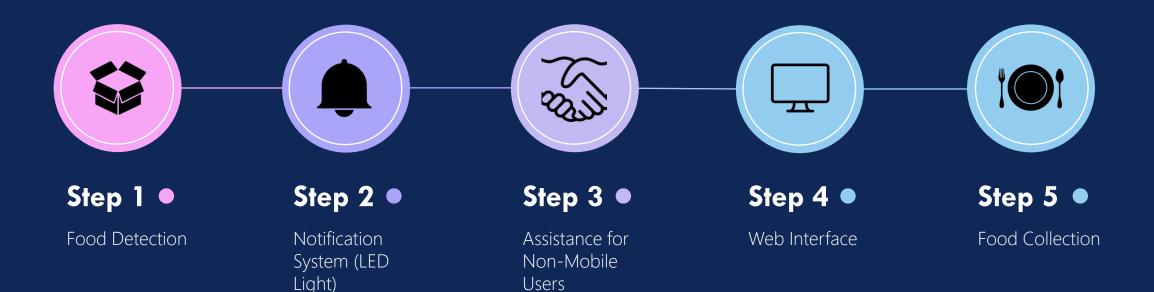
-Robert Ingersoll

## 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



## 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.

#### 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.

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.

#### Step 4: Web Interface

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

#### 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

o 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**

o 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

Sandeep Prajapati

6392424180sandeep@gmail.com

+916392424180

https://x.com/mr\_mark\_of\_ind

<u>https://www.linkedin.com/in/sandeep-prajapati-</u> 391604218<u>/</u>

https://github.com/sandeeep-prajapati/