

PLEDGE TO PROGRESS

Sustainability Hackathon

Sponsored By



Your Team Name : Reborn 2.0

Your team bio : Shriram (Researcher, Hack Enthusiast), Murugesh (Author, Researcher), Ms. Sini Raj (ML/DL Expert), Ms. Subashri (Cloud Expert) and Giri (App development, IoT)

Date : 30th March 2023

Problem Statement?

Why did you decide to solve this Problem statement? – We chose agriculture.



Realtime Perishable Tracking During Transport.



Realtime Crop Disease Identification



User Segment & Pain Points

Which user /advertiser segment would be early adopter of your product & why? – The Farmers!

Real Time Crop Quality Monitoring during Transport

Agriculture produces to the tune of Rs **58,000 crore.**

40% of the total produce

wasted every year in the country.



The reason behind this is **Less Visible supply chain** management and lack of **basic facility to store the foods.**

We let it not to perish.
Quality Monitoring
During Transport.

Pre-Requisite

What are the alternatives/competitive products for the problem you are solving? – Currently there are no many alternatives which are affordable and scalable.

India's farm-produce losses at Rs 92,000 cr, thrice the agriculture budget

Harvest and post-harvest loss of India's major agricultural produce is estimated at Rs 92,651 crore (\$13 billion), according to data published by the ministry of food processing industries.

By: Charlie McHenry | Updated: August 11, 2018 4:27 PM

<https://www.financialexpress.com/economy/>

Key facts about hunger in India

- Largest India is home to the largest undernourished population in the world
- 14.5% of our population is undernourished
- 190.7 million people go hungry everyday
- 1 in 4 children malnourished
- 3,000 children in India die every day from poor diet related illness
- 24% of under-five deaths in India

<https://www.indiafoodbanking.org/hunger>

Bacteria:

- **Listeria** can result in blood poisoning and meningitis, and is usually spread by consuming contaminated raw vegetables, ready-to-eat meals, processed meats, smoked fish or soft cheeses.
- **Cholera** can be caused by consuming food contaminated with *Vibrio cholerae*. It causes watery diarrhoea that can be fatal within hours if left untreated.

<https://www.who.int/foodsafety>

Stats prove that we are heading in right track!

At Source



At Destination



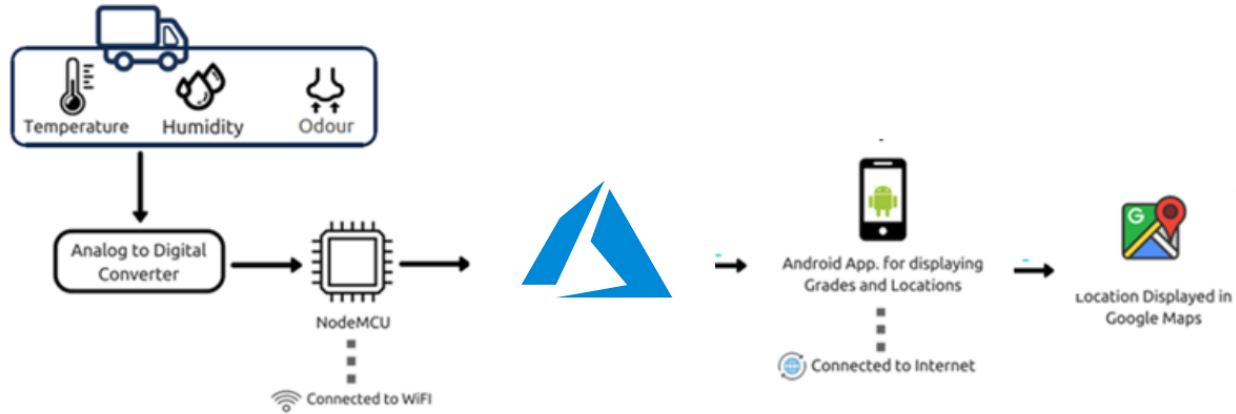
Tools or resources – it's AZUREd!



FOR PERISHABLE DURING TRANSPORTATION



The Architecture



More for the farmers!

Healthy Organic
Crops, AI to rescue!
Real-time crop
disease monitoring.
Insect Identification.

Why us?

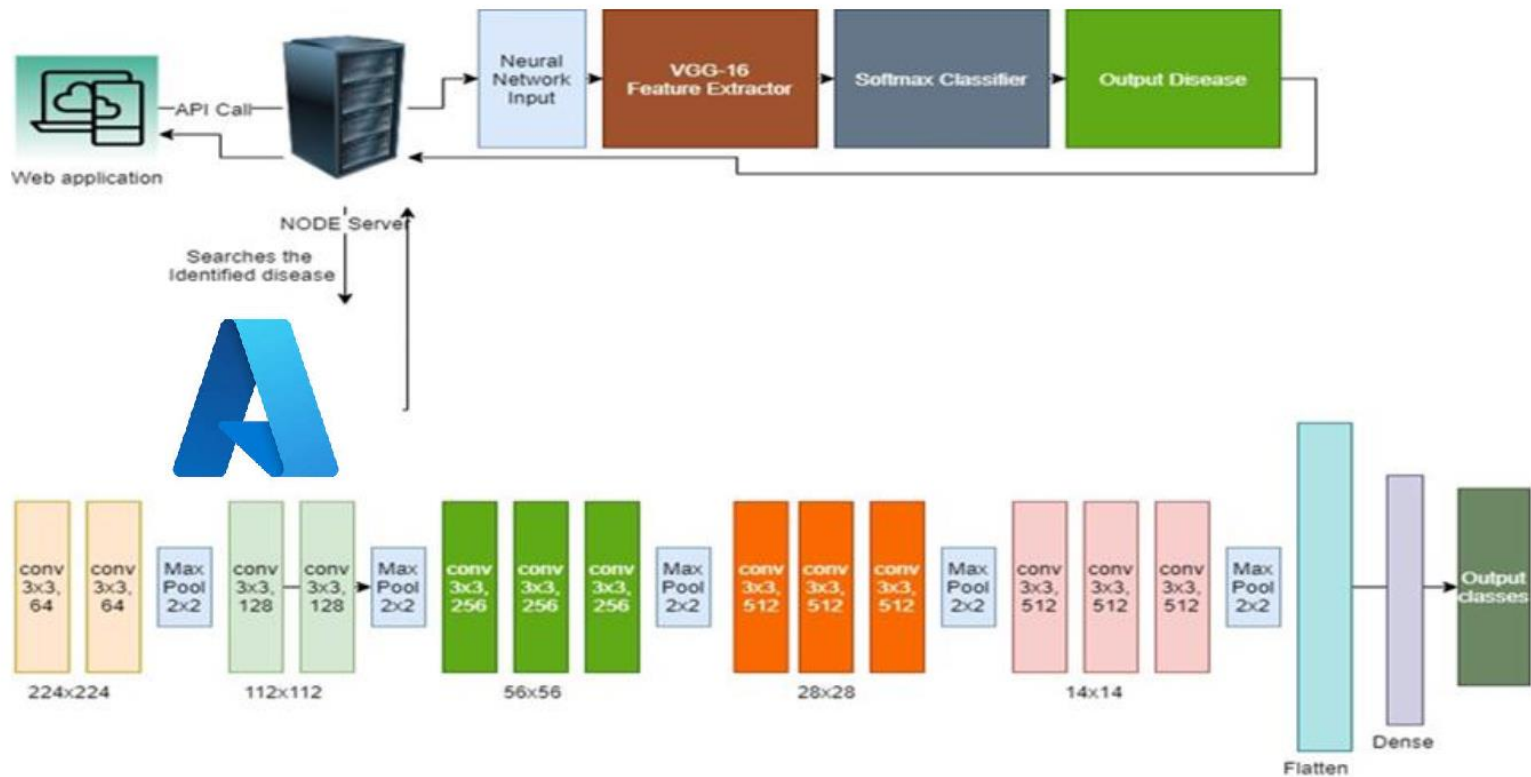
Motivation:

- Difficulty in identifying the diseases of the plants/crops early
- Lack of mechanisms and affordable technologies to detect the diseases
- Leads to hefty loss for the organic farmers and the nation.

Proposed Solution:

- Simple, affordable easy to use Web Application / Android Application to scan and upload the leaf image.
- Immediate real time disease identification with suggestions for the cure.
- Our Model would identify over 30 diseases caused by various reasons such as pests, fungus, algae, etc. affecting a wide variety of crops including food crops, cash crops, horticulture crops, etc. and presents it to the farmers in an easy-to-comprehend manner, etc.
- Real-Time insect / pest identification to increase Farmer awareness!

Architecture



The Summary

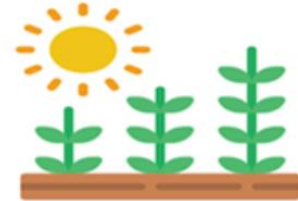
AZUREd Success!



Real Time



**Crop Disease
Identification**



Crop Health



Hygiene



Geo-Tagging



Scalability



Happy Farmer



Web and Android



**Customer
Retention**

TECHGIG

Thank You

Shriram, Murugesh, Sini, Subashri and Giri!

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