Seminar

SEMINAR – 20MCA244

IMAGE RECOGNITION

for

Search and Disease Detection

Submitted By:
N Amal Thomson
Reg. MCA (S4) B
2022 – 2024
Uni. Roll No. AJC22MCA-2065

Project Guide:
Ms. Meera Rose Mathew
Asst. Professor
Department of Computer Application
Amal Jyothi College o Engineering

Image Recognition for Product Search and Disease Detection

FarmConnect is bridging the gap between technology and agriculture by integrating image recognition for search and disease detection. This feature empowers both farmers and buyers, fostering a more informed and connected agricultural ecosystem. The implementation involves integrating advanced image processing algorithms into the platform's Flutter front-end and utilizing Firebase for robust back-end support. The key modules for this implementation include:

1. **Image Search for Product Discovery**
   Buyers can use the image search feature to visually explore and discover specific farm products, improving the overall user experience.

2. **Disease Detection for Crop Health Monitoring:**
   Farmers can upload images of crops to the platform for disease detection. Utilizing machine learning models, the system analyses images to identify potential crop diseases, providing timely and actionable insights to farmers.

Implementation Approach:

Develop and train machine learning models using a diverse dataset of crop images to ensure robust recognition capabilities. Integrate the trained models into the Flutter front-end, allowing seamless interaction with the image recognition features. Utilize Firebase for efficient storage, retrieval, and management of the image data, ensuring scalability and real-time processing.

The integration of image recognition for search and disease detection reinforces FarmConnect's commitment to empowering agricultural commerce through cutting-edge technology, promoting sustainable practices, and improving overall efficiency.

Date: 18/01/2024