

CULTIVATING IDEAS FOR GROWTH

AGRO-VISION



PROJECT OVERVIEW

This platform is a comprehensive solution designed to assist farmers in optimising their crop management practices. By leveraging inputs of nutrient levels (N, P, and K) in the soil, leaf images for disease detection, and live weather information, this system provides valuable recommendations for crop selection, fertiliser application, and disease prevention.

The platform is a valuable tool for farmers of all sizes. It can help farmers to improve their crop yields, reduce their input costs, and protect their crops from pests and diseases. The platform is also a valuable resource for agricultural advisors, who can use it to provide their clients with the best possible advice.



KEY FEATURES

CROP RECOMMENDATION

- THE SYSTEM PROVIDES FARMERS WITH A LIST OF RECOMMENDED CROPS BASED ON N, P, AND K LEVELS IN THE SOIL.
- RECOMMENDATIONS CONSIDER CLIMATE, SEASONALITY, AND MARKET DEMAND.
- THE GOAL IS TO ASSIST FARMERS IN MAKING ECONOMICALLY VIABLE DECISIONS FOR CROP SELECTION.

USER FRIENDLY INTERFACE

- THE INTERFACE ALLOWS EASY INPUT OF SOIL NUTRIENT LEVELS.
- CROP AND FERTILISER RECOMMENDATIONS ARE DISPLAYED CLEARLY.



Fertiliser Recommendation:

- The system suggests appropriate fertiliser formulations or blends to address nutrient deficiencies in the soil.
- Recommendations consider the nutrient requirements of the recommended crops.
- Precise dosage guidelines are provided for optimal fertiliser application.



LIVE WEATHER INFORMATION:

THE PLATFORM INTEGRATES REAL-TIME WEATHER DATA TO PROVIDE FARMERS WITH UP-TO-DATE INFORMATION ON TEMPERATURE, HUMIDITY, RAINFALL, AND WIND CONDITIONS.

FARMERS CAN ACCESS THIS INFORMATION WITHIN THE PLATFORM, ALLOWING THEM TO MAKE INFORMED DECISIONS ABOUT THEIR CROP MANAGEMENT PRACTICES.



DISEASE PREDICTION

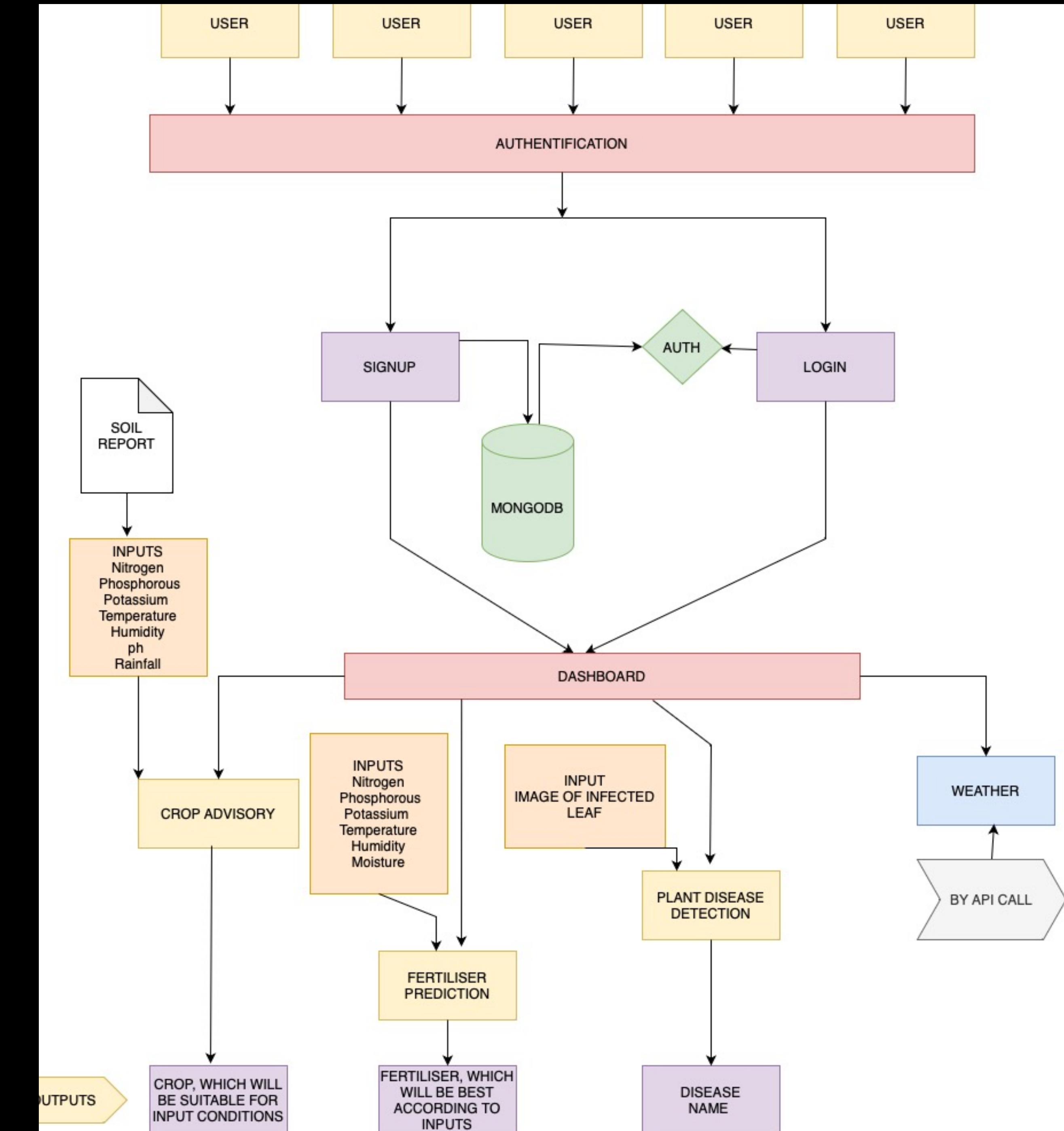
FROM IMAGES OF LEAFS

FEATURE:

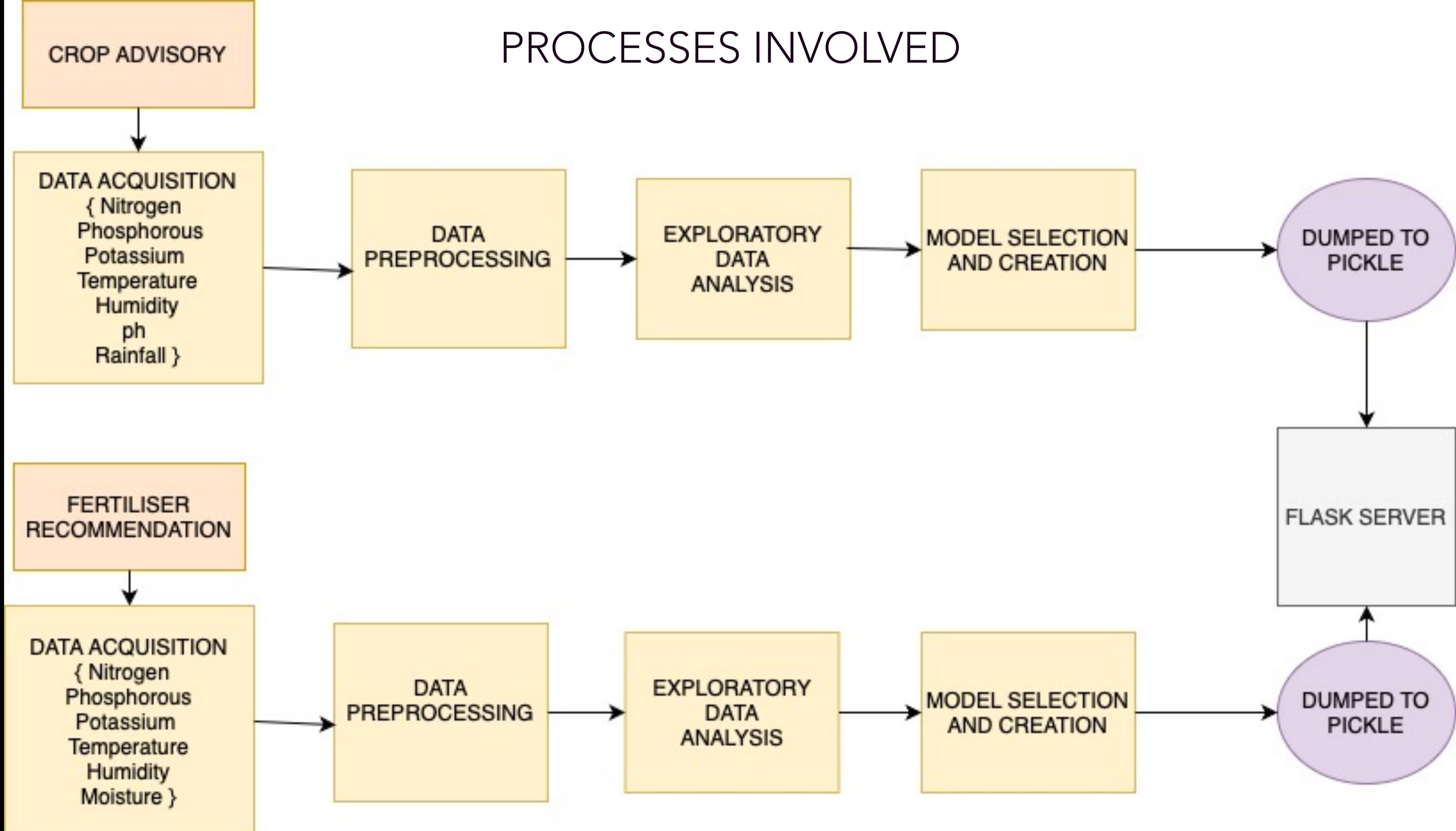
- The platform incorporates advanced image analysis techniques and deep learning algorithms to predict diseases from images of crop leaves.
- Farmers can capture images of affected leaves using a smartphone or a camera and upload them to the platform.
- The system analyzes the leaf images, extracting relevant features and patterns associated with different diseases. and predict which disease is affecting the plant



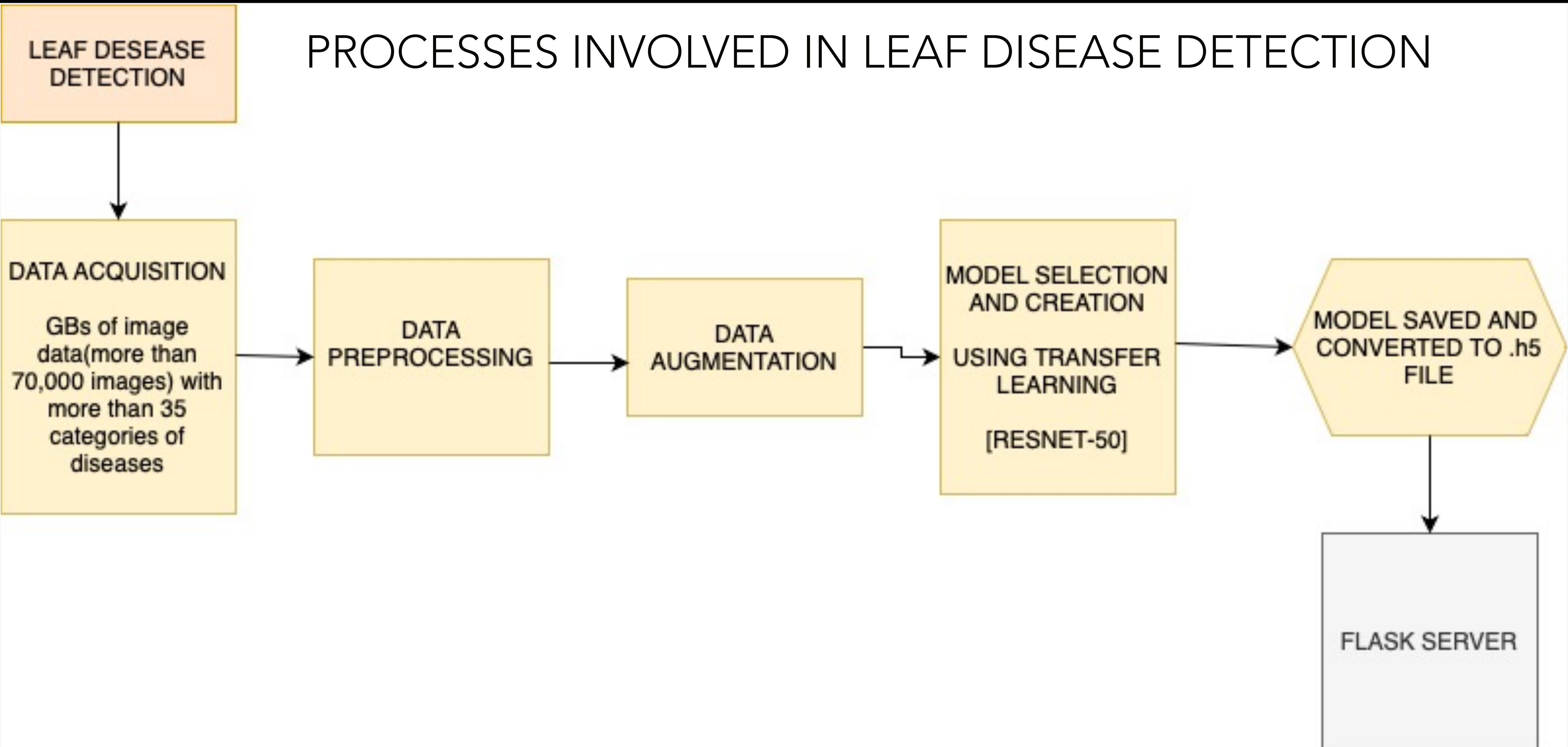
FLOW-DIAGRAM



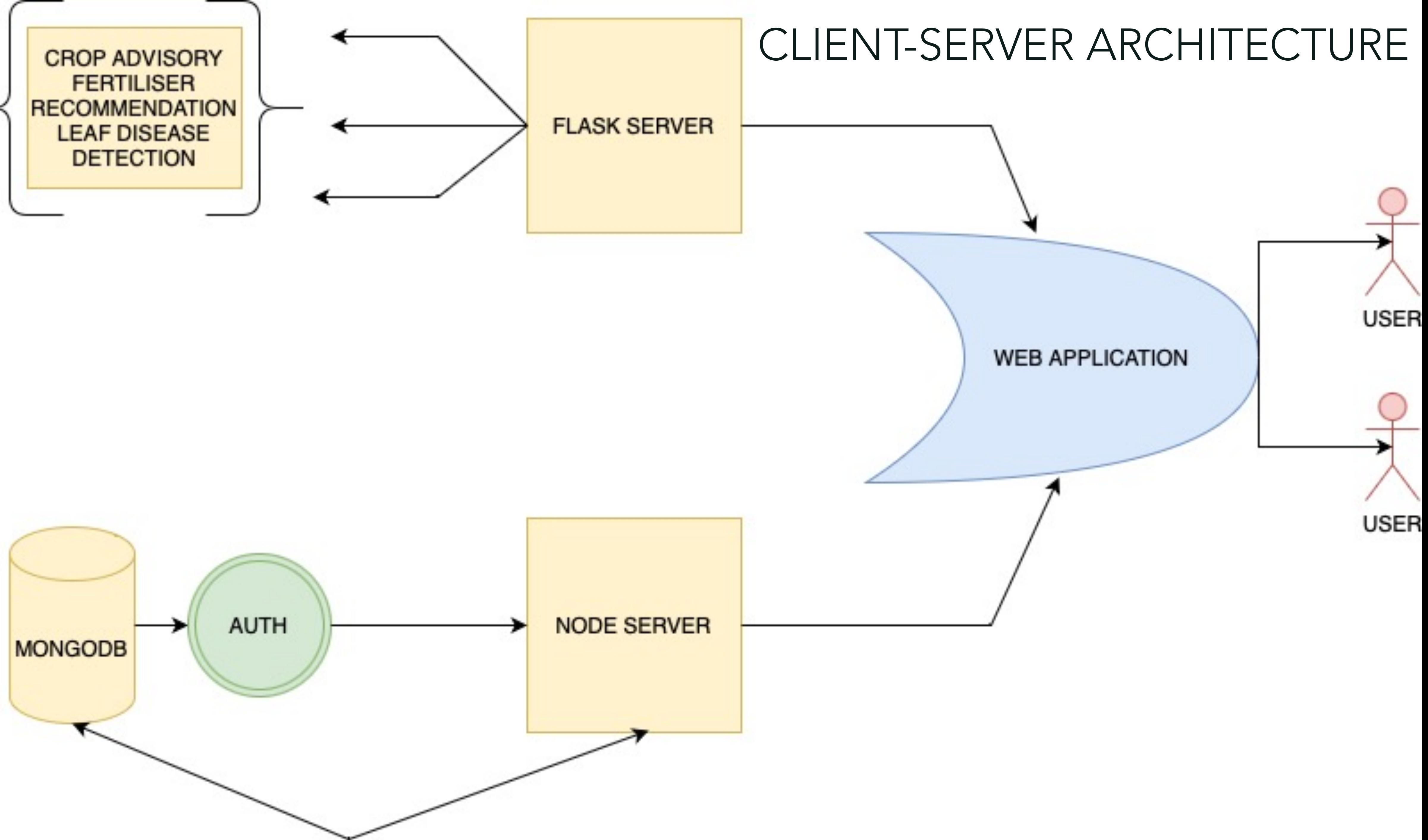
PROCESSES INVOLVED



PROCESSES INVOLVED IN LEAF DISEASE DETECTION



CLIENT-SERVER ARCHITECTURE



TECH-USED

FRONT-END:

HTML , CSS , JAVASCRIPT , REACTJS

DATABASE:

MONGODB

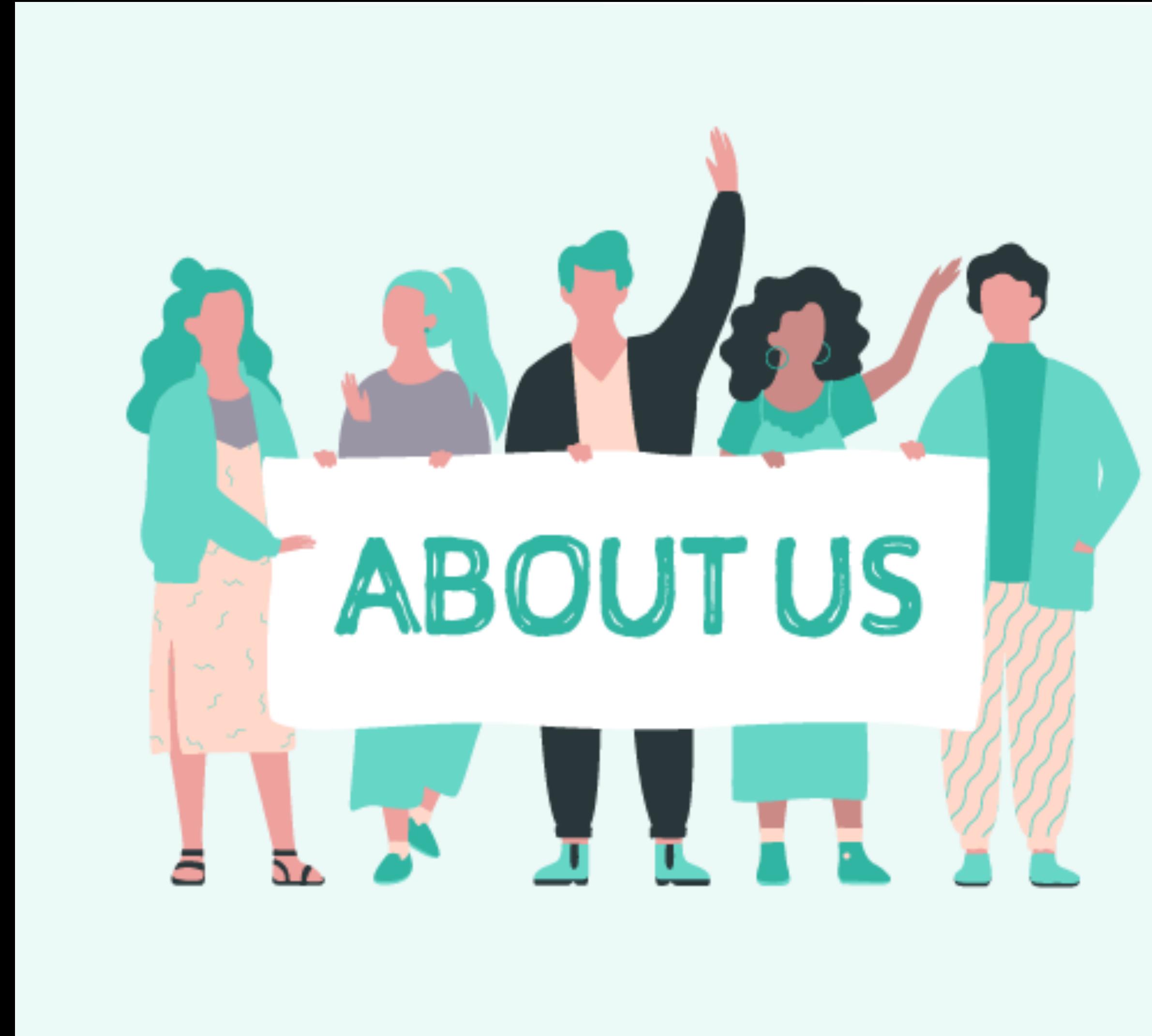
BACK-END:

FLASK ,
NODEJS ,EXPRESS.JS ,MACHINE
LEARNING, DEEP LEARNING ,PYTHON



ABOUT US

Welcome to our team, a dynamic group of talented individuals who are passionate about combining the power of machine learning and web development to create innovative solutions. With expertise in both fields, we have come together to deliver cutting-edge projects that leverage the latest technologies and address real-world challenges.





THANK YOU

