



Basic Details of the Team and Problem Statement

Ministry/Organization Name: **Ministry of Micro, Small and Medium Enterprises**

PS Code: **SIH1401**

Problem Statement Title: **App-Based Solution to identify and solve disease in plants/crops**

Team Name: **Hack-Atheletes**

Team Leader Name: **Priyanshu Raj**

Institute Code (AISHE):

Institute Name: **Galgotias University**

Theme Name: **Agriculture, FoodTech & Rural Development**

Idea/Approach Details

Problem Statement

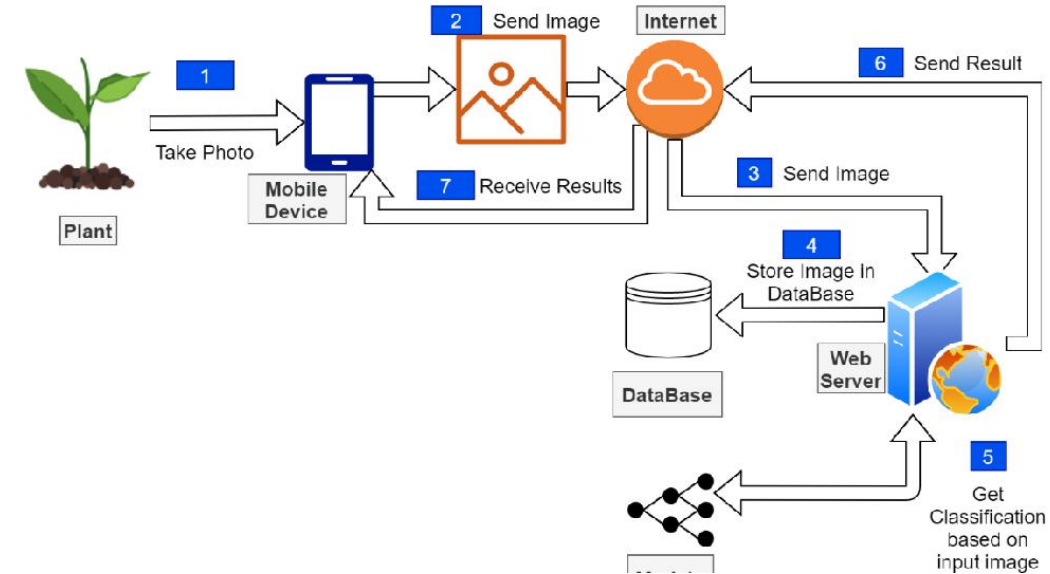
App-Based Solution to identify and solve disease in plants/crops.

Solution

Our app leverages image recognition and AI to swiftly detect and diagnose diseases in plants/crops. Users simply take a photo, and the app provides instant insights and actionable recommendations for treatment, enabling early intervention and improved crop health.

Features of Our Platform

1. Early disease detection
2. High accuracy
3. Real-time monitoring
4. User-friendly interface
5. Data analytics for insights

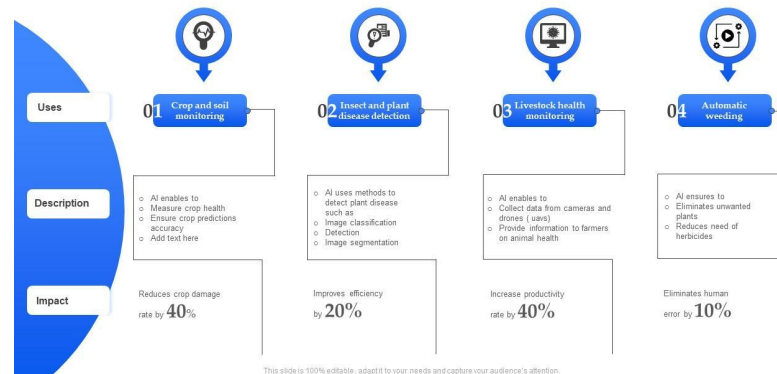


Technology stack :

- **Artificial Intelligence - Machine Learning:** sci-kit learn, TensorFlow, Keras, and NLTK
- **Data Set:** Kaggle, Google Colab(IDE)
- **MERN Stack - Front End:** React Js, UI/UX
- **Back End:** Node.JS, Express.JS
- **Data Science:** Pandas, NumPy, Python

Use of artificial intelligence (AI) in agriculture to increase efficiency

This slide covers use of artificial intelligence in agriculture to increase efficiency. It involves crop and soil monitoring, insect and plant disease detection, livestock health monitoring and automatic weeding.



Idea/Approach Details

Use Cases

- Our solution for identifying and solving diseases in plants and crops has found practical applications across various real-world scenarios, making a tangible impact in the agriculture sector.
- **Farmers** have embraced this technology to proactively identify diseases, enabling them to take timely actions and save their crops from devastation. Agricultural consultants and extension workers utilize our app to provide **on-the-spot recommendations** to farmers during field visits, enhancing their advisory services.
- **Agribusinesses** leverage our solution to ensure the quality of their produce, preventing outbreaks from damaging their supply chain in modern agriculture, promoting **sustainable farming practices** and **increasing** overall **crop yields**.

Describe your Dependencies / Show stopper here

- The successful implementation of a crop and plant disease detection system hinges on several critical dependencies and potential showstoppers.
- Firstly, **data quality** and **quantity** are paramount; without robust and diverse datasets of diseased plants, the **accuracy** and **reliability** of the detection system may be compromised.
- Additionally, the effectiveness of the system is highly dependent on **cutting-edge technology**, such as AI and ML, which is easy to use.
- Addressing these dependencies is essential to ensure the successful deployment and utility of crop and plant disease detection solutions to farmers.

Team Member Details

Team Leader Name: Priyanshu Raj

B.Tech CSE Year II

Team Member 1 Name: Aastha Bajaj

B.Tech CSE Year II

Team Member 2 Name: Roshni Kumari

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Team Member 3 Name: Kalta Rawal

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Team Member 4 Name: Sakshi kumari

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Team Member 5 Name: Himmanshu

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*Thank
you!*