

## **PROJECT TOPIC: Cotton Disease Prediction**

**CSE Group No.:95** 

#### **Project Group Members:**

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**Objective:** The Purpose is to generate accurate and timely forecasts of potential disease outbreaks in cotton crops. Farmers can then take precautionary measures, such as adjusting irrigation or applying fungicides, resulting in lower crop losses and a more stable and reliable cotton supply. This technology contributes to the sustainability of the textile industry and improves the livelihoods of cotton farmers by reducing the impact of disease on cotton crops. Early detection of disease outbreaks can also lead to more effective management strategies, reducing the need for expensive and environmentally damaging interventions.

## **Tools required:**

# > Hardware Requirements:

Processor: Intel /AMD

• RAM: Up to 8 GB

• Hardware devices: Mobile, Laptop

Hardisk: 8 GB

Display: 6-inch,14 inch

#### > Software Requirements:

Deep Learning – Renset 50, Python, TensorFlow

User Interface Design: HTML, CSS & BOOTSTRAP

Web Browser: Google Chrome

Computing Platform - Spyder, Google Collab

**Abstract:** Cotton disease prediction is an important aspect of sustainable agriculture because it helps farmers reduce crop losses and ensure a steady supply of cotton. By analyzing various data sources such as weather patterns, soil moisture levels, and disease incidence in nearby areas, models can accurately forecast potential disease outbreaks. Farmers can use this information to implement more effective management strategies and preventative measures, reducing the need for costly and environmentally damaging interventions. Overall, cotton disease prediction helps to ensure the textile industry's long-term viability and improves cotton farmers' livelihoods.



# **Outcome:**





