

## MODERN PLANTATION HOUSE

In recent years, technological advancements have made it possible to enhance agricultural productivity and safety through automated systems. Our project focuses on developing a modern plantation system incorporating fire detection and soil moisture monitoring to optimize crop growth and protect against potential hazards. This system utilizes a flame sensor to detect fire incidents, triggering a buzzer and activating a water pump to extinguish the fire. Additionally, a humidity sensor monitors soil moisture levels, and when dryness is detected, the water pump is activated to irrigate the soil. This integrated approach not only ensures optimal growing conditions but also enhances safety measures on the plantation. Our project aims to demonstrate the efficiency and reliability of such a system in a modern agricultural setup, paving the way for smarter farming practices.