## SMART CATTLE MANAGEMENT SYSTEM

# **Abstract:**

The Smart Cattle Management System is an innovative solution designed to enhance the efficiency and well-being of cattle farming operations. Leveraging advanced technologies such as Arduino boards, GPS modules, automatic doors, and fire alarms, the system provides comprehensive monitoring and automation for improved cattle management.

### HARDWARE REQUIREMENTS

- → Arduino Board
- → GPS Module
- → Sensors [Motion Sensors PIR), RFID (Radio-Frequency Identification)]
- → Actuators [servo motors, DC motors]
- → Fire Alarm System Components (Optional)

## SOFTWARE REQUIREMENTS

- → Arduino IDE
- → GPS Module Libraries
- → Programming Language [Embedded Python]

#### **MODULES**

- → GPS Module
- → Environmental Monitoring Module
- → Automatic Doors Module
- → Fire Alarm Module (Optional)

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