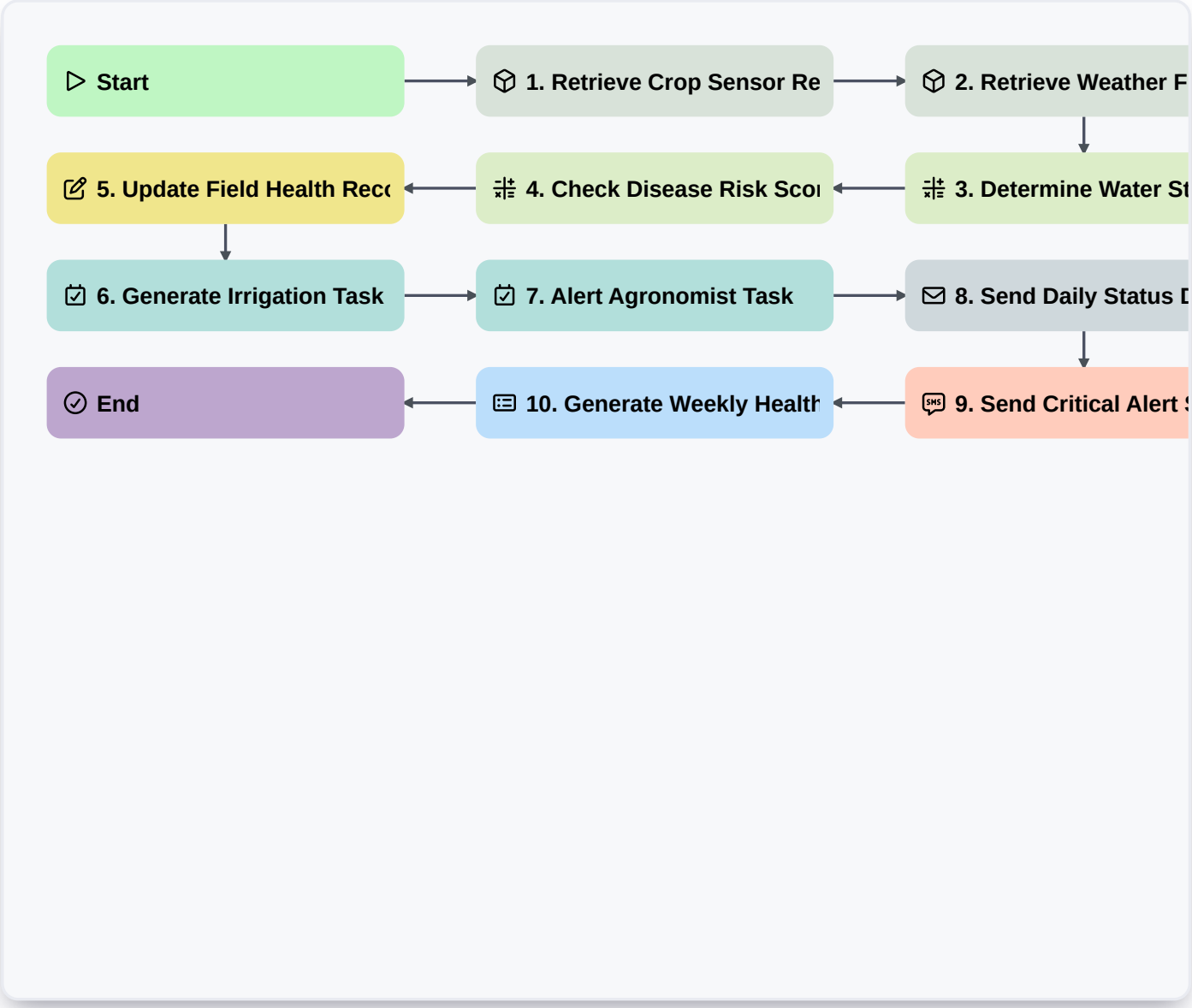
ChecklistGuro

Automated Crop Health Monitoring Workflow | Agriculture Management



Start
Start of the Workflow/Process.

1. Retrieve Crop Sensor Readings
Fetch current sensor data (soil moisture, temperature, humidity) for targeted fields.

2. Retrieve Weather Forecast Data
Get localized, real-time weather data inputs (rainfall, evapotranspiration).

3. Determine Water Stress Index
Calculate the current water stress level using sensor data and evapotranspiration rates.

4. Check Disease Risk Score
Run a formula based on temperature, humidity, and leaf wetness to calculate potential disease risk.

5. Update Field Health Record
Update the master field record with the calculated stress index and risk score.

6. Generate Irrigation Task
Create a maintenance task for irrigation adjustment if the water stress index is below threshold.

7. Alert Agronomist Task
Create a high-priority task for the agronomist if the disease risk score exceeds the alert threshold.

8. Send Daily Status Digest Email
Send an automated email summary of all checked fields and actionable alerts to farm managers.

9. Send Critical Alert SMS
Send an immediate SMS notification for critical readings (e.g., extreme heat or confirmed blight).

10. Generate Weekly Health Report
Compile all daily readings and actions into a consolidated, downloadable PDF report for compliance.

End
Start of the Workflow/Process.