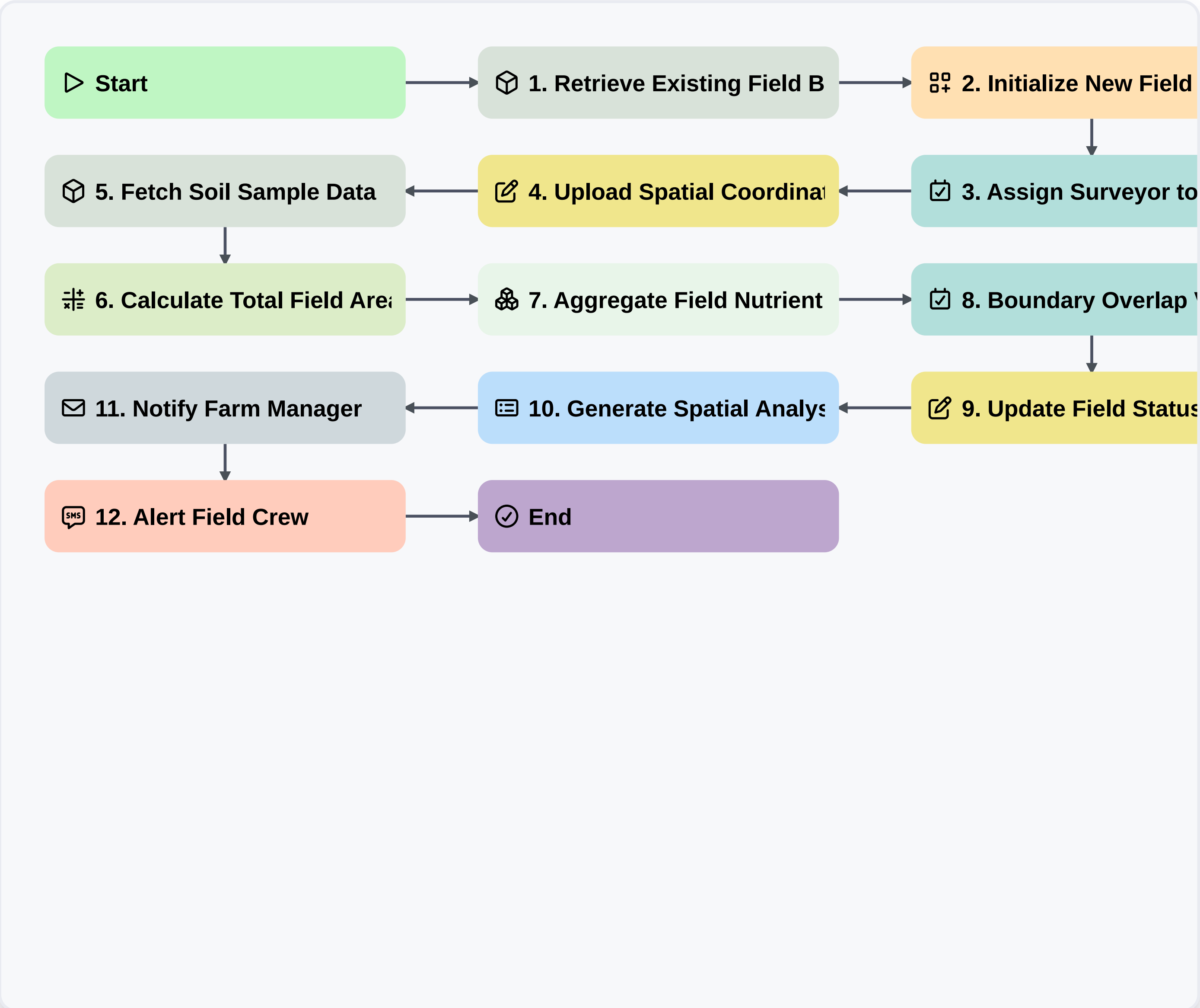
ChecklistGuro

Farm Field Mapping And Spatial Data Management Process



Start
Start of the Workflow/Process.

1. Retrieve Existing Field Boundaries
Fetch all previously mapped field polygons from the Field Data Model to check for overlaps.

2. Initialize New Field Record
Create a new entry in the Field Data Model to represent the newly identified area being mapped.

3. Assign Surveyor to Field Site
Create a task for a field technician to perform the physical GPS/GNSS boundary traversal.

4. Upload Spatial Coordinates
Update the newly created field entry with the precise GPS coordinates and boundary geometry captured.

5. Fetch Soil Sample Data
Retrieve existing soil nutrient and moisture data associated with the specific field coordinates.

6. Calculate Total Field Area
Execute a formula to calculate the area in hectares based on the polygon geometry data.

7. Aggregate Field Nutrient Levels
Calculate the average Nitrogen, Phosphorus, and Potassium levels from all soil samples within the field boundaries.

8. Boundary Overlap Verification
Create a task for the GIS Analyst to verify that the new field boundary does not intersect with existing registered properties.

9. Update Field Status to 'Verified'
Update the status field of the Field Entry from 'Draft' to 'Verified' once spatial checks are complete.

10. Generate Spatial Analysis Report
Create a comprehensive report containing the field area, soil aggregates, and boundary imagery for stakeholder review.

11. Notify Farm Manager
Send an email to the Farm Manager with the generated report and the updated field specifications.

12. Alert Field Crew
Send an SMS to the field crew notifying them that the new field map is ready for physical marking/flagging.

End
End of the Workflow/Process.