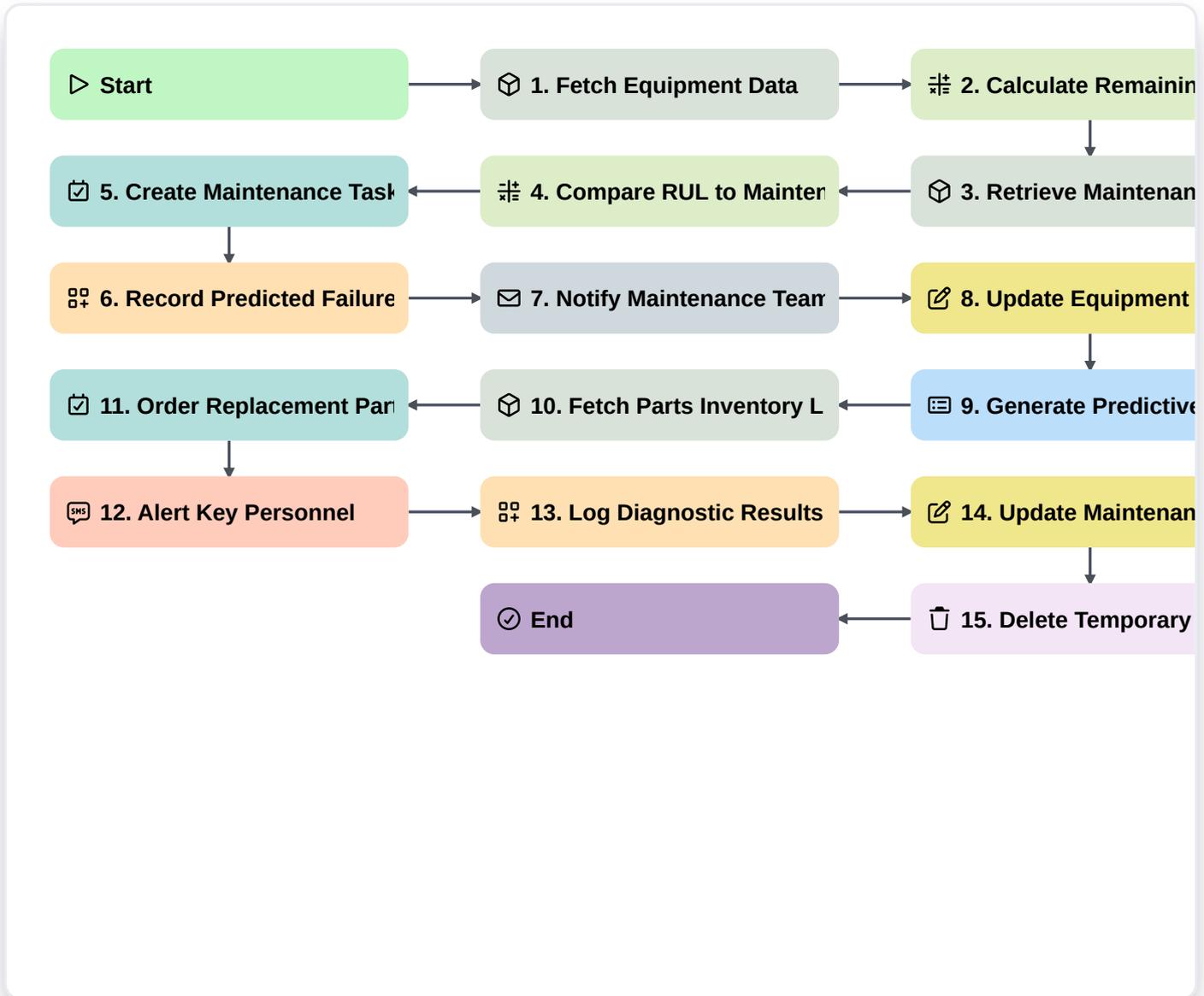


Predictive Equipment Maintenance Workflow



Start

Start of the Workflow/Process.

1. Fetch Equipment Data

Retrieve latest sensor readings and maintenance history for selected equipment.

2. Calculate Remaining Useful Life (RUL)

Calculate the estimated RUL based on sensor data and degradation models.

3. Retrieve Maintenance Schedules

Fetch scheduled maintenance tasks and due dates for the equipment.

4. Compare RUL to Maintenance Threshold

Determine if the RUL is approaching a predefined maintenance threshold.

5. Create Maintenance Task

Automatically create a maintenance task if RUL is below threshold.

6. Record Predicted Failure Entry

Create an entry documenting the predicted failure and associated data.

 **7. Notify Maintenance Team**

Send email notification to the maintenance team about predicted failure.

 **8. Update Equipment Status**

Update the equipment status to 'Predicted Failure' in the equipment data model.

 **9. Generate Predictive Maintenance Report**

Generate a report summarizing the predicted failure, RUL, and associated data.

 **10. Fetch Parts Inventory Levels**

Retrieve current inventory levels for necessary replacement parts.

 **11. Order Replacement Parts**

Automatically create a task to order necessary replacement parts.

 **12. Alert Key Personnel**

Send SMS alert to key personnel about the predicted failure.

 **13. Log Diagnostic Results**

Create an entry for diagnostic results performed before maintenance.

 **14. Update Maintenance Task Status**

Update the maintenance task status upon completion.

 **15. Delete Temporary Diagnostic Entries**

Delete temporary diagnostic entries after maintenance.

 **End**

Start of the Workflow/Process.