## **Step 3: Plan the Solution (Design the Algorithm)**

## Algorithm

Start the system and load the schedule.

Check the current time using the real-time clock.

If the time matches the feeding schedule, check the food.

If the food bin is empty, send an alert and skip feeding.

If the food bin has food, rotate the motor to dispense a portion.

Check the motor status. If it is jammed, send an alert.

After dispensing, check the bowl weight:

If it remains unchanged after 10 minutes, send an alert about the pet not eating.

Otherwise, mark feeding as successful.

Return to idle state until the next scheduled feeding.

Flowchart

