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

**Algorithm**

Here’s the decision logic in plain steps:

1. System Start
2. Load feeding schedule (e.g., 08:00, 18:00)
3. Continuously check the current time
4. If current time matches a schedules fedding time
   * Check food level sensor:
     + - If food container empty → Send Alert: “Food Container Empty”.
       - Else:
         1. Rotate servo motor to dispense required portion
         2. Recoed bowl weight before and after dispensing
         3. If no weight change → Send Alert: “Dispense Faiilure”
         4. Wait 10 minutes
         5. Check if bowl weight decreased significantly:

If Yes → Pet has eaten, return to monitoring

If No → Send Alert: “Pet has not eaten”

1. Loop back and keep checking untill next feeding time

**FlowChart**

