**Simple sketch of the system:**

Start → Input Real Time

IF Current time != feeding time ( 8 AM or 6 PM) → display “not feeding time”, continue loop

ELSE identify pet profile ( type of pet, size)

Calculate amount of required food

Check if food is sufficient or not ?

No: trigger alert “ low food supply” → end

Yes: continue activate dispenser motor

Dispend to correct bowl

Check if dispensing was successful

No: trigger alert → end

Yes: continue

Read weight sensor → Wait 15 mins → compare initial weight with final weight

IF initial = final → alert → end

IF initial > final → collect data → display → end