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

* **Create decision logic for dispensing food (e.g., “At 8AM and 6PM, rotate servo to dispense food”).**

▶ **IF current time is 8:00 AM, 12:00 PM, or 6:00 PM**

AND food storage ≥ 150g

AND bowl weight < 7g

THEN

→ Dispense food

- 8:00 AM: 100g

- 12:00 PM / 6:00 PM: 150g

→ Measure and log the actual amount dispensed

→ Start a 20-minute timer to check food consumption

ELSE

→ Send an alert based on the failed condition

* **Add logic to detect errors (e.g., “If bowl weight unchanged 10 mins after feeding, send alert”).**

▶ **IF bowl weight ‘> 7g’ before feeding**

THEN

→ Send alert: "Food not consumed"

**IF food was dispensed**

AND bowl weight remains ‘> 7g’ after 20 minutes

THEN

→ Send alert: "Food not consumed"

**IF feeder status is not normal**

THEN

→ Send alert: "Feeder out of order"

**IF battery level is less than 10%**

THEN

→ Send alert: "Battery replacement required"

**IF current time is 7:50 AM, 11:50 AM, or 5:50 PM**

AND food storage < 150g

THEN

→ Send alert: "Need to fill up the food before feeding"

* **You must create a flowchart to represent your algorithm using Draw.io.**
* **Follow the instructions shown in the appendix of this assignment.**

Deliverable: A flowchart representing your automated pet feeder logic (exported from Draw.io and included in your assignment report). You must also include in your submission the actual Draw.io file.