

Step 4:

Coding

Feeding_time= "08:00"

Bowl_weight=500

Current_time=input("Enter current time (HH:MM)")

If current_time==feeding_time:

 Initial_weight= int (input ("Enter bowl weight before feeding;"))

 New_weight=int (input ("Enter bowl weight after feeding;"))

If initial_weight!=new_weight:

 Print(" Feeding successful.")

Else;

 Print(" send alert; bowl weight has not changed!")

Else;

 Print("Activate sensor: Not feeding time yet.")

Step: 5

Testing and refining the solutions

Test:

- Check dispenser, if there is no food send an alert.
- Check dispenser, if there is food dispense the food.
- Check weight of the bowl, if weight is not changed after 10 minutes send an alert.
- Check weight of the bowl, if weight is changed log the feeding.

Refinements:

- Creating a simple dashboard for staff to monitor feeding and alerts.
- Planning for pet identification using camera based tracking.
- Adding options like manual feeding and backup power alerts.