# Step 1: Understand and Define the Problem (Analyse)

At specific times the feeder will dispense food for cats and dogs. Will alert staff if there’s been no consumption (as the system will monitor consumption) or if the machine has malfunctioned and not dispensed at all.  
  
  
Limitations:  
Only 2 schedules (For cat and dog).  
Memory stores last 12 feeding logs  
Each feeder dispenses 1 type of pet food (can be duplicated to accommodate other species of pet).  
Clock with current time  
Sensors will consist of load cell, rotation tick, hopper level switch  
For alert to be received, a network service must be available for staff.  
Attempt to dispense 3 times then alert staff.  
  
  
  
  
  
  
How system is supposed to operate:

