# Step 3: Plan the Solution

## Draw.io Flowchart

## Initialise system

- Schedule and clock setup

## Is it feeding time (step 2)

 This is a decision, if current time matches a scheduled feeding time.

## Wait for next cycle

 This delays the loop by revisiting step 2 until step 2 is false (here the loop continues until the condition that keeps it looping becomes false). PSA I learnt this is python for while loops/conditional repetition but not sure if it applies here as well.

#### Is food storage tank empty?

This is a decision/ Boolean expression, to verify there's enough dry kibble

## Alert staff: food tank empty

This is an output, alerting staff to refill the tank

#### Wait for 10 minutes

- This is a timer to allow time for the pet to eat before assessing the bowl

#### is bowl weight unchanged?

- This is another decision/ Boolean expression, by checking weight, if then before (true) or same as before (false)

#### Alert staff: food uneaten

- This is an output, alerting staff to check animal well-being.

## Log uneaten feeding/successful feeding

- This an input/ a event log. This is required so system can distinguish between different feeding times, E.g., breakfast vs lunch.

#### End of cycle

- This is led by the log, it marks an end of a cycle (breakfast) so it can successfully move on to next cycle by looping back to step 2.

