**PART 1: On the Solving Problem Process**

**Create decision logic for dispensing food.**

1. Check Current Time.

* IF the time matches to any of the stored schedule for feeding time, then go Step number 2.
* ELSE continue to monitor time.

1. Check Bowl Status.

* IF the bowl is empty, then alert the staff member to fill the Bowl according to Bowl Portion.
* ELSE Proceed to next Step.

1. Activate Motor to Dispense Food.

* Run motor for the calculated time only.
* Log “Food Dispensed [portion] at [time]”.

1. Checking Post Dispense Food.

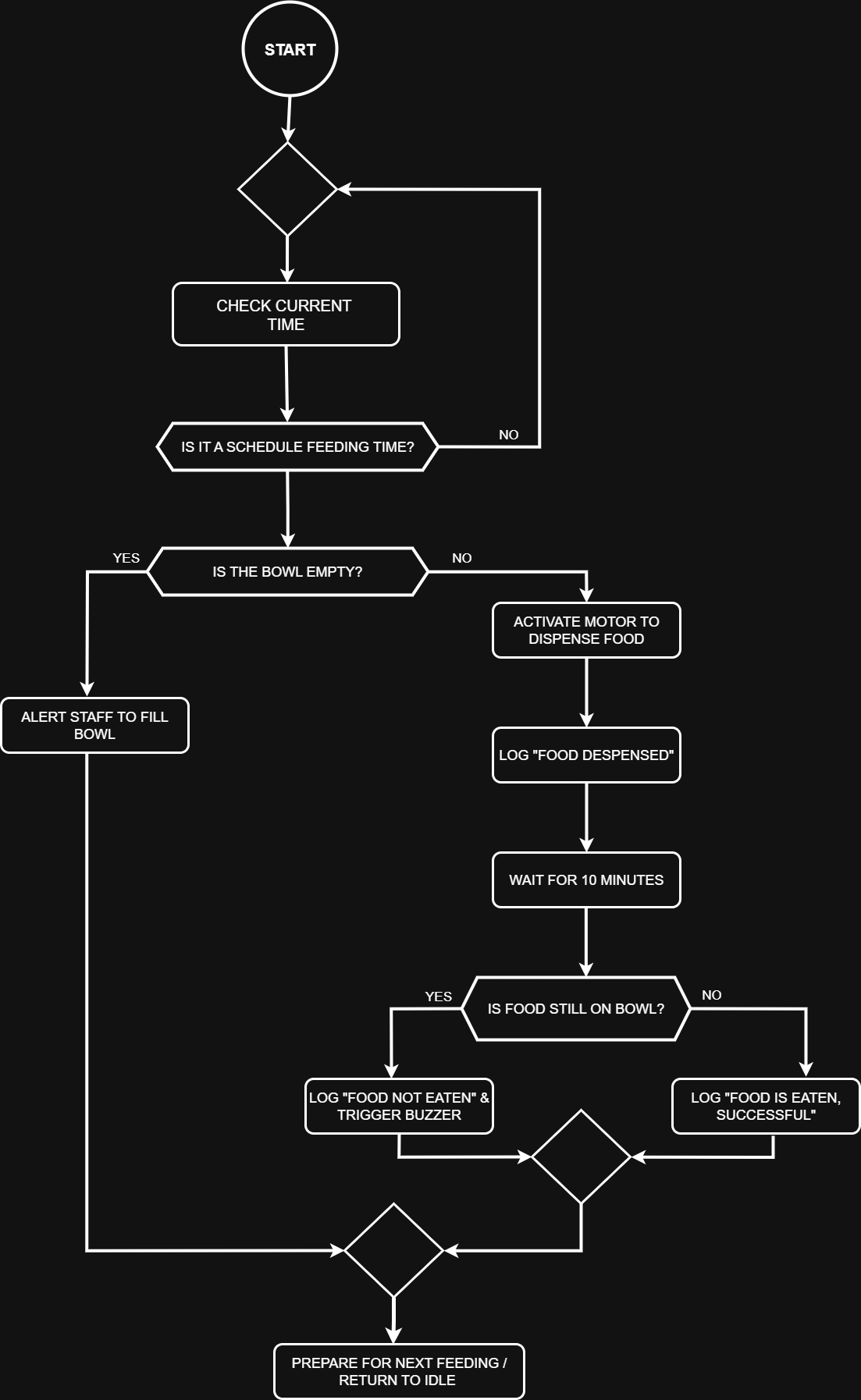
* Wait for 10 minutes.
* IF bowls still has food in it. Then Log “Food not Eaten – Alert Staff” and Trigger Buzzer
* ELSE, Log “Food is Eaten, Feeding successful”.

1. Prepare For Next Feeding

* Update the Status Display for next feed time.
* Return system back to Idle Mode.Errors Covered:

**Dispense Failure** – Food not released into bowl despite motor running.

**Food Not Eaten** – Pet did not consume food within allowed time.

**The algorithm using Draw.io. **