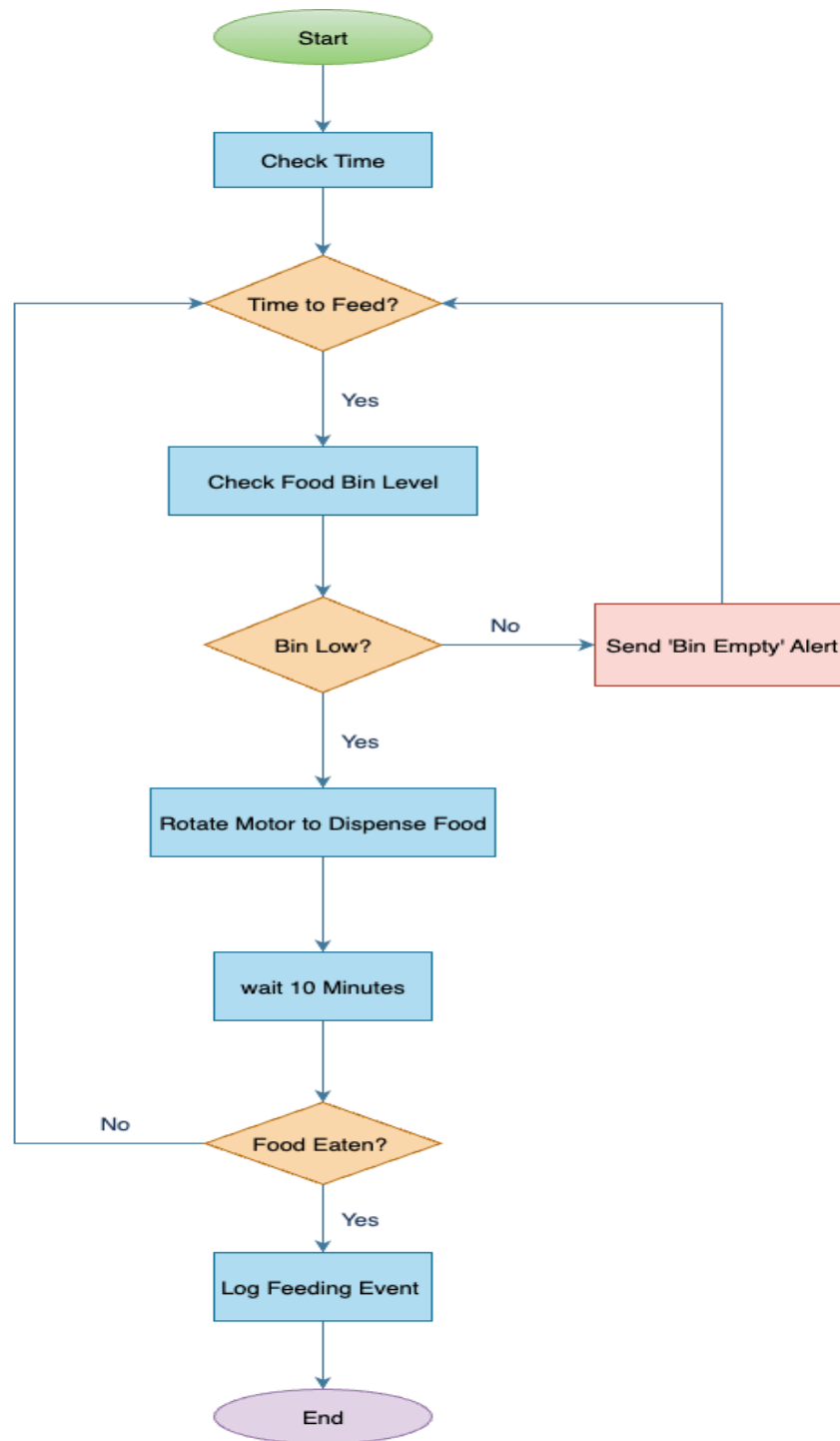


## Part 1 – Problem-Solving Process

### Step 3 – Algorithm Design (Flowchart)

#### Flowchart Description:

1. **Start** – System ON.
2. **Check Time** – Compare RTC with feeding schedule.
3. If time matches feeding schedule → **Check Food Bin Level**.
  - If low → Send “Bin Empty” Alert.
  - Else → Rotate motor to dispense food.
4. **Wait 10 minutes** → Check bowl weight change.
  - If change  $\geq$  expected threshold → Log “Fed Successfully”.
  - If no change → Send “Food Not Eaten” Alert.
5. **Return to Idle** until next scheduled time.
6. **End**.



*Figure 1: Flow Chart*