**Step 3:** **Plan the Solution (Design the Algorithm)**

**Algorithm:**

IF Feeding Time:{

Check current time.

IF{ current time matches any scheduled times:   
  - IF { food level sensor detects food available == TRUE:   
    - Activate servo to dispense set portion.   
    - Wait 10 minutes.   
    - IF bowl weight has increased:   
      - Feeding successful. }  
    - ELSE: {  
      - Trigger alert (“Food not dispensed or pet not eating”). } }  
  - ELSE: {  
    - Trigger alert (“Low Food Level”). }

Show next feed time and current food level on display. }

-ELSE:{

Show next feed time and current food level on display.

}

**Flowchart:** 