

Automated Pet Feeder

Step 1: Understand and Define the Problem (Analyse)

A local animal owner is seeking a low-cost, easy-to-use, programmable automated pet feeder.

Features to include in automated pet feeder:-

- Scheduled feeding times for the pet.
- Alert system to alert the staff if there is an issue.
- Monitor food level in the bowl.
- Simple control logic for ease of implementation.

Inputs:- real-time clock, weight sensor for pet bowl, food level sensor(for the food in the feeder)

Outputs:- servo motor, alert system, and Logs/display

Assumptions and limitations:-

- Only one type of food.
- Feeder can store limited food.
- The feeder can only store dry food, not wet food.
- Limited memory.

Block diagram of the system:-

