Data Table(Step 2)

The following table summarizes the inputs, outputs, sample values, and operational constraints of the system:

Type	Component	Description	Example Values	Operational Constraints
Input	Real-Time Clock	Tracks the current time to trigger feeding events.	08:00, 13:00, 18:00	Can store up to 7 scheduled times; no history kept
Input	Food Level Sensor	Detects whether the food storage bin is full or empty.	Full / Empty	Binary only (cannot measure partially filled levels)
Input	Weight Sensor	Monitor the food bowl weight to detect consumption.	0g – 500g	Accuracy ±2g; if <5g change in 10 mins → "Uneaten" alert
Output	Servo Motor	Rotates to dispense a fixed portion of food.	0° – 180° rotation	Runs on 12V DC; preset dispensing (~3 seconds)
Output	Buzzer / LED Alert	Provides audio/visual alerts for critical issues.	"Refill Food", "Uneaten Food"	Only triggers for major issues; no alert history
Output	LCD Display	Displays real-time status and feeding information.	"Feeding at 08:00", "Food Empty"	Needs continuous power; limited to live display