Step 2: Organise and Describe the Data

INPUT/ OUTPUT	NAME	UNITS	DESCRIPTION
Input	Inferred sensor	True/false	Checks if the food storage tank has enough food or if it's empty.
Input	Weight sensor	grams	Measures the amount of food in the bowl to check if kibble has been dispensed and later eaten.
input	Real time clock	Time values/ HH:MM	Tells the system the exact times when food should be dispensed based on the user's schedule.
output	Dispensing Mechanism Activation	True/false	Turns the food dispensing mechanism ON or OFF to release dry kibble
input	User-Set Schedule (Custom Intervals)	List of time values	These are the specific, pre-determined feeding times that the user sets for the system to follow.
Output	Staff Alert: Mechanical Failure	String / Boolean (sound signal)	Displays a message and makes a sound to tell staff immediately if the feeder is broken and cannot dispense food.
Output	**Staff Alert: Empty Food Tank**	String / Boolean (sound signal)	Displays a message and makes a sound to tell stuff if the food tank is empty.
Output	**Staff Alert: Unconsumed Food**	String / Boolean (sound signal)	Displays a message and makes a sound to alert staff if the dispensed food has not been eaten, prompting them to check on the pet.