**Step 2: Organize and describe the data**

**Inputs:**

**Schedule Times:** Timing for when the food is dispensed

**Storge sensor:** This measures how much food is left in the feeder.

**Bowl Sensor:** This sensor detects how much food is in the bowl and will let you know if your pet has eaten any of it.

**Manual feed:** Push button to trigger extra feed.

**Output:**

**Operation of Servo Motor:** Allowing food to be put into the bowl.

**Alert/Buzzer:** Alerts if the food is not consumed or falls below certain levels.

**Screen Display:** Food remining and next feeding time

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| --- | --- | --- | --- | --- |
| **Variable** | **Ditype** | **Units** | **Examples** | **Notes/Limits** |
| Feeding time | input | clock | 08:00, 12:00,18:00, 21:00 | 4 automated  Feeding daily |
| Storage status | Input | Boolean | True “food present”, False | Alerts as storage falls<10% of usage |
| Bowl reading | Input | Grams | 0-300g | Monitors consumption based on weight change |
| Check on uneaten food | Output | Buzzer | On/Off sound | If there are no weight changes within 10 min |
| Mange motor activity | output | On/Off | Active to release food portions |  |
| Alert signal | Output | Buzzer | On/Off | Signal low storage or feeding errors |
| Display | Output | Data updates in Realtime via sensor signal |  |  |