Step 2: Organise and Describe the Data

|  |  |  |  |
| --- | --- | --- | --- |
| Input | Data type | Sample values | Constraints |
| Feeding time | Time | 8:00 Am, 2:00 PM, 8:00 Pm | 3 scheduled times per day |
| Food level in bowl | Percentage (%) | 100%, 25%, 0% | Value must be greater than 0 % for feeding |
| Bowl weight before adding food | Gram | 250 grams | Sensor range will be 0-1000 gram |
| Bowl weight after food | Gram | 25 grams | Sensor range will be 0-1000 gram |
| Time check | Minutes | 10 minutes | Time check will be between 5-10 minutes |

|  |  |  |  |
| --- | --- | --- | --- |
| Output | Type | Sample values | Constraints |
| Running Servo Motor | Action | Dispense 150 g | Maximum 10 second run |
| Stop servo motor | Action | Stop Dispense | Stop once maximum dispense is reached |
| LED status | Color | Red, Green, Yellow | Error as Red, Normal for Green, Warning for yellow. |
| Alert | String | No Eating at time 06:20 am | In queue if offline |
| Log Record | CSV | Per events | 5000-line ring buffer |

Some operational parameters are as follows:

Feeding time is maximum 3 times per day.  
Bowl eating time is between 5-10 minutes.

Data retention should be of 30 days of logs.  
Bowl should be less than 25g after the food is taken by pets.  
  
Sample example is below:  
At 6:00 am first feeding time is set. Food level in bowl before and after the food is measured and the further steps are taken.