IoT Project Proposal Year 1 Semester 2

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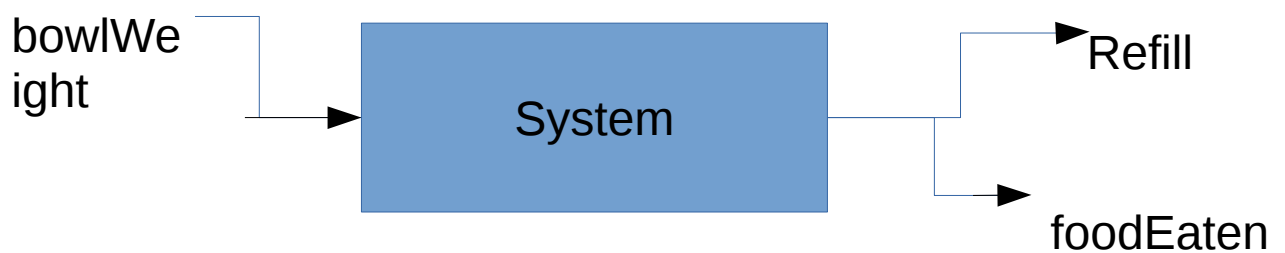
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Project Title: Automatic Pet Feeder.

Purpose: A pet feeder that can be set to refill a bowl at certain times, when the bowl is empty, or be told to refill remotely.

Customer Feature List:

- Remote refilling of food bowls.

- Ability to choose the amount of food put in the bowl.

- Stores the amount of food eaten by the pet.

- Graphs the amount of food and eating habits of the pet with the data sent to the cloud.

Context Diagram:

Name	Direction	Type	Description
bowlWeight	Input	Analogue	Weight of the food in the bowl.
refill	Ouput	Digital	Moves the motor to allow the bowl to be filled.
foodEaten	Output	Network data	The amount of food eaten.

Non-Functional Requirements:

- Battery powered to allow for easy placement.

- Moving parts and electronics must be covered due to the presence of animals.

Concepts used:

- Programming the system to operate in the needed ways.

Technology/Tools:

- Arduino boards.

- Motors.