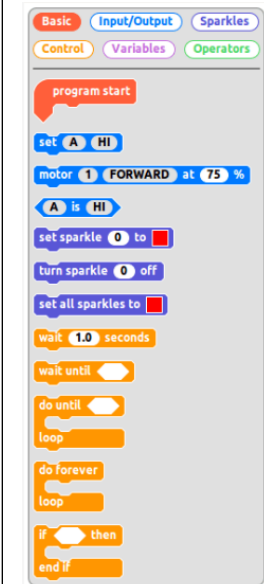


Finches Year 5 Computing Spring 2

Selection in physical computing: Coding with crumbles

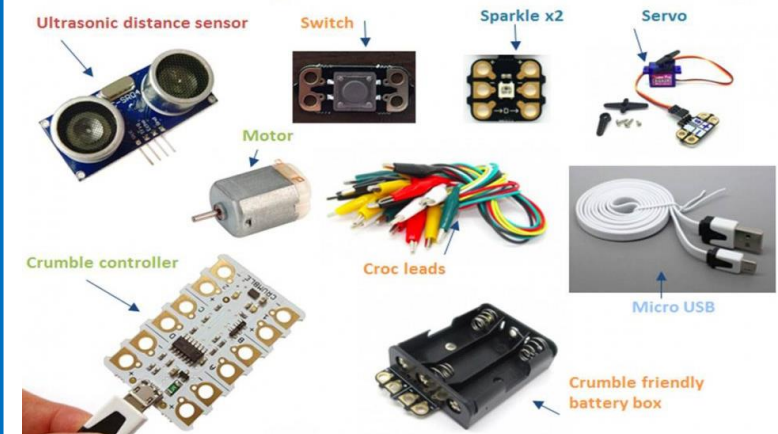
Algorithm

The programming for Spring halfterm will be important in the development of the algorithms for the Crumbles; the building blocks to the right show how the crumble is programmed.



Key Vocabulary	Definition
components	A part, such as a buzzer, LED, or sensor.
condition	A statement that needs to be met to allow something to happen and is true or false.
Crumble	A programmable device used for physical computing. It has 4 input / output terminals, which can connect LEDs, switches and other interesting add-ons.
LED lights	(Light emitting diode) A type of bulb which can produce many different colours of light.
microcontroller	Something small that can be used to control other things.
motor	A machine, especially one powered by electricity, that supplies power to moving parts.
output devices	Equipment connected to a computer that is used to transfer data out of the computer, either to a human user (e.g. as images on a monitor or sound from a loudspeaker) or to some form of permanent record (e.g. printed text).
Selection	An algorithm that uses the "If... then..." instructions.

Crumble components



Some of the components which can be used with the Crumbles:

- Switches
- Batteries and motors
- LED lights
- Sparkles

Crumble controller

The crumble controller can be programmed to perform many different outputs, including lighting an LED, making noise through a buzzer, and powering a motor.

