What is an Arduino

An Arduino is an open-source prototyping platform based on easy-to-use hardware and software. They are like a tiny computer that you send commands to follow and they will follow those commands. The boards have a microcontroller that are the part of the Arduino that follow the instructions that are sent to them. It only reads instruction that are written in Arduino programing language that is based off Wiring which is an open source programing framework.

There are many types of Arduino each of them are different from each other for example one Arduino may have more inputs and outputs that another board. The Arduino uno for example is pretty simple and straightforward while the Arduino 101 has more features built in like bluetooth and a gyroscope since these are on the board there no need to install them and they can be used to perform task. Another difference between Arduinos is memory on the board this effect how much space your have to program your code on the board and there is also processing power.

Arduinos can also be improved on by adding a shield to them. Shields are bits and pieces on a board that connects on top of a Arduino there are many boards that can be used that allow the Arduinos to do more. An example of a shield would be a MP3 shield which allows the board to be able to read mp3 files since there encrypt and the arduino by itself can't read those files. There are sd shields that allow the Arduino to access sd cards to cards that allow them to connect to the internet . Arduinos can also work with a breadboard and be connected to led and buttons for inputs. Since you have a number of inputs and outputs you're able to add light, buttons and add circuits to the Arduino

Arduinos have a variety of uses they can be used to make simple things to some of the most complicated things by itself or with other parts that connect to it. You're able to make a device that can control the temperature of your house to a alarm system if your fancey to making little robots cars that drive around and wearable gadgets with the smaller Arduinos. There able to do a lot and they can also be connected to other boards if you want to make thing even more complicated

Bibliography

For most of the information

<http://www.arduino.cc/>

Mentor

Williamson, Laurie

Misc

https://en.wikipedia.org/wiki/Arduino