

Project Evaluation

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Evaluation:

SOIL20

Soil20 is a device that measures the moisture of your soil to determine if the plant needs watering or not. This device solves the problem that most busy people have, wanting to have their own plants but don't have time to water them regularly. This device allows busy people to own a plant and makes sure that the plant lives and won't wither. The device waters the plant when the moisture sensor takes a range of values that suggests that the plant is thirsty and is about to wither so before this happens Soil20 will pump water from the stylish water container and give water to the plant. After watering the device will notify the owner that the plant has been saved but to check if the water container still has some water left or if its empty to refill the container. Soil20 makes gardening simpler and less work because now the user only needs to check up on the container when Soil20 gives you an e-mail. Soil20 encourages people to not use the excuse of being busy to avoid planting their own vegetable garden, their own greenhouse; it encourages people to be more eco-friendly which is something that needs to be advertised and encouraged to the public.

Hardware: I learnt how Arduino can communicate with the internet using Ethernet shield, I discovered a plethora of applications that is arduino compatible and arduino friendly which enables it's user to control their arduino using their phone and their computer. I learnt new electronics like the relay, H-Bridge and learnt their purpose, use, and how we can make them work together with other electronics.

Coding: I learnt how to programme in C language, which I only have elementary knowledge on, as I am more of a JAVA programmer. I thoroughly understood how `delay()`; and the loop function works.

Circuits: I have a better understanding in building circuits, especially how I can share my voltage, my ground and how the breadboard works in all of its aspects.

Solder: I learnt how to solder in a different way like soldering really small parts because I've been soldering things wrong the whole time. Now I know a faster, easier and cleaner way of soldering compared to before where I burnt most of my fingers and hand because I was doing it wrong.

