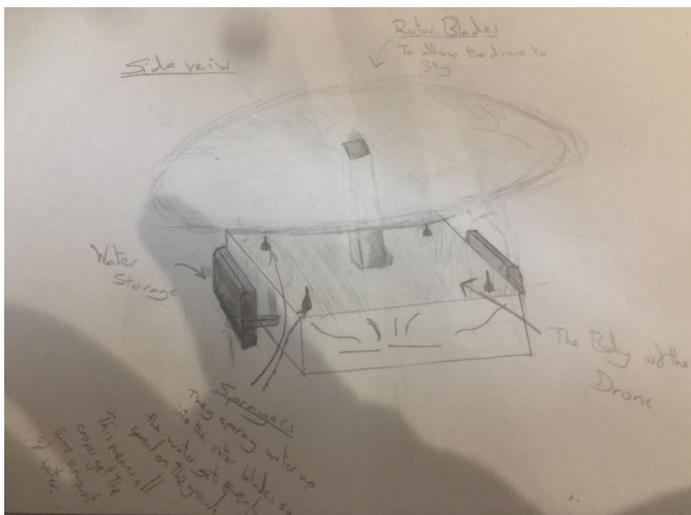


The Small Robot Company Challenge

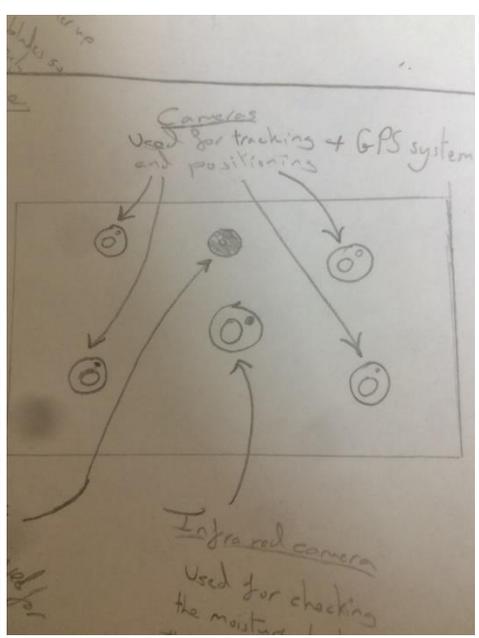
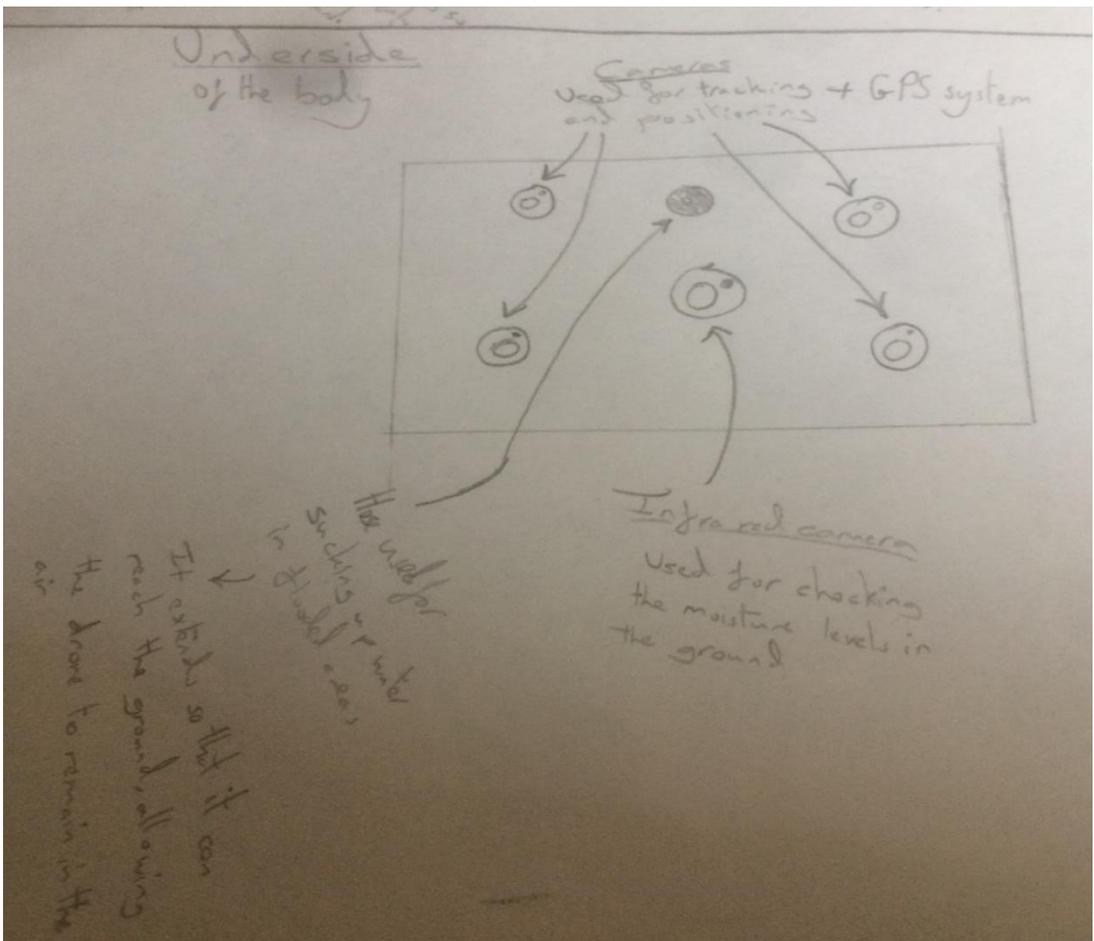
My Farming Robot

Job: My robot is the water control drone. This means that it is in charge of making sure the crops have the water they need, and any flooding is sucked up by the drone and removed so the crops are not destroyed.

Description: My drone has a pretty basic body which is 1.4meters wide, 80cm in depth and 40cm high. On top of the body connected by a metal shaft are the rotor blades which are of the same design to those of a helicopter: however, much smaller. Connected to the left and right of the drone by tubes made of strong metal, are two water storages which can hold up to 8litres of water each. The last important feature on top of the drone are the sprayers these are again connected to the water storages through internal tubing (the drone has an inbuilt computer that lets it work out which set of tubing is needed for which job) these sprayers fire water at the blades which in turn evenly spread the water around a certain area this makes watering crops more efficient and time saving.



On the bottom of the drone, there is an extendable hose which is used for the removal of water from flooded fields, the water collected by the hose is then sent to the water storages where it is held until it needs to be used, the hose extends which allows for the drone to remain in flight. Also located on the bottom of the drone are four cameras which are used for tracking, GPS and the positioning of the drone. There is also an infra-red camera which is used to help identify the moisture levels in and on the ground.



Interior: The drone contains a 24hr battery for long jobs. It also contains an inbuilt computer with a database, that can be changed, for each field so it knows how much water each crop type needs.