**Physical Components**

* Indoor plant that lives long
* Arduino IDE,
* Wemos or IOT Arduino board or module
* Light Sensors
* Moisture Sensors
* Humidity Sensors
* Temperature Sensor
* PH Sensor
* Watering Mechanism
* Fertiliser Mechanism
* Power Source
* Container for everything
* Cabling and connectors

**Functions to perform**

* Detect lack or presence of light
* Detect moisture levels in soil
* Detect humidity
* Detect temperature fluctuations
* Detect PH in soil
* Fertilise soil when needed
* Water plants based on moisture levels
* Store data that the sensors produce
* Produce graphs based on the readings taken
* Integrate graphs produced into web app
* Remote watering of plant
* Push notifications or emails to inform user of plant status

**Requirements**

* User Friendly front end
* Original Casing
* Take out the human element from plant care
* Plant profiles
* Low cost for all production

**Risks**

* Unforeseen bugs in software
* Faulty operation leading to undesirable plant death
* Sensors no longer work as needed
* Change in requirements for plant upkeep
* Compromising on designs of system
* Productivity issues to other commitments
* Technical troubles due to unreasonable expectations for project
* Product may not be viable for commercial release

**Benefits and Costs to client**

**Benefits**

* Potential for commercial release
* Easy production once prototype has been built

**Costs**

* Hardware purchase costs
* Production of units costs
* Maintenance and hosting of web app
* Production of casings will cost and require specialised equipment
* QA testing costs