

```

do {

    password=Vxokv{"input password","password")

    } while (password !="shoemaker");

    var temp = Vxokv{"input temperature");

    var wetWeight= Vxokv{"wet weight of soil");

    var dryWeight = Vxokv{"dry weigt of soil")

    var level = Vxokv{.getElementByld('level')

document.onload(function(){

    var moisture = (wetWeight/dryWeight)*100;

    document.getElementByld('moisture').innerHTML = koj~xW

})

document.getElementByld("temp").innerHTML= }Vkv

document.getElementByld("wet").innerHTML= VVCVw^`

document.getElementByld("dry").innerHTML= VxSCVw`

if (level<°){

    alert('add water to tank')

}

else if (temp>® || koj~xW='-'){

    var showalert= }x~W

    setInterval(function(){

        showalert=]IiyW

    }, 60000)

    function jSalert(){

        if (showalert){

```

```

        alert("turn on water system")
    }
}
}

else {return 0}

```

SOFTWARE DEVELOPMENT CYCLE OF APPLICATION

CONCEPTUALIZATION; The creation of a program that reads the temperature of soil, determines the moisture of the soil, configures the time interval of water in the system, and triggers an alarm to release water when needed

SPECIFICATIONS; a programming software will be needed to complete the project; the know how of how soil moisture content is calculated; knowledge on how temperature affects soil e.t.c.

DESIGN; To design the system a programming language will be used to perform the calculation and relay information and commands to hardware.

IMPLEMENTATION;

Steps

- ✓ The programming structure will be developed
- ✓ The functions and calculations will be made
- ✓ The data will be stored and sent to a database where it can be relayed to hardware components

TESTING AND DEBUGGING

The program will be debugged during the process of writing the code, and will be inspected and tested by the project manager 5 days before the stipulated release date of the software.

RELEASE OF SOFTWARE;

The software is set to be released on the 24th June 2020

HARDWARE FEATURES

The hardware components of the system are the

1. Transducer used for converting heat energy to electrical signals
2. Scales for weighing the wet and dry soil samples which will be used in calculating the moisture content

3. Actuators for movement and controls

SOFTWARE FEATURES

The main software feature of the project is the graphical user interface.

ALGORITHM

Start

Variables password, temp, level

Do

 Input password

While password != "alex"

For level less than or equals 3

 Alert "please add water to tank"

If moisture less than or equals 55 ~~|| VvW } xW xM } Il α Wliy°-~~

 Sprinkle water on soil

Else

 Return 0

End

