

Low Cost Water Irrigation Information System
Mechatronics

Application development:

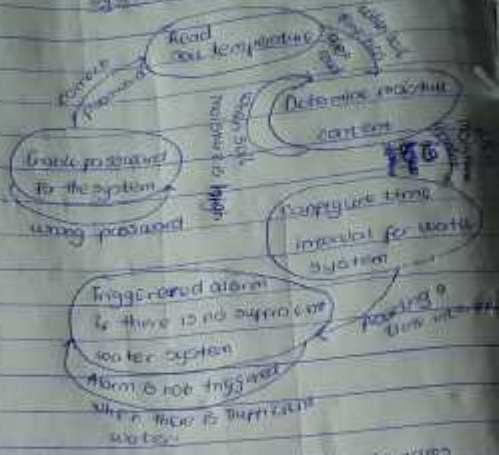
The best apparatus for reading the temperature of the soil will be a thermometer, an inbuilt thermometer will be able to provide accurate data on the soil's temperature. To determine soil moisture content, a sensor called water potential is used.

To configure time interval for the water system, various sensors can be used for this such as Accelerometer body sensor.

For an alarm when there is no sufficient water, a pressure sensor is used.

The password option is also provided to give protection, face, voice and also thumb prints can also be used.

System development cycle



Hardware and software features

- Hardware features
- monitor - To display data / information.
- Keyboard - To input data
- Mouse - For selection.
- Sensors - To detect and give accurate alarm.
- Camera - For password security etc.
- External storage devices - for backup mobile devices, storage areas and spread of information.
- Server - to always available for access.
- Software:

- Use Ge specific 82160 - 6 Dial - To help read soil temperature (programmed)
- Water potential sensor to help determine soil moisture (programmed)
- Accelerometer body sensor to help provide a time interval. (programmed)

Its primary purpose is to send an alarm when the moisture of the soil is not sufficient (programmed)

Hardware that supports both voice, video and thumbprint recognition are also provided.

Python - Programming language used

Algorithm

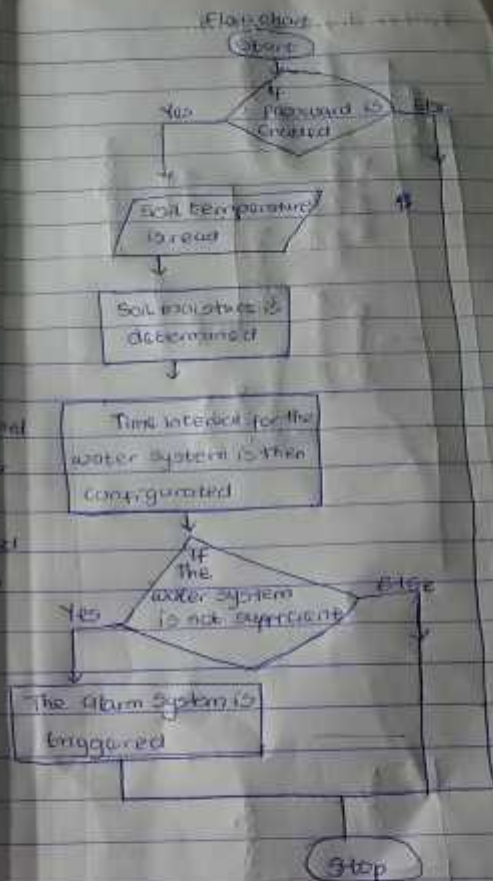
1. Start
2. If password is enabled for the system then the soil temperature is read, the soil moisture content is determined and the time interval for the water system is then configured.

The alarm system is then triggered if there is no sufficient water system.

Else

The program ~~will~~ stop.

stop.



Integration System for ABUND Farm



System layer approach



System layer approach

Integration System for ABUND Farm