# AUDI FATIMAH

### **BIOMEDICAL ENGINEERING**

#### 18/ENG08/004

## ALGORITHM ASSIGNMENT

Conceptualization: This is to develop an irrigation control system, to develop a software which interacts with the machine which can turn on the pump monitor when it senses the moisture of the soil or the content of the soil and it operates with a security system. The main objective of this project is to check the moisture content and temperature of the soil and to provide a major wireless messaging security system that can maximize the cost of labor.

#### Specialization:

For my software components;

- Graphic user interface will display texts and objects which will show information to the land owner
- C programming language ; the c which is a general language that is used to develop software in either high level language or low level language
- Database management system which aids easy manipulation of information , where by transmitted data received by an rf receiver operations at same frequency as that of transmitter
- Water pumps is any device for moving water pumps which include obtaining water from ground wells, Moving water in active heating system. Advantage of the water pump is to is that it prevents the pump, problem associated with high elevation difference between gthe pump and the water surface
- Reservoir created using a dam which stores large amount of water
- Microcontroller unit ;this is a computer system on a chip .it is an intergrated chips that performs controlling function . also called a one chip microcomputer used for controlling a wide range of electrical and mechanical appliances. Light, water, soil and temperature and solenoid valve are connected to it .
- Solenoid; solenoid valve are electromechanical valves that are controlled by stopping or running an electrical current through a solenoid, which makes use of this solenoid to in order to activate valve, in controlling the air flow, water flow, and other electricity appliances

#### Hardware components

Sensors (light, moisture ,soil water level and temperature); This wil be placed to detect the soil to detect the light, moisture, temperature and water level of the soil.

LCD known as liquid crystal display is a flat panel display , electrical visual display, or video visual diplay that uses the light modulating properties of liquid crystals which do not emit light directly . they are available for arbitrary images.

Sprinklers for the control of air bone dust .

Flowchart

assword reservoir tank

