

## **Team Srishti**

### **Problem statement - Irrigation automation system for precision farming**

**Parameters monitored** - Temperature, humidity, UV and light

**Controlling parameters** - Drip, fogger, foot cooling, fertilizers - N, P & K, artificial light and light trap for insects.

### **Working**

Based on predefined timing the drip system will work. N, P & K fertilizers will be added after some time delay to the drip system and turn off before the drip motor off time so that the fertilizers are not present inside the drip line.

If the light intensity inside the polyhouse is less, light is compensated by adjusting the brightness of the LED light based on LDR reading. Light trap is activated during night at specific intervals so that insects are controlled inside the polyhouse without using chemicals.

**Hardware used** - LinkitOne board, temperature humidity sensor, light sensor, UV sensor relay module, 12 V water pump, 3W led bulbs, driver circuit for LED using TIP122, 12 V, 2A power supply.

**Software used** - Arduino & MCS

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