

Peer-graded Assignment: Assignment 3: Testing Document

RaspberryPi for the energy-saving and heat-watering system.

1. Testing Components

- First I checked the Photoresistor in series with a capacitor and read the voltage in the middle point.
- Read the values with a small script.
- Second, I found a generic SmartPlug of open source that I can communicate.
- I created a socket between the RaspberryPi and the SmartPlug
- I sent some orders of ON/OFF with a python Script.

2. Integration Testing

- I made a script to implement the previous scripts in an infinite loop.
- When the detected sunlight is above a threshold the SmartPlug is ON, and below is OFF.
- The script sends the order of scheduling from 00.00h to 07.00h.