

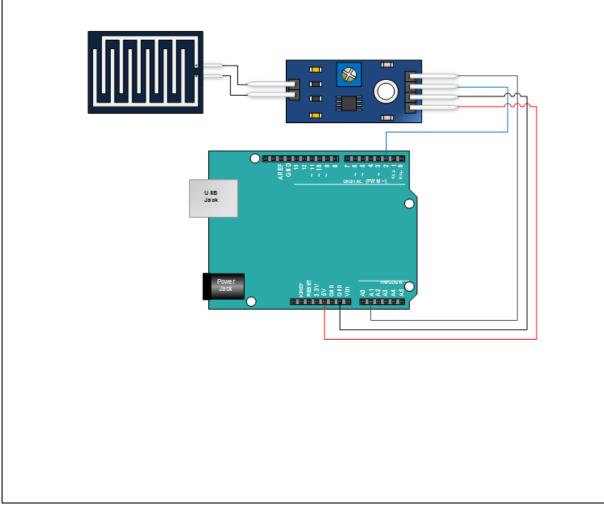
#### SYNACORP TRADING & SERVICES No.9, 1st Floor, Lrg 1/SS2, Bandar Tasek Mutiara, 14120 Simpang Ampat, S.Prai (S), Penang Tel : +604.504.1617 Hunting Line : 012.4033.474 Fax : +604.502.1726 r Strategic Solution Provider (Website) http://www.synacorp.my (Email) sales@synacorp.com.my

### **Application: Rain Sensor**

#### **COMPONENT NEEDED:**

- Arduino UNO .
- USB Cable •
- Rain sensor module
- Male to female jumper wire •

### **CONNECTION:**





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| Rain Sensor | Arduino     |
|-------------|-------------|
| VCC         | 5V          |
| GND         | GND         |
| S2          | D4          |
| AO          | Analog in 1 |

| Rain Sensor | Sensor Board |
|-------------|--------------|
| +           | +            |
| -           | -            |

- 1. Connect the circuit as shown in figure above.
- 2. Connect your Arduino UNO to Arduino IDE.
- 3. Open your Arduino IDE.
- 4. Select the right board type and COM port.
- 5. Upload the sketch. You can get the sketch from *Application1\_Sketch*.
- 6. Open the serial monitor to view the output and result.

\*Note: To test the Rain Sensor and ensure that it is working correctly, connect the VCC to a 5V power source and GND. Try placing a few droplets of water on the Rain sensor detection board and the D0-LED should light up.





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#### **RESULT:** COM3 (Arduino/Genuino Uno) COM3 (Arduino/Genuino Uno) Send Send Flood Rain Warning Flo Ra < < ✓ Autoscroll No line ending 🗸 9600 baud ✓ Autoscroll No line ending 💗 9600 baud v v □ × COM3 (Arduino/Genuino Uno) -Send Not Raining No < ✓ Autoscroll No line ending 🗸 9600 baud

## **CONCLUSION:**

- If the Sensor Board is completely soaked; case 0 will be activated and "Flood" will be ٠ sent to the serial monitor.
- If the Sensor Board has water droplets on it; case 1 will be activated and "Rain • Warning" will be sent to the serial monitor.
- If the Sensor Board is dry; case 2 will be activated and "Not Raining" will be sent to ٠ the serial monitor.