

**The University of the West Indies**

**Department of Computing and Information Technology**

**COMP 3990 Project**

**Status Report**

**Project**: < Pi Weather Station with Web APP Project> **Date**: < 21/01/2020>

**Iteration**: <the version/iteration of the project/prototype>

**Implementation Status**

Briefly describe the prototype or what can currently be demonstrated by the system; i.e. what is now available for feedback from the customer and testing within the development team? Attach or include a few sample screen shots to illustrate the progress.

**Highlights**

<List any items of note. Breakthroughs, accomplishments, major decisions, or changes in the project plan. Are you on schedule, ahead of schedule or behind schedule?>

**Risks or Issues List**

List any risk or issue that is critical for the success of the project. This could be anything from “*we need to get test data*” to “*how do we ensure that the system is usable*” to “*performance is unacceptable*”. This should be a complete historical list that is kept from the beginning of the project until the end. *Status* should be one of *New*, *Ongoing*, *Closed*.

The resolution column should be filled in if the issue or risk has been taken care of.

A project may be expected to have around 1-3 active issues or risks that are being managed (New or Ongoing) at any given time. If you have more than three, then either you have a project in serious trouble or your criteria for what is "critical to success" is too loose.

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| --- | --- | --- | --- | --- |
| Date Entered | Risk or Issue | Description | Resolution | Status |
| 21/01/2020 | Lack of pollen sensor for the Raspberry Pi. | A pollen sensor was included in our proposal to expand the usability of our system by considering those who suffer from pollen allergies.  However a suitable sensor was not found. | A dust sensor will be used to improvise though pollen allergies can be different from allergies relating to general dust. However it will still be usable to those who are allergic to general dust. | Completed |
| 21/01/2020 | Difficulty in getting UV-transparent materials to house or UV sensor. | Our UV sensor requires a weatherproof enclosure whilst being exposed to UV light from outside. Regular glass is not UV-transparent and will mess with the accuracy of our readings while no glass will give the highest accuracy but it will result in exposure to rain etcetera. | Fused silica glass have been ordered in addition to special glue. The idea is to place the sensor in one of our weatherproof PVC enclosures and glue the fused silica sheet on one side to allow UV light to enter. However the purity of the glass ordered from the seller is unknown. | Pending |

**Tasks in Progress or Completed in** the **Last Iteration:**

<List the tasks that each member of the project worked on up to the present time.>

|  |  |  |  |
| --- | --- | --- | --- |
| Task Name | Description | Team Member Responsible | % Complete |
| Gathering Necessary Hardware for building the Pi Weather Station | The following items have been ordered:   * 2 Pole 5mm Pitch PCB Mount Screw Terminal Blocks * Seal Bond 105 Black -Marine/Industrial Adhesive Sealant * Double Side Polished Fused Silica Quartz Glass Sheets Plate 30mm x 30mm x 1mm * Adafruit Perma-Proto HAT for Pi Mini Kit - With EEPROM * Breadboards * Jumper Wires * Adafruit VEML6070 UV Index Sensor Breakout * Electric Soldering Iron Kit * 2-pin Male Headers * 22 AWG Wire 30 ft. * Waterproof Cable Gland Joints * Dustproof, Waterproof Plastic Enclosures (2 each of size 3.4" x 3.4" x 2" and 5.9" x 4.3" x 2.8") * Adafruit BME280 I2C or SPI Temperature Humidity Pressure Sensor * IC Socket for 16-pin 0.3" Chips * Adafruit MCP3008 8-Channel 10-Bit ADC With SPI Interface for Raspberry Pi * 4.7k Ohm Resistors, 1/4 W, 5% (Pack of 10) * SDS011 High Precision PM2.5 Air Quality Detection Sensor * 2 x Gravitech RJ11 Breakout Boards * Wind/Rain Sensor Assembly from Argent Data Systems (Contains Anemometer, Wind Vane and Tipping Bucket Rain Gauge)   The following items have been acquired:   * Raspberry Pi 3 Model B | Vinod Lochan Dassrath | 47.5 % Complete  All items are expected to be acquired by Jan 29th excepting the Fused Silica Glass sheets which have a delayed shipment.  Items need to pass through customs as well. |
| Installation of OS on the Pi | Raspbian OS (NOOBS) was installed on the Pi | Vinod Lochan Dassrath | 100% |
| Determining what Technologies we want to use for our System |  | Vinod Lochan Dassrath,  Jose Bravo Mata,  Ronald Jaglal | 10% |
| Doing the group website |  | Ronald Jaglal |  |
| Starting the design of the app interface |  | Ronald Jaglal |  |

**Upcoming Tasks for the Next Iteration:**

List the tasks that each project member is planning to work on in the upcoming iteration.

|  |  |  |
| --- | --- | --- |
| Task Name | Description | Team Member Responsible |
| Researching and planning our application structure |  | Vinod Lochan Dassrath,  Jose Bravo Mata,  Ronald Jaglal |
| Software Engineering practices(use of ERD and use case diagrams, use cases), |  | Jose Bravo Mata |
| Writing scripts for the Pi sensors |  | Vinod Lochan Dassrath,  Jose Bravo Mata,  Ronald Jaglal |

*<Add rows to tables as needed>*