**[Group 11] Assignment #3: Hands-on Experience with MQTT**

**1. Team Member Details:**

1. Priyam Garg [pgarg6@ncsu.edu](mailto:pgarg6@ncsu.edu)
2. Divyang Doshi [ddoshi2@ncsu.edu](mailto:ddoshi2@ncsu.edu)
3. Brendan Driscoll [bhdrisco@ncsu.edu](mailto:bhdrisco@ncsu.edu)
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5. Vishal Veera Reddy [vveerar2@ncsu.edu](mailto:vveerar2@ncsu.edu)

|  |  |
| --- | --- |
| **Percent Contribution** | |
| Priyam Garg | 20% |
| Divyang Doshi | 20% |
| Brendan Driscoll | 20% |
| Jordan Boerger | 20% |
| Vishal Veera Reddy | 20% |

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| --- | --- | --- | --- | --- | --- | --- |
| **Tasks** | | **Members** | | | | |
| **Topic** | **Sub Tasks** | **Priyam Garg** | **Divyang Doshi** | **Brendan Driscoll** | **Jordan Boerger** | **Vishal Veera Reddy** |
| Hardware | Raspberry Pi A Hardware Connectivity and Software Integration of Hardware |  |  | 100% |  |  |
| Raspberry Pi B Hardware Connectivity and Software Integration of Hardware |  |  |  |  | 100% |
| Software | Raspberry Pi A MQTT Code |  |  |  | 100% |  |
| Raspberry Pi B MQTT Code | 100% |  |  |  |  |
| Raspberry Pi C MQTT Code |  | 100% |  |  |  |
| Laptop #2 MQTT Code | 100% |  |  |  |  |
| Laptop #1 requirements |  | 100% |  |  |  |
| Report/README | | 20% | 20% | 20% | 20% | 20% |

We believed that every teammate did their part well and had the equal contribution in the project.

**2. Schematics for raspberry pi a**

Schematics for RPiA

**3. Schematics for raspberry pi b**

Schematics for RPiB

**4. Design choices**

**4.1. MQTT Broker – Choice 1**

**4.2 Choice 2**

**4.3 Choice 3 (Normalization)**

**4.4 Choice 4 (range of raw values (min and max) for LDR and Potentiometer**

**4.5 Choice 5 (Scaled Values)**