**Differences from Planned to Actual Activities**

The two primary causes for the differences between planned and actual activities were the much higher than expected workload for software debugging and Raspberry Pi permissions handling/workarounds and the lack of requirement in the hardware construction area.

When the time came for constructing the hardware, it quickly became apparent that there were plenty of team members taking responsibility of the construction and hence an extra pair of hands were not required and would have in fact slowed the process, as there were only so many solder stations and only so many circuits to be soldered at any one time.

This allowed for more time to debug the PHP and bash that made up the web servers front and back end. PHP can, at times, be difficult to debug as often the errors and warnings you need to see are either not displayed, are difficult to find, or do not provide sufficient information. As a novice PHP user (this project is my first time using PHP) this provided at times a difficult challenge.

There were also several permissions problems that had to be overcome by either workarounds or by changing the permissions.

Finally, due to dynamic test data not being available from the back-end until the final Monday, dynamic real-time graphs and displays were not able to be programmed until the very end of the project. This stemmed from poor communication between the web side and the back-end.