Agenda

* [AP] and [MM] to present hardware prototype
  + Transfer understanding of individual units
* [RS] and [WB] to demonstrate website in full
  + Explain and go through code used
* [AD] to explain his utilisation of HTML and PHP to display tables depending on user input
* [MS] and [IH] to finish purchases log and ratify with other members
  + Organising meeting with Steve to acquire final hardware and enquire 3d printer use

Minutes

[AP] and [MM] present hardware prototype based on plans from last meeting. Hardware utilises lateral stepper motor to push open and pull close a valve constructed from a cylindrical pipe and a plastic cap. This is fantastic progress and the prototype works from the website without a hitch. [RS] and [WB] note that the website used for control is not their website, but a new solution. [WB] and [AP] theorize that it should be easy to converge the two, [IH] indicates that a merger of the three websites will have to occur on a date that the entire team are free due to share of knowledge. [MS] brings up the use of GitLab but [IH] declares the importance of face to face meeting when dealing with mission critical software, [AP], [MM] and [WB] agree to this statement. [MM] and [AP] will endeavour to type up all their findings and properly comment their code to assist the final merger with [RS] and [WB]’s more advanced web solution. Up to this point the Arduino has been communicating via hotspot. [IH] has discussed matters with Sarah Slater and the IT support department and has been met with no success in setting up a static IP for the unit. [MS] declares the university security to be far too draconian and the group agrees but understands.

[RS] and [WB] demonstrate the progress made on their website, although development has slowed down due to other module deadlines, progress is still very much promising. They have now added in persistence of updated valve names and allowed the editing of existing valve properties. Valves are now stored within the PHP code ready to be injected into [AD]’s database backend.

[AD] has posted HTML examples of his SQL data arranged into tables, [RS] and [WB] have left space on their website for this to be implemented “plug and play”, [AD] states that although he may be busy in the coming weeks he will create documentation for his solution and will be on hand to support the integration of the SQL data. [WB] and [RS] thank him and are guided through [AD]’s use of PHP to display the data using SQL statements to bring up relevant information about the valves, including their status, modified time, and placeholders for their volume.

[MS] and [IH] run through the purchases document and check with [AP] and [MM] that their prices for hardware are accurate, [MS] asks [MM] to post a invoice for the stepper motor hardware and WiFi chip on the basecamp, [MM] agrees. [AP] and [MM] agree on the purchases document.

[MS] Starts on the test cases for the testing phase of our hardware unit, he takes the details of other members, so he can better understand hardware and software separately.

Goals for next meetings

* [AD] and [WB] work together on giving each other access to the SQL back end, so far data has been traveling within [AD]’s user space so this may take some time
* [MS] will finish off work on test cases and software/hardware usage documentation to aid in the testing phase.
* [MM] will work on smoothing out the hardware and ensuring total reliability.
* [AP] will work on helping to streamline the WiFi connectivity and website with [RS] to smoothen the user experience and integrate the login page.
* [IH] Will arrange a meeting with Steve to acquire specifications of the hydraulic system.