# Integrated Engineering (IE) Meeting – Specialist Team Progress Report

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| **Team Name** | Clear Health – Team 3 |
| **Represented Engineering Disciplines** | CS-EEE |
| **Report compiled by** | Kassim Daher, Liu Xianrong, Berat Baran Cevik, Chingis Latifov |
| **Reporting period** | Workshop 5 |
| **Section One: Summary** | |
| **Motor**: All in all a lot of progress had been made during this workshop. We were able to get our hands on the actual equipment we are going to be using for this project. After some trial and error we managed to wire up the motor component to the bread-board through to the Microcontroller and induce the LED to blink on and off. We are now working on implementing the whole system to be functioning to our specifications.  C:\Users\User\AppData\Local\Microsoft\Windows\INetCache\Content.Word\12325075_1942041572686689_1433870178_n.jpg  **pH:** With the help of two workshops in last week, we have already finish the whole circuit and identified every single component in ph control system. Our specific design is shown below.  78180777056341700/var/folders/s0/znzvkyp509zfcxn0ntwqcxpw0000gn/T/com.apple.iChat/Messages/Transfers/IMG_1200.JPG  ***Sensor system Actuation system***  **Temperature:**  Last week, our CS-EEE team worked on   1. How to generate the circuit and connect it to the microcontroller. 2. How to display the voltage taken from the circuit on the screen and how to send the data back to the circuit in order to adjust the temperature. 3. According to the newest version of the design, the voltage which is changed by the temperature will be displayed on the computer screen and considering this value, a command will be sent to the circuit through microcontroller to adjust the temperature. | |
| **Section Two: Stage of Design** | |
| Motor: We are currently working on rigging up the motor function and implementing the code written for it. We’re generally ahead in terms of the workload. Basically in the process of transitioning from design concept to an actual working prototype.  **pH**: We have finished the circuit design and most of codes of the microcontroller basically. What we are going to do next is connecting real circuit with equipment provided and breadboard, which is a final step.  **Temperature:**   * Electrical and electronics engineers have finished the circuit for the heating system. Computer scientists have managed to get the output data from the circuit through microcontroller and display it on the computer screen. * We are currently struggling sending data to the circuit from the computer and that is the problem that we are trying to solve this week. * Once we succeeded sending data to the circuit through microcontroller we will simply connect the program to a user interface. | |
| **Section Three: Achievements and Set-backs** | |
| **Motor**: Initially our setback was not being able to configure the breadboard correctly with all the needed connections. This was overcome by taking a closer look at the transistor specifications to find out which pin was what. Achieving a greater rapport throughout our sub team has meant that we are working to a greater efficiency and quality of work. Our setback was only short term and doesn’t seem to have a long term effects on our goals.  **pH**: -Sufficient discussion between team members and professional and useful suggestions we got from professor  .  -Specific division of workload.    -At beginning there are some problems on building buffer and actuation, because we do not have enough knowledge about op-amp and electronic switch. Besides, insufficient connection between two parts: programming and circuit building.  **Temperature:**   * Electrical and electronics engineers managed to finish the circuit and computer scientist succeeded to display the output data taken from the circuit through microcontroller on a computer screen. * We had trouble connecting the microcontroller to Energia. * We are currently struggling sending data from the computer to the circuit. | |
| **Section Four: Meeting Notes.**  All teams are currently working according to their plan and deadlines  All sub-teams will start soon to connect their designs between each other to get the final prototype  Sub-teams’ circuits are ready | |