

Mechatronics design week 2

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1) Arduino -

- a. Reading light, temperature and accelerometer sensors
- b. Basic coding for reading inputs
- c. Using Analog to Digital conversion on Arduino
- d. Displaying information on the screen
- e. Attempted controlling servo using computer
- f. Received physical data from my home Arduino and sensors to display voltage readings
- g. started thinking about PID control for setting servo position depending on user pressure input and physical pressure output.

2) Standards -

- a. Looked briefly into basic coding conventions
 - i. Documentation
 - ii. Structure in codes(starting with a simple code and making it increasingly complex
 - iii. Exceptions and protection

3) JavaScript

- a. Linking images to a basic site
- b. Learnt basic code conventions
- c. Began considering GUI aesthetics

4) Team Communication

- a. Spoke to mounting about protection of Arduino/pi chips
- b. Spoke to sensors about using only 1 webcam to measure expansion
- c. Housing about what cylinder they might be using
- d. Spoke to Oscar and Carl about how last years project

To-do

- i) Correctly use servo to get accurate positions from an input
- ii) Look into communication between the pi and Arduino
- iii) Draft/brainstorm some GUI pages
- iv) Continue doing JavaScript tutorials
- v) Have a brief look into open cv
- vi) Consider which libraries will be needed using Arduino
- vii) Brief look into image processing and multithreading