ASSIGNMENT X

(Processing + Arduino)

1. Go through whatever you have learnt in both the lectures, try to recall all the problems you faced and how you resolved them, revisit the codes (sensor integration with Arduino, processing examples, fusion of processing and Arduino (both read and write)).

2. Finish up your egg-basket game nicely so it looks like a game and not some rectangles and ellipses falling around. Add levels (for example, increase the egg speed after a certain score), add cool background and images for your egg and the basket. And yes, a game isn't fun without sound! And for more curious souls, try solving the issue of high sensitivity of the basket when you control with ultrasonic (probably take mean of few sensor values and map it or some other way, look it up!).

3. Code a proper 3x3 Tic-Tac-Toe and export it to your android devices (sad reacts for iPhone users).

4. A radar imaging system using ultrasonic sensor and servo motor that will map the surroundings and make a plot on processing (be creative with the GUI). Yeah, you're right, attach the ultrasonic to that servo!

5. Code the 2D snake game(again, be creative with the features you add) and play using MPU, like you saw in the video, or think for yourself(feel free to create, for example, besides controlling the direction of your snake using the MPU readings, you can also control its speed).

Remember, googling is a must have skill and creativity is always appreciated! ;) Cheers!

-Yuvraj