Lab #2 - Pan/Tilt Control System

Objective

Design, build and implement a pan and tilt structure controlled by distance sensors with analog response.

Materials

- Micro-controller
- 4 Infrarred sensors (Recommended Sensors)
- Pan/Tilt structure (3D Printed, CNC or bought) Example
- 2 Motors (Servo and/or Stepper)
- Basic Components (Resistors, capacitors, etc)

> Note: Other components might be needed, this is just a basic list.

Requirements

1. Build a block diagram of your control system.
2. Build (and design) a pan an tilt structure
3. Implement an control system algorithm that follows an object.
4. Integrate all the components.
5. Generate an IEEE report that specifies all the components of the system.

> Note: A 3D printed or CNC personal design will award you +5 extra points.
> Note 2: See grading criterio for the IEEE report in Blackboard.

Planning

1. Develop requirements plan in Github.
2. Specify the responsible person per task.
3. Use Github for your source code.