

6.111 Project Checklist | Fall 2014

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- 1) Interface video with labkit
 - a) Test video/ZBT read and write
 - b) Slow down memory to only store 10 frames per second
- 2) Display and testing block
 - a) Add cursors to video output for testing
 - b) Make video output dependent on switches
 - c) Make video output larger
- 3) Motion tracking module
 - a) Deal with delays inside of color conversion modules
 - b) Motion tracking module by color
 - c) Make cursor move with center of mass
 - d) Change hex display values to show RGB, position of center of mass
 - e) Test color tracking
- 4) Hard-code calibration
 - a) Figure out how to represent field of view in calibration data
 - b) Hard-code calibration, possibly controlled by switches
- 5) Motion calculator
 - a) Combine calibration data and center of mass data to output pan/tilt data
- 6) Testing of project so far
 - a) Test motion tracking under different lighting conditions
 - b) Add pan/tilt data to hex display
 - c) Test output to go to DMX block
- 7) DMX processor and writer
 - a) Write block to take/store input from motion tracker and calibration
 - b) Add functionality to send data to DMX writer
 - c) Write DMX writer
 - d) Test DMX writing with hard-coded test data
 - e) Test with moving light
- 8) Integrate and test project
 - a) Combine motion tracking data with DMX writing
 - b) Test DMX writing based on motion tracking
 - c) Test motion tracking with moving light
- 9) Optional modules
 - a) Write DMX reader
 - b) Test DMX reader with Chamsys MagicQ and enttec or leprecon
 - c) Write/design better calibration module
 - d) Pattern tracking writing and testing
 - e) Test optional blocks
 - f) Integrate optional blocks
- 10) Buffer time

- a) Test/debug anything that isn't working
- 11) Demo and checkoff
 - a) Test in DT set up if time permits
 - b) Checkoff and demo
 - c) Project report