

Project Management

8/23/16

Pg 1

- What does the project entail?
 - hardware
 - software

• Work Breakdown Structure (WBS)

- list of every part of the project
- Breakdown part into sections that can be completed by the time you need to report (our case twice a week)

- Short Estimate Long
(1) (4) (1)

$$\frac{S + 4(E) + L}{6} = \text{Time}$$

• Polc Analysis

Green

- done it before
- can do it

Yellow

- done it a few times

Red

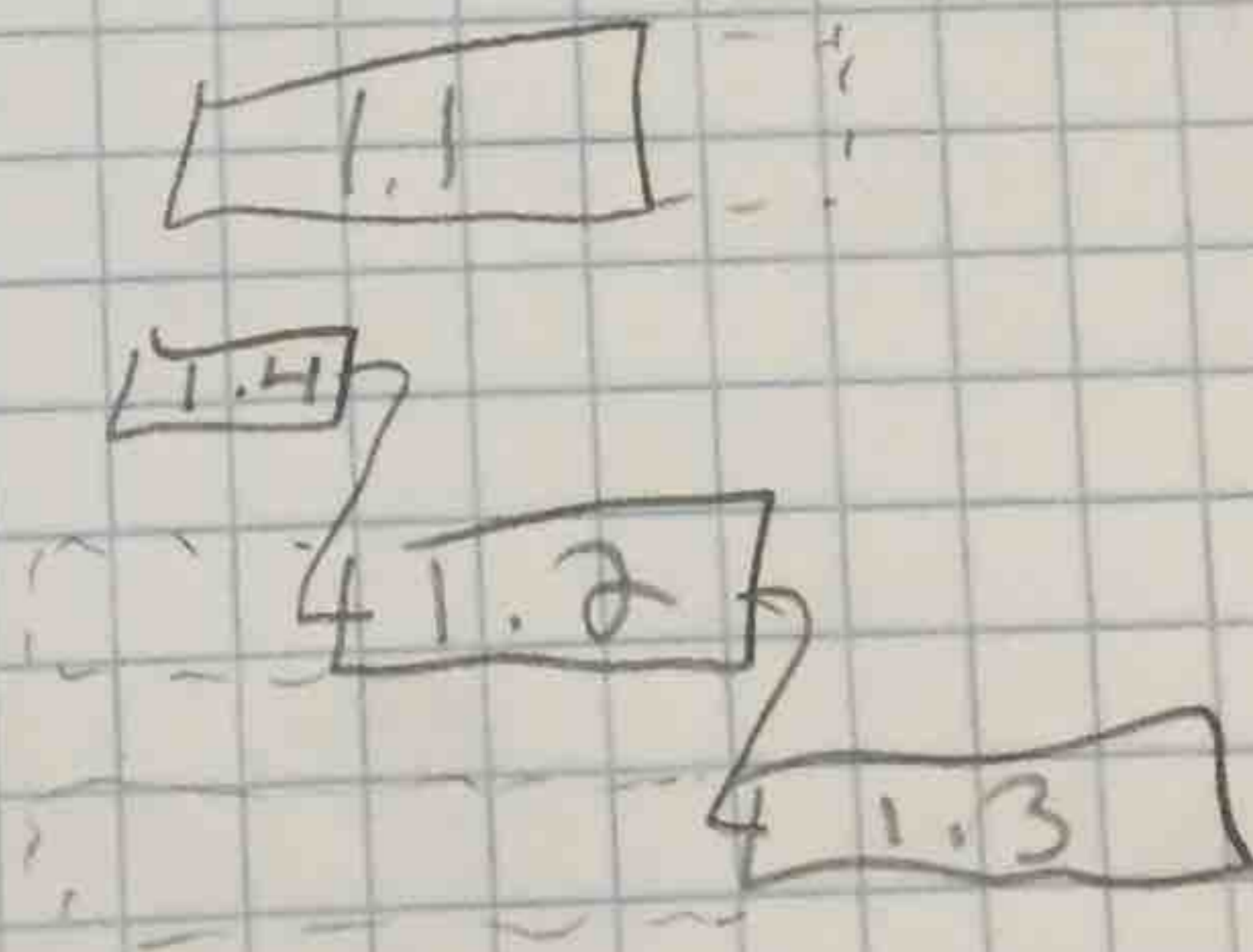
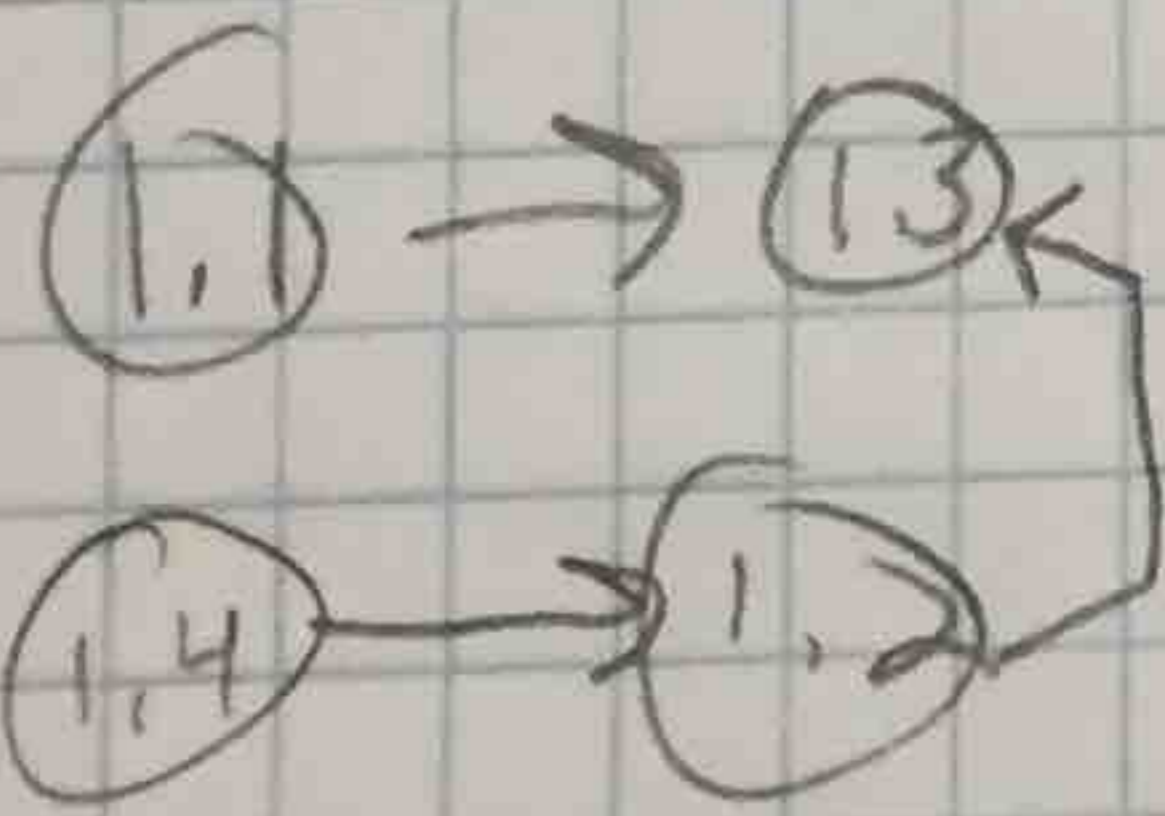
- no idea

• PERT chart Dependencies

G → no dependencies

Y 1,4 → dependencies

R



• Gantt Chart

- Critical path (longest path for project)
- Crash / move critical path using slack periods

WBS

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LEDs

Standards

Light Room

Transmit Info

4 Hubs

- 1 Light intensity
- 2 Brightness of sources
- 3 LED as Receiver
- 4 Physiological/Biological Impact
- 5 Transmission characteristics
- 6 Message " "
- 7 location
- 8 Distribution mechanism
- 9 Documentation
- 10 User Guide

Dependencies

3

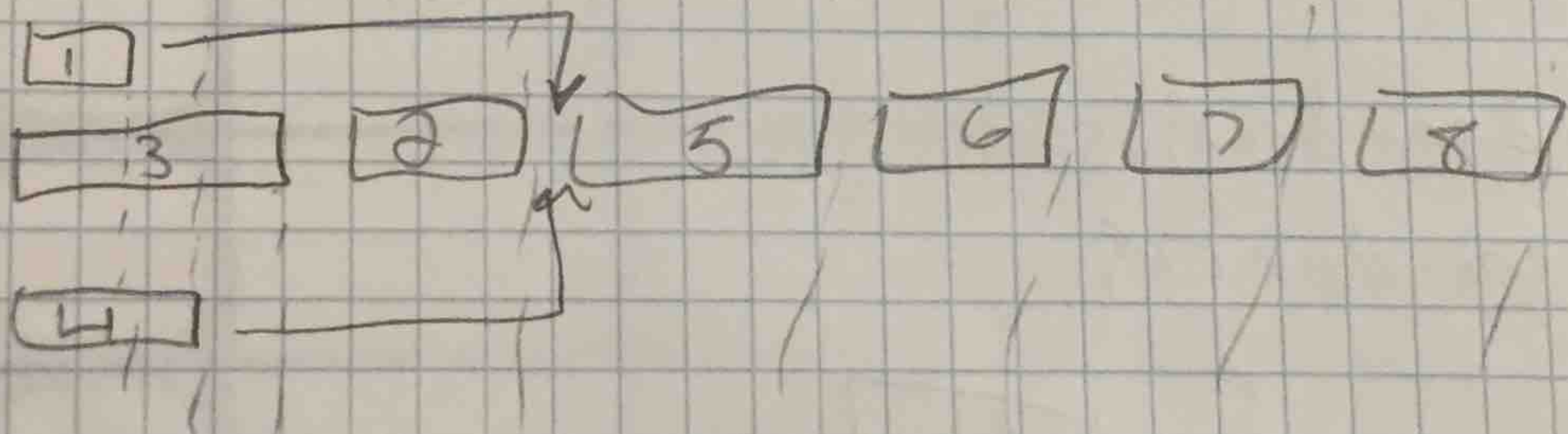
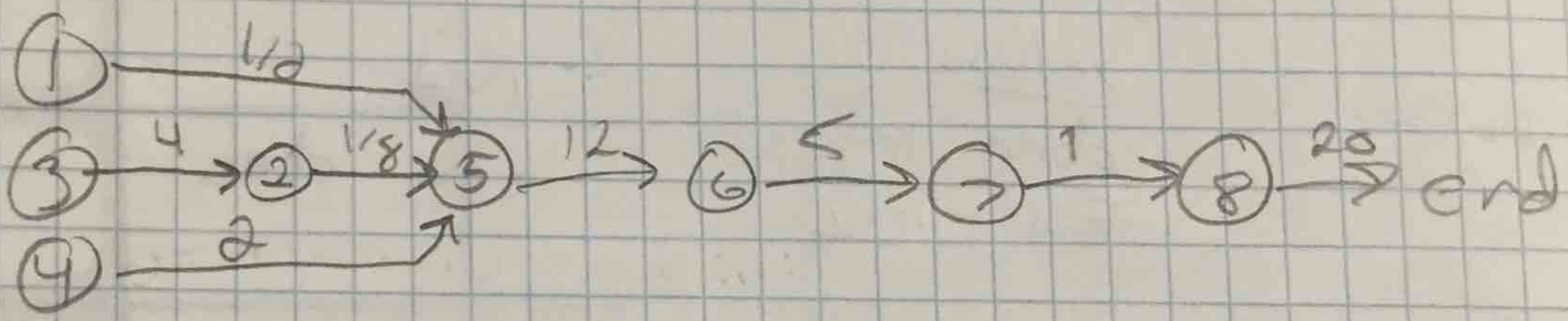
1,2,4

5

6

7

Closeout



Quadcopter

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Pg 3

Take off

Hover

Identify obj

React

Visual

Follow commands

○ Documentation

- 1 Hardware Op. manual 0
- 2 Hardware op. Auto 7.8
- 3 Hover Ideal 0
- 4 Hover non Ideal 0,3
- 5 Hover auto 4,7,8,9
- 6 Pixi camera 0,7
- 7 Choose Intelligence 0
- 8 Implement " " 7
- 9 Program Reaction 8
- 10 Determine Tasks
- 11 Create visual cues 0,6
- 12 Integrate System All

Standards

Notebook and Portfolio - Grade is based on portfolio
Schedule
Cooperation

6/30/14
Pg 4

Notebook & Portfolio

- Projects
 - description
 - deliverables
 - milestone
 - Final Project Report
 - Project management concepts
 - Extensions / changes
 - Links to notebook / SLOs
- Notebook
 - (A) Weekly Summary
 - (B) Scanned Notebook
Expect one page a day at least
- SLO's
 - Page for each Program SLO
 - Add statement
 - This course
 - Artifact
- Video site
 - A.) Project Proposal
 - B.) Project Report / Progress Report
 - Supervisor
 - C.) Team Progress Report
 - D.) Project Sales Pitch to a customer
 - E.) Final Report Supervisor
 - F.) Project closeout report

Quadcopter Parts and Resources

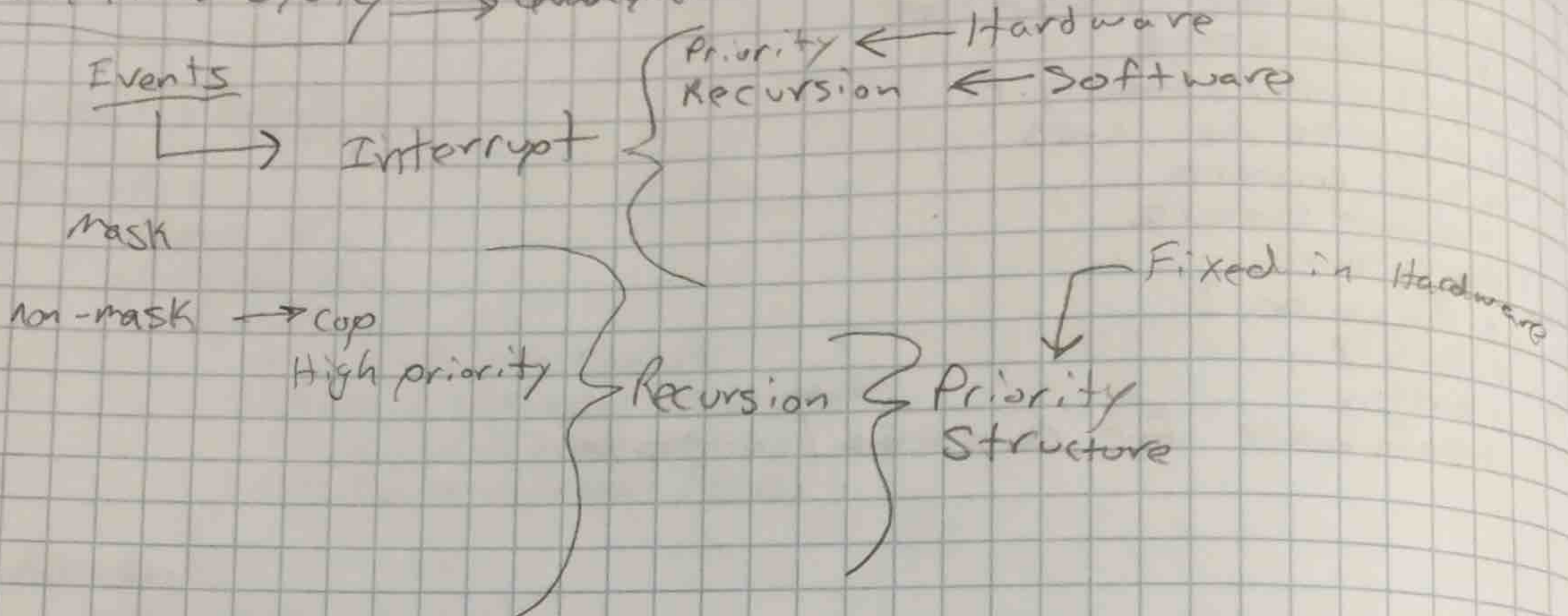
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- Quadcopter
- RC controller/Transmitter
- Qualcomm board
- arduino / Raspberry Pi
- objects for LWS
- pixi camera
- other camera
- propellers
- location?
- safety
- battery
- software for cameras/controllers

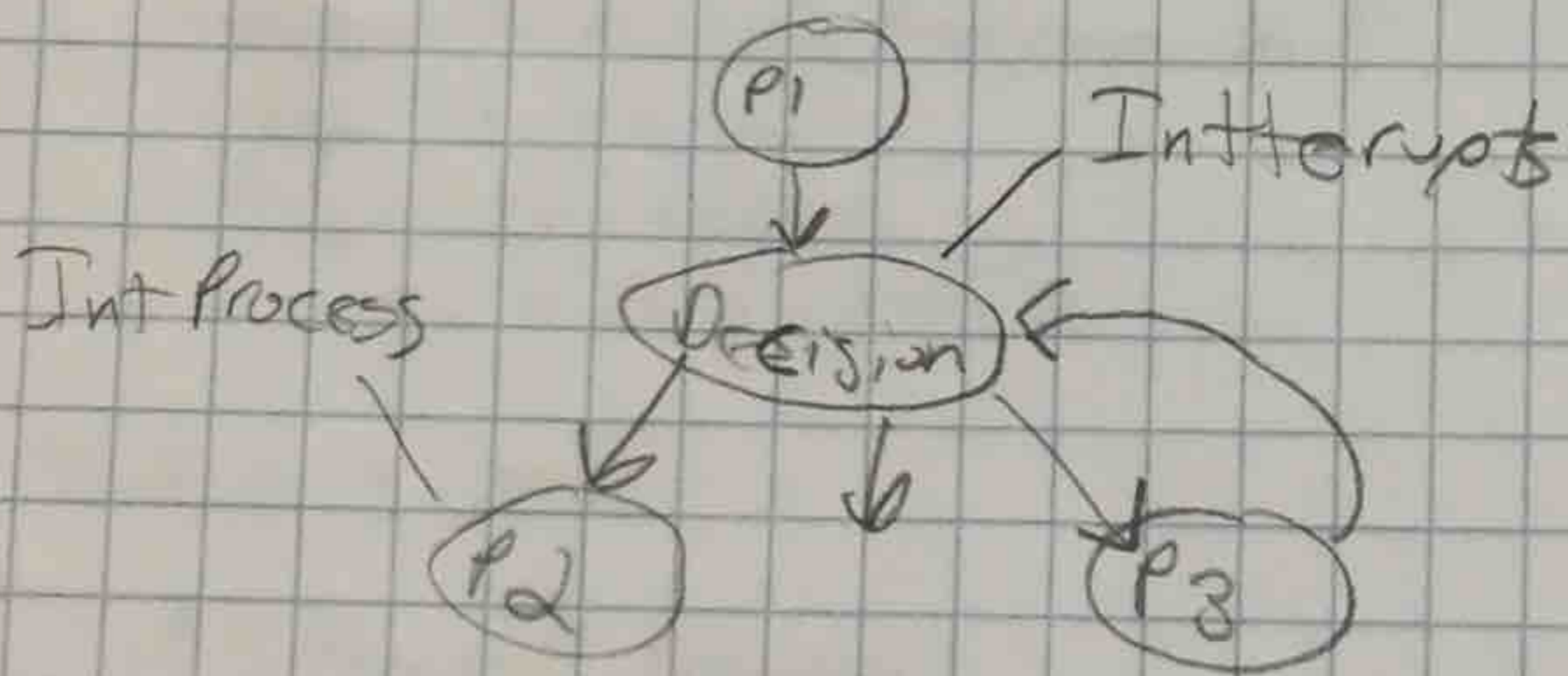
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Pg 6

computers → Threaded System

Real time system → Quadrator



Sequential System (state machine)



Milestones for Quadcopter

- gather components
- take off Auto
- Hover/Land Auto
- object identification
- follow visual commands