Questions and Answers Vol. 4

or

"By caffeine alone do you set your mind in motion."

Paul Pounds

27 April 2015

University of Queensland

But first…

Some house keeping

The shortest lecture of the year?

- This might be the shortest lecture of the year
  - Don't worry, I'll still make it worth your while!

- Please note, there is NO LECTURE on Monday 4th of May
  - I will not show up
  - You should not show up, either

3

Incremental Demo II

- Next incremental demos will be next week
  - Again, you need to send me an email requesting a slot by Friday.

- Same process as before
  - Easy way to secure marks
  - This time will be more rigorous

Calendar at a glance

Week	Dates	Lecture	Reviews	Demos	Assessment submissions
1	2/3 – 6/3	Introduction			
2	9/3 – 13/3	Principles of Mechatronic Systems design			Problem analysis
3	16/3 – 20/3	Professional Engineering Topics			Analysis peer review
4	23/3 – 27/3	Your soldering is (probably) terrible			
5	30/3 – 3/4	Q&A	Progress review 1		
Break	6/4 – 10/4	Q&A			
6	13/4 – 17/4	Radio module selection			
7	20/4 – 24/4	Aircraft flight	Progress seminar	25% demo	
8	27/4 – 2/5	Q&A			
9	4/5 – 8/5	NO LECTURE IN WEEK 9		50% demo	
10	11/5 – 15/5		Progress review 2		
11	18/5 – 22/5			75% demo	Preliminary report
12	25/5 – 29/5				
13	1/6 – 5/6	Closing lecture		Final testing	Final report and reflection

You are here

Progress review II

- Sign ups for progress review II will open in week 9 and close that Friday
  - No lecture next week, so I'm reminding you now!
  - Same process as always; sign up via Doodle poll
  - Incomplete sign ups will be cleared

An announcement will go out via

Blackboard when sign ups open

FAQ Roundup

- **None as yet**

And now…

Gratuitous project tips deux

Gratuitous project tips!

- What does the task really require you to do?
  - What is not required?
  - Don't spend time on unneeded functionality

- Make sure that your launcher fits entirely –inside– the designated launch zone
  - Non-compliant systems will *not* be tested

Gratuitous project tips!

- How much sensing do you really need?
  - What can you do with off board sensors?

- That said, you are almost certainly not putting enough time into trajectory control
  - Your success will largely depend on whether you can get your aircraft from A to B

Gratuitous project tips!

- What kind of flight profile will make landing easiest?

  – What is the second derivative of your trajectory?

- Is your aircraft structurally strong enough to take the force of its launcher?

  – Avoid spontaneous wings-fall-off failure

  – What about dynamic flight loads?

Questions

Tune-in next time for…

Questions and Answers Vol. 5

or

"The madness will never end."

Fun fact: The spiny hairs of ***Dendrocnide excelsa***, also known as the gimpi gimpi or "Australian Stinging Tree", are so painful that victims of large exposure have shot themselves rather than endure it.

It is endemic in South East Queensland.