# COMSM0142 Individual Project with Presentation

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# Reminder: Basic goals

You have 15 minutes plus 5 for questions/changeover.

Leave a start-of-Y3 audience knowing:

- What you're doing for your project.
- Why you care about it, and why they should too.
  - Doesn't need to be a practical application!
- How it's going.
  - "Badly" is fine if you explain the problem!
- At least one new idea on the technical side.
  - Could be from maths, ML, architecture, study design, software engineering, HCI theory, ethical theory...
  - **No need to be the absolute hardest thing!**

Formal mark scheme will (still!) be released Soon$^{\mathrm{TM}}$, but will be based around this.

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- Optional: What will its layout be?

Use Notepad, VScode, paper, whatever works best.

If there's an important snippet you already know (a joke, a key analogy, important pictures) jot them down now, but don't do anything neat yet. Be willing to "murder your darlings".

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> "My propositions serve as elucidations in the following way: anyone who understands me eventually recognizes them as nonsensical, when he has used them—as steps—to climb beyond them. (He must, so to speak, throw away the ladder after he has climbed up it.)"
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> — Ludwig Wittgenstein, *Tractatus Logico-Philosophicus*

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> "A lie-to-children is a statement that is false, but which nevertheless leads the child's mind towards a more accurate explanation, one that the child will only be able to appreciate if it has been primed with the lie."
>
> — Jack Cohen, Terry Pratchett and Ian Stewart, *The Science of Discworld*

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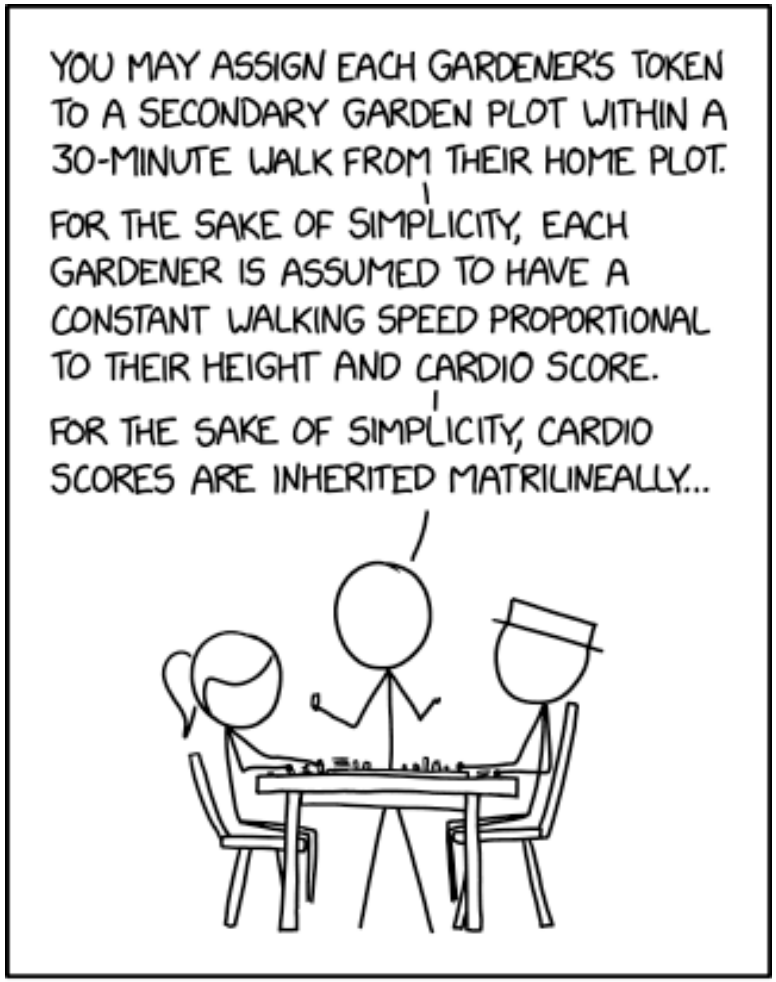
- Many others — examples?

# Honesty in lies-to-children

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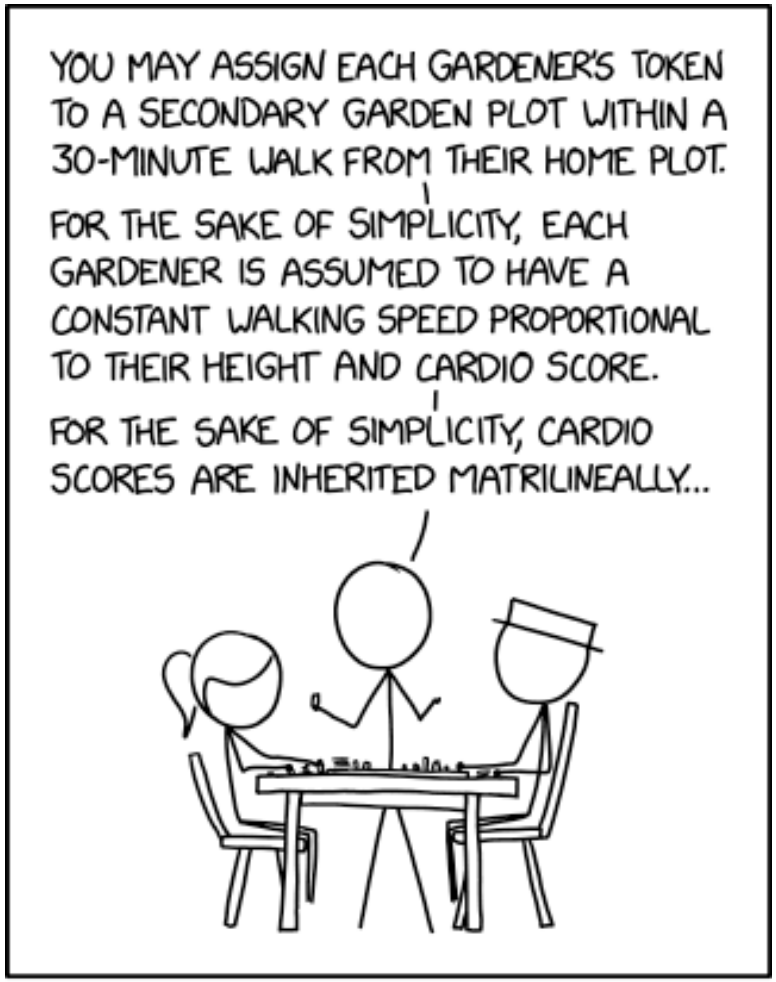


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It's important to be open about lies-to-children so you don't actually deceive people.

**But** don't harp on it. The goal is to teach, not to impress.

Let the audience leave feeling like they're smart for understanding!

# Slide design: What not to do

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Check out the military powerpoint karaoke session!

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# Designing for accessibility

- Colour blindness:
  - Pick a small palette of distinguishable colours for diagrams.
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  - Use high-contrast colour schemes. (High contrast against white, too — bad projectors are a risk for everyone!)
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Beyond the scope of this talk but important for large audiences: make the PDF accessible for screen readers.

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# Exploiting the visual hierarchy

The eye is naturally drawn to certain parts of slides:

- Things at the top-left of the slide.
- Things running down the middle third of the slide.
- Anything unusually large.
- Anything surrounded by **negative space**.
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Collectively, this is known as the **visual hierarchy**. Make sure the most obvious thing is what you *want* the audience to focus on!

Slide titles are naturally high in the hierarchy — if you use them, make them a decent summary.

# Simple, non-technical content: Keep the reader awake!

- Visually-distinct "break slides" around topic changes.
- Many short slides are better than few long slides.
- Pictures, relevant or fun or both.
- Graphic design: Beautiful colour schemes, interesting fonts, unusual layouts. (But *only* if you can actually do this well!)
- Verbal asides — jokes, digressions, informality.
- If all else fails, slide transitions.

My own slides aren't very good at this!

(They're mostly intended to convey I mostly teach/present maths and CS, so...)

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- It is **much** easier to go too fast than too slow. Remember yourself at the start of the year.
- Don't be afraid to go back a slide to e.g. recall a picture.

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Some of this is the opposite of the advice for keeping the reader awake — for easy sections, you *want* high cognitive load!

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Most important for proofs and technical concepts, but still valid on a larger scale — introduction and conclusion!

# For next time

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- Write draft versions of 2-3 slides.
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Thanks for coming, and good luck!