PP => D+N=AWESOME

Ladies and Gentlemen, Start your cogitation engines...

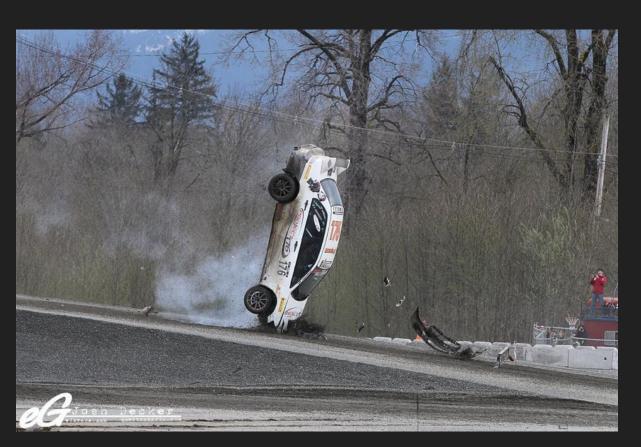
```
if (wkstnNum%2==1) {
 thinker.login();
 thinker.open(codeEditor);
 thinker.open(terminal);
else {
 thinker.fetch(KtS);
 thinker.fetch(KtS);
 thinker.craft(teamFlag);
```

Analog feedback on rally racing?

a typical rallycross scene...



We aim to avoid this



...and instead aim for this:



pair programming: driver + navigator = awesome!



pair programming: driver + navigator = awesome!

- only 1 Thinker ("driver") types
- other Thinker ("co-driver")
 observes/guides/checks/co-creates
- both thinkers think
- both thinkers get smarter faster
- swap roles at specified intervals

Ladies and Gentlemen, // < < < it's a spectrum > > >

Thinkers,

Start your cogitation engines...

- driver: logged in, ready to code
- co-driver: KtS on hand, ready to "navigate"

rules of the road:

- raise team flag to indicate
 - distress
 - something to show off
- *listen* for signal to
 - swap seats
 - pause for announcements

...aaaand they're off! (it's NOT A RACE)

1. **bar_graphify(nums)** takes a list of non-negative integers and prints a horizontal bar for each index, commensurate with the value at said index. *Exempli gratia*,

GOooo!!!! (it's NOT A RACE)

2. **vertbargraphify(nums)** takes a list of non-negative integers and prints a set of vertical bars visualizing the magnitude of the value at each index. *Exempli gratia*,

pedagogical notes

pair programming: deploy wisely

Good for:

- Accelerating learnination of
 - new tools
 - language syntax
 - platforms
 - new techniques
- Encouraging collaboration
- Realizing fallibility
- Building sense of community

Less ideal for:

- Big conceptual challenges
- Multi-faceted, large-scope projects

...but with modified structure, can still work well.

pp PROTIPS

- play the referee/support van role...
 - enforce 1-driver rule
 - respond to distress signals
 - watch for less-visible cues, respond appropriately
 - encourage
- visible timer
- clear signal for transition
- "Hints at the Half"
- kiss: odds drive first
- physically switch seats
- notebook <-> map

- violation/hatchback/teamflag/siren/e
 tc... milk the rally metaphor...
- "Not a race. No really tho."



resources + miscellany

background: https://en.wikipedia.org/wiki/Pair programming

convince your uber-nerds:

https://www.newyorker.com/magazine/2018/12/10/the-friendship-that-made-google-huge

amuse: Samir, you're breaking the car ...w/ follow-ups 1 and 2

inspire: Rally driving done well

what is AWESOME? see Fake Grimlock page & twitter