# Debugging

Resources:

https://dwheeler.com/essays/debugging-agans.html

http://web.mit.edu/6.031/www/sp22/classes/13-debugging/

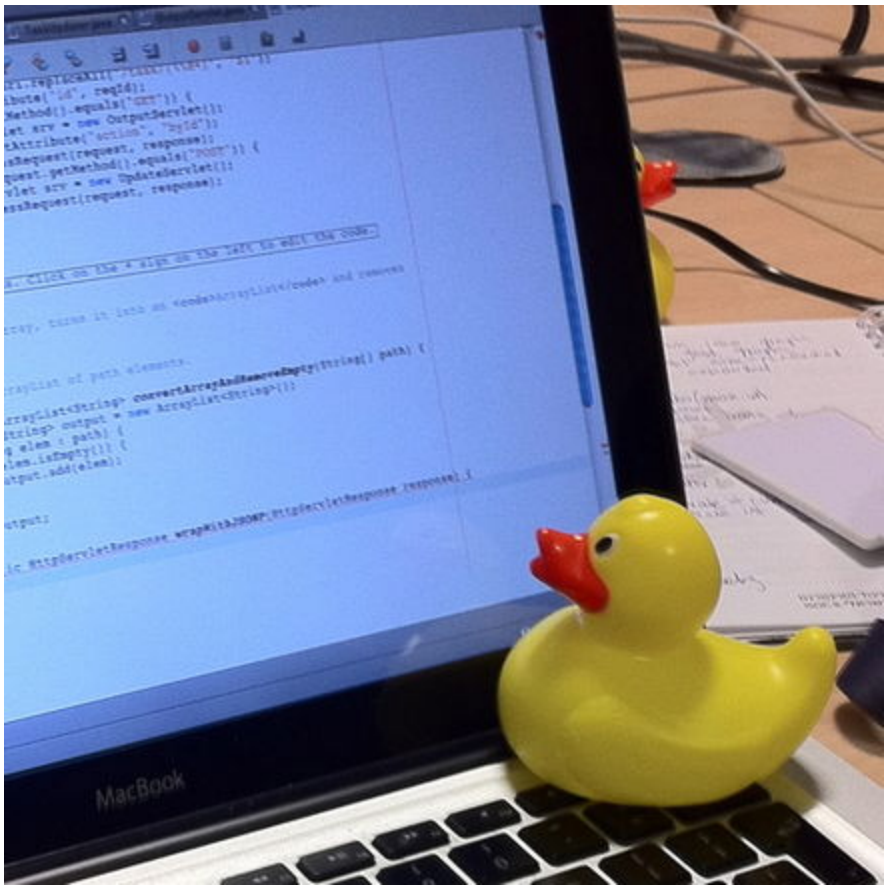
https://stackoverflow.com/help/minimal-reproducible-example

6. **Keep an Audit Trial**
    - Start writing things down to avoid the short-memory problem of what's working and what isn't.
    - Record it in a form of log: hypothesis, experiment, observation

7. **Check the plug**
    - Question our assumptions

      For example, if we turn on the power switch of a machine, and the machine doesn't start, maybe you shouldn't be debugging the switch or the machine – but asking whether the machine is even plugged in? Or whether the electrical outlet itself has power?
    - make sure your source code and object code are up to date

8. **Get a Fresh View**
    - Explain our problem to someone else
        - rubber-duck debugging/teddy-bear debugging




Tell it to the bear before trying it to the human

By talking aloud our code confusion, it can be good at helping us realize the problem ourselves

Fresh view can be from: team members, co-workers, StackOverflow

Minimal Reproducible Example (MRE)

- Minimal
- Complete
- Reproducible

Real-world illustrations:

http://debuggingrules.com/?page_id=140

http://debuggingrules.com/?page_id=165