

Procedural Design Heuristics

Heuristics: a set of guiding principles

Procedural Design: design by decomposing the problem into high-level steps (procedures/methods)

Procedural Design Heuristics

1. Cohesive, focused methods

- Cohesive: responsibilities of method closely related to each other
- Focused: singular purpose/job ... able to summarize purpose of method in 1 short non-compound sentence

2. No "do-everything" methods

- Keep methods short, fit on one screen (~15 lines of code)
- Big/long method -> haven't decomposed enough

3. Minimize coupling and dependencies between methods

- Coupled if can't call one without the other
- Don't have parameters that are only passed to other methods
- Use return to send info back to caller

4. Main a short, concise summary - no low-level commands

- High-level -> method calls ... Low-level -> raw commands
- No chaining: m1() calls m2() calls m3() calls m4() ...

5. Localize your data

- Data "owned" at the lowest level; smallest scope possible