Unix Programming

Unix Programming [1/3]

- Rule of Modularity: Write simple parts connected by clean interfaces.
- Rule of Composition: Design programs to be connected with other programs.
- Rule of Clarity: Clarity is better than cleverness.
- Rule of Simplicity: Design for simplicity; add complexity only where you must.
- Rule of Transparency: Design for visibility to make inspection and debugging easier.

Unix Programming [2/3]

- Rule of Robustness: Robustness is the child of transparency and simplicity.
- Rule of Least Surprise: In interface design, always do the least surprising thing.
- Rule of Repair: Repair what you can but when you must fail, fail noisily and as soon as possible.
- Rule of Economy: Programmer time is expensive; conserve it in preference to machine time.
- Rule of Generation: Avoid hand-hacking; write programs to write programs when you can.

Unix Programming [3/3]

- Rule of Representation: Fold knowledge into data, so program logic can be stupid and robust.
- Rule of Separation: Separate policy from mechanism; separate interfaces from engines.
- Rule of Optimization: Prototype before polishing. Get it working before you optimize it.
- Rule of Diversity: Distrust all claims for one true way.
- Rule of Extensibility: Design for the future, because it will be here sooner than you think.

Unix Philosophy in One Lesson

- KISS
- KEEP IT SIMPLE, STUPID!

Python Principles [1/3]

- Simple is better than complex
- Complex is better than complicated
- Beautiful is better than ugly
- Readability counts
- Errors should not pass silently unless explicitly silenced

Python Principles [2/3]

- If the implementation is hard to explain, it's a bad idea
- If the implementation is easy to explain, it may be a good idea
- There should be preferably only one obvious way to do it
- Although that way may not be obvious at first glance

Python Principles [3/3]

- Special cases aren't special enough to break the rules
- Although practicality beats purity
- Flat is better than nested
- Now is better than never
- Although never is often better than right now