2024-05-12-Free Range Programming

Notes to self

- FoPoC¹ developers use only function-based text and think inside the box. FoC² developers use many notations and think outside the box.
- goal: show one way to create new notations
- goal: use existing tools
- Code: a way to create scripts to program actions of electronic machines
- CPU is a script sequencer. A sequencing chip attached to storage.
- FOPOC finding a way to program cpu based sequencer only.
- Definition of computer science: digitized mathematics
- Demo 1: show sequential echo boxes.
- Demo 2 edit sequential demo to parallelize boxes
- Double 3: show XML of parallel boxes; show JSON from XML; discuss code to evaluate JSON
- PROLOG: the demonstration of a programming language in a declarative style;
 uses engine to decide on implementation of details
- S/SL Syntax / Semantic Language demonstration of typeless language;
 types can be declared, but not defined
- S/SL demonstration of the power of a typeless language. Can implement a whole compiler in S/SL, e.g. PT Pascal. Logic is declared in S/SL, then we use object oriented techniques to modularize implementation.

¹ FoPoC - Future of Past of Coding

² Future of Coding

- MiniKaren: demonstration of exhaustive search without specifying implementation.
- Production Engineering: implementation of types, implementation of code.
- Choosing algorithms is Production Engineering.
- Question: is DPL (Diagrammatic Programming Language) declarative or Production Engineering?
- There is a difference between Engineering and Production Engineering.
- SWIB style thinking outside of the box: example: pipeline of components to implement Dungeon Crawler game, used something like 15 stages (project is unfinished)
- Focus follows mouse issue: major drawback of MacOS interface. Scrolling focus follows mouse, but you have to click (a second time) to have keyboard follow mouse. You can mouse over to a window and scroll it, but, to type in it, you have to click on the window first. Schizophrenic behaviour.

Appendix - See Also

See Also

References https://guitarvydas.github.io/2024/01/06/References.html

Blog https://guitarvydas.github.io/

Blog https://publish.obsidian.md/programmingsimplicity

Videos https://www.youtube.com/@programmingsimplicity2980

[see playlist "programming simplicity"]

Discord <u>https://discord.gg/Jjx62ypR</u> (Everyone welcome to join)

X (Twitter) @paul_tarvydas

More writing (WIP): https://leanpub.com/u/paul-tarvydas