

Progress report in Pen programming language

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Agenda

- Progress report
 - Code formatter
 - Documentation generator
- Next plans

Progress report

Code formatter

- Pull request: [#874](#)
- Similar to `go fmt`
 - No configuration
 - No maximum editor width

Code formatter (continued)

- The previous work
 - [Prettier](#)
 - [Wadler's prettier printer](#)
 - Written in Haskell
- AST -> Doc -> String
- Doc: IR for formatted codes
 - It represents all the possible formatted codes in one format.

Code formatter (continued)

- Rewritten once...
 - v1: AST -> String
 - v2: AST -> Doc -> String
 - 5 times faster!

Documentation generator

- Pull request: [#878](#)
- It's all about formatting codes as well.
 - But in a flipped way
 - Codes in comments v.s. comments in codes
- Reuses the same formatting logic.

Next plans

- New packages and examples with map types
 - Knapsack problem
 - Conway's game of life
 - `Json` package
 - `Flag` package

Summary

- Progress
 - Code formatter
 - Documentation generator
- Future plans
 - New packages and examples with map types