Elm Program Mapper

Function-ness →

"Fanciness" ↓

⊙ (size) Use frequency, github repos with stars

⊗ Align related types by usage

- [x] Christmas Examples
- [x] Web Examples
- [ ] Github Examples
- [ ] Only exposed

Basics

type Choice = Rock | Paper | Scissors

Rock : Choice

5 : Int
5.0 : Float

"Hello World" : String

True : Bool
False : Bool

tipFromAunt : Service → Float → Float
tipFromAunt s billAmount = case s of
  Awful → billAmount * 1.15
  Good → billAmount * 1.18
  Great → billAmount * 1.20

distinguish by link →

String.reverse : String → String
(e.g.) String.reverse "Hello"
"olleH"

tipFromUncle : Float → Float
tipFromUncle billAmount =
  billAmount * 1.15

Fancy

type Service = Awful | Good | Great

type Toy = Legos | Doll
type SantaGift = Gift Toy | Coal
Coal : SantaGift
Gift Doll : SantaGift

type alias ChristmasChild = {name : String, gift : SantaGift, delivered : Bool}
{ name : "Drew", gift : SantaGift, delivered : False } : ChristmasChild

Flip Y, add physics for "static" vs "top heavy" type structures?

Fancier

type SantaList = List
  [{name : "Sean", gift : Doll, delivered : False}
  , {name : "Forest", gift : Coal, delivered : True}
  ] : SantaList

coalCost : SantaList → Float
coalCost list = list
  |> List.map .gift
  |> List.filter (\g → g = Coal)
  |> List.length
  |> (*) 500

Html.div : List Attribute → List Html msg → Html msg

List.map6

Fanciest

(+) : number → number → number

(+) 5 : Int → Int

(+) 5.0 : Float → Float

What are representative projects for usage frequency data?
- elm-real-world
- Open source high-quality projects? High "elminess"?
- Private analytic sharing via elm-syntax, elm-in-elm?
- All github elm?
- Fuzzed execution paths?

Idea 1: Analyze Github and publish cross-repo subset

Idea 2: Select Repo from Github, analyze in Browser w/ elm-in-elm (and github via elm-kite)