Hat Visual

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My Perspective

• A casual user
  – When I fire up Hat, I’m already annoyed
• I want answers, but if Hat is too much work I use `unsafePerformIO`
• I like Windows
• I have a mouse, which I like
• I do not develop Hat
The concept

• You click on what you want information on
• Your trace is a path from start to end
  – You expand the middle
  – The top is “main”
  – The bottom is a result (usually “{IO}”)
• Easy to go back
• Lots of ways to explore the trace
• Can reach the same data different ways
main

putStrLn (map toUpper "hello")
main

putStrLn (map toUpper "hello")

putStr ("HELLO" ++ "\n")
main

putStrLn (map toUpper "hello")

putStr ("HELLO" ++ "\n")

map toUpper "hello"

"HELLO"

{IO}
main

putStrLn (map toUpper "hello")

putStr ("HELLO" ++ "\n")

map toUpper "hello"

'H': 'E': 'L': 'L': 'O'

"HELLO"

{IO}
map toUpper "hello"

toUpper 'h' : map toUpper "ello"


"HELLO"
map toUpper "hello"

toUpper 'h' : map toUpper "ello"

toUpper 'h'

'H'


"HELLO"
An existing tool

- I have a very approximate tool on this idea
- Written in C#, so no one will like it
  - Doesn’t even use the standard Hat library
- Does the rough algorithm (apart from its wrong), but a very different GUI
  - The GUI is a lot worse…
Summary

- Top = Expression
- Bottom = Value

Thoughts?