



TopHat: a stylish journey through task oriented programming

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Dutch FP Day, January 11, 2019



Motivation

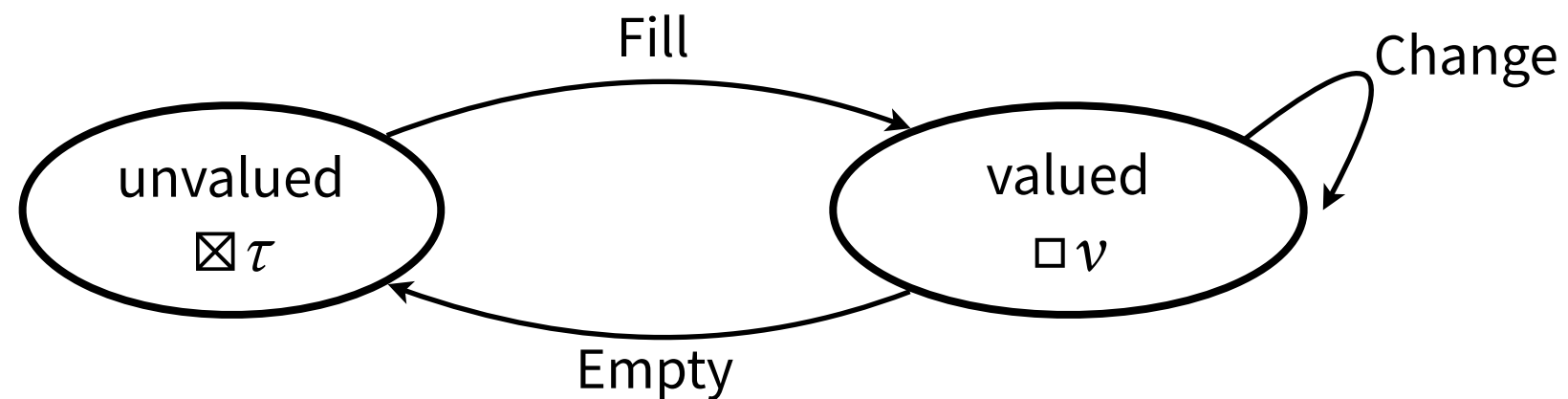
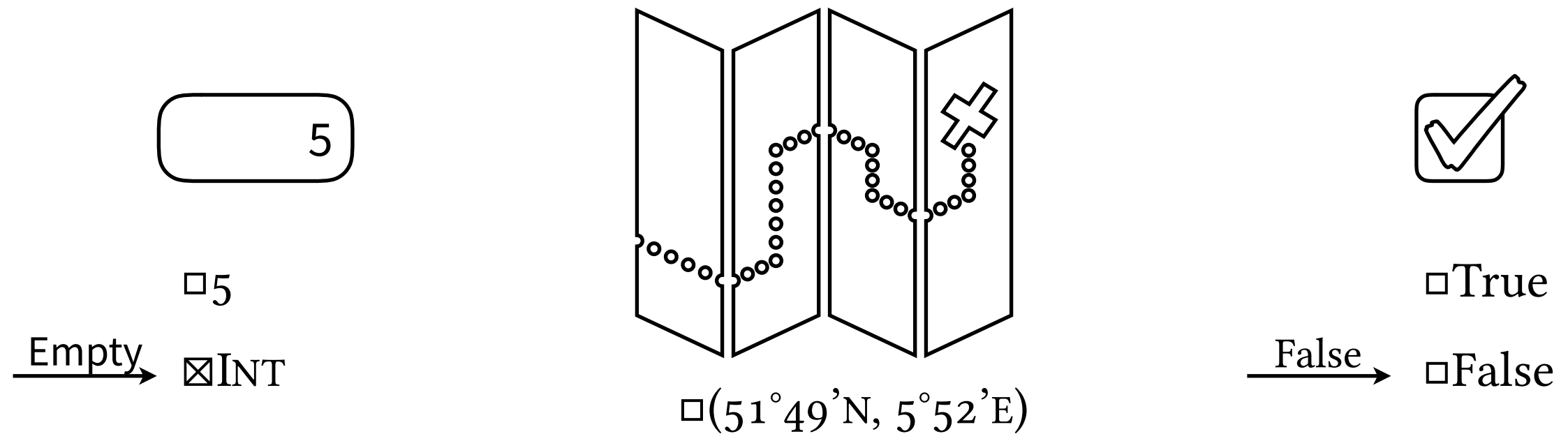
- * Compare to other frameworks
- * Clear borders between host semantics and domain semantics
- * Find elementary building blocks of TOP



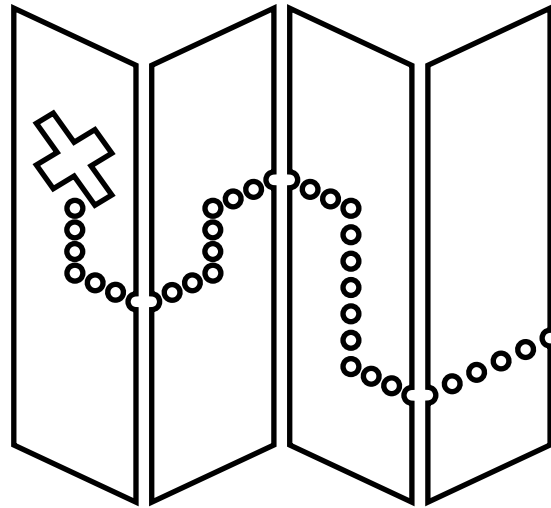


Building blocks

Editors

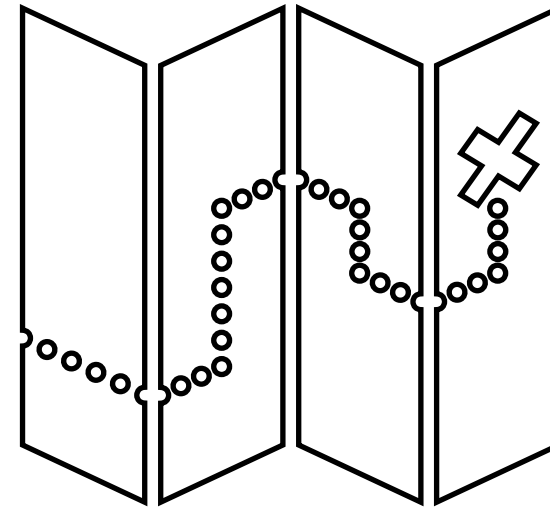


Shared editors

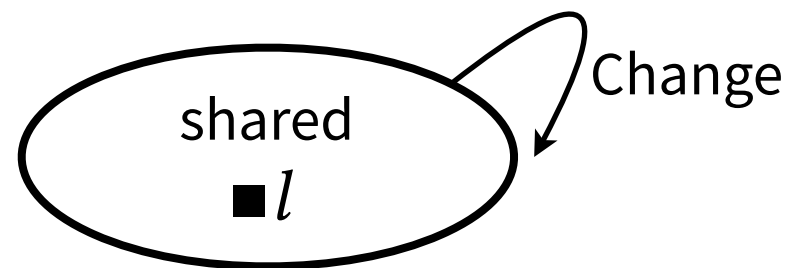


■(51°49'N, 5°52'E)

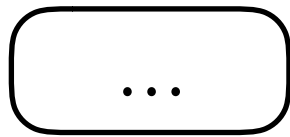
$(51^{\circ}49'N, 5^{\circ}52'W)$
→ ■(51°49'N, 5°52'W)



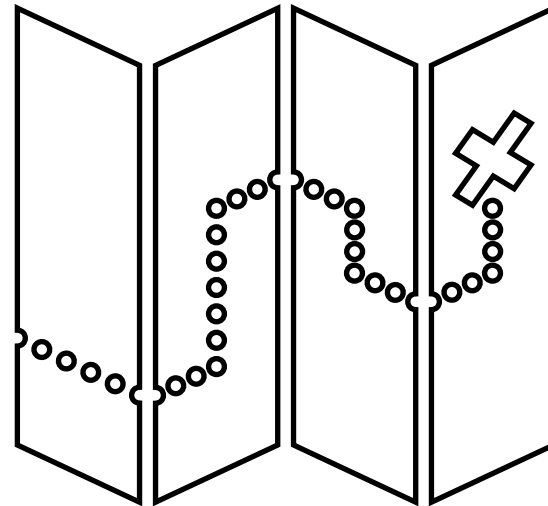
■(51°49'N, 5°52'E)



Observations



$$\mathcal{V}(\boxtimes \text{INT}) = \perp$$



$$\begin{aligned} \mathcal{V}(\Box(51^\circ 49' \text{N}, 5^\circ 52' \text{E})) \\ = (51^\circ 49' \text{N}, 5^\circ 52' \text{E}) \end{aligned}$$



$$\mathcal{V}(\Box \text{True}) = \text{True}$$

UNVALUED EDITORS SIMPLY HAVE NO VALUE

$$\mathcal{V} : \text{TASK } \tau \longrightarrow \text{MAYBE } \tau \quad \text{PARTIAL FUNCTION}$$

$$\mathcal{U} : \text{TASK } \tau \longrightarrow \text{HTML} \quad \mathcal{U} : \text{TASK } \tau \longrightarrow \text{STRING}$$

Steps



Guarded steps





Task semantics

Internals

Tasks embedded in simply typed lambda calculus...

Layered semantics

Layered semantics...



Comparisons

Tasks vs Processes

Collaboration vs Communication...

Future work





Summary





Extras

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