EECS3342 System Specification and Refinement (Winter 2022)

Q&A - Week 5, 6 Lectures

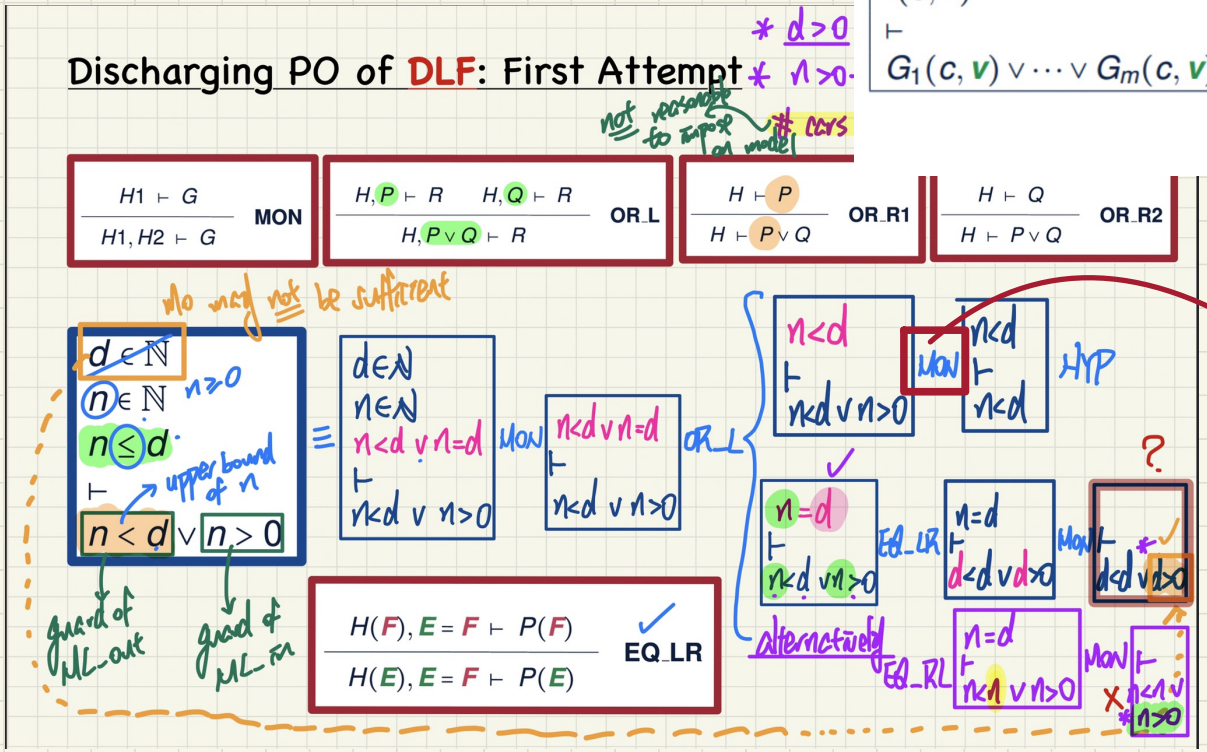
Thursday, March 3

WT1 35 WT4 70
WT2 60 Ex. 56
WT3 50

Announcements

+ eClass announcement about ProgTest
+ Lecture W7 released → WT3
+ Written Test ~~2~~ 3

Typos on the Inference Rule Application

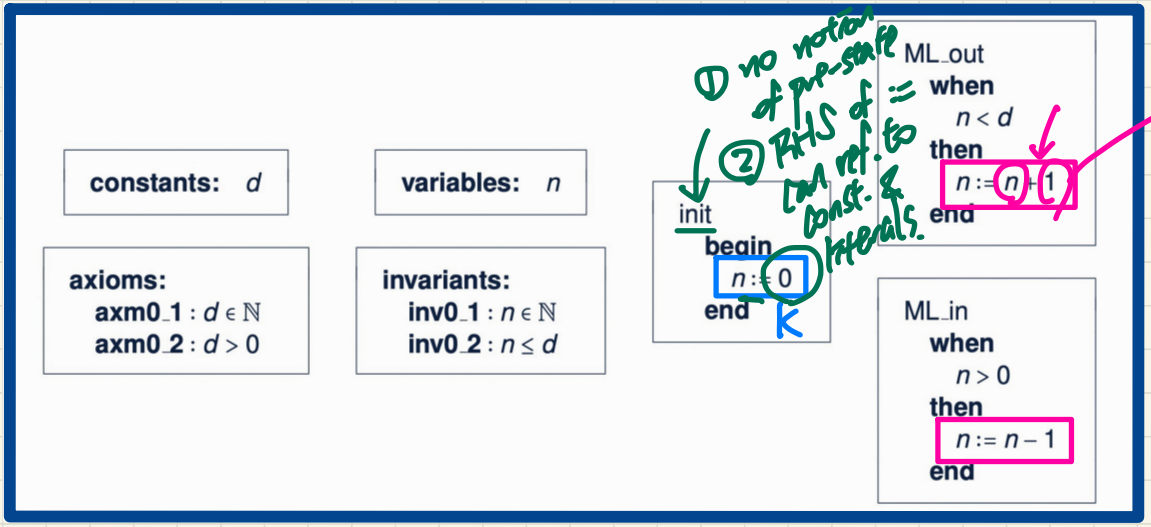


Is there a difference between K(c) and E(c,v)?

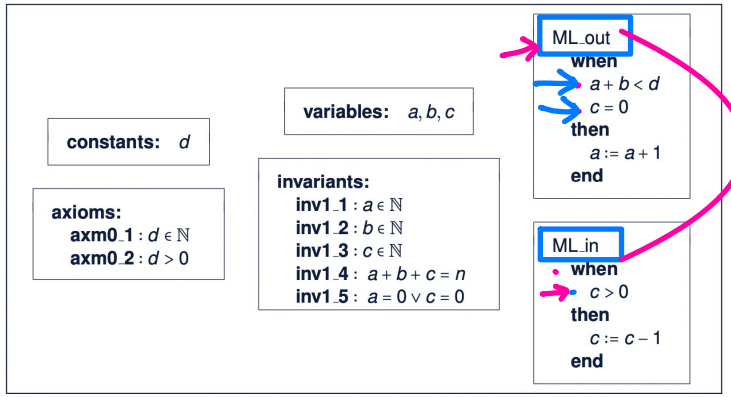
F(C, V, W) → effect of concrete evt.

K(c): effect of init's actions

E(c, v): effect of an event's actions



When we talk about the formal components
(the list of constants, list of axioms, etc.)
we talk about G(c,v) as a single item,
but isn't it possible that a single event has multiple guards?
In which case, G(c,v) should also be a list?



Con. ver.

- $G(c, v)$: list of guards of the ***abstract event***

$$G(\langle d\rangle, \langle n\rangle) \text{ of } ML\_out \mathrel{\widehat{=}} \langle n < d\rangle,\ G(c, v) \text{ of } ML\_in \mathrel{\widehat{=}} \langle n > 0\rangle$$

- $H(c, w)$: list of guards of the ***concrete event***

$$H(\langle d\rangle, \langle a, b, c\rangle) \text{ of } ML\_out \mathrel{\widehat{=}} \langle a + b < d, c = 0\rangle,\ H(c, w) \text{ of } ML\_in \mathrel{\widehat{=}} \langle c > 0\rangle$$

guards

$\langle a+b<d\ ,\ C=0\rangle$

↳ proofs

↳ $a+b<d \wedge C=0$