# hhu.

# Validation Obligations Manager

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# Changes to VO Syntax/Semantics (since 2023)

- Sequential composition operator was replaced
- Previously: e.g. TR(...); LTL($\neg$ e(up))
- Now: e.g. LTL(TR(...), $\neg$ e(up))
- Every task - independent from context
- Formal Semantics simpler

# Changes to VO Syntax/Semantics (since 2023)

- New special expression `root` for an initial animator state
- LTL(root, {cur_floor = -1})
- CTL(root, AG EF {cur_floor = topf})

# Changes to VO Syntax/Semantics (since 2023)

- Negation operator - initially decided against
- Initially was part of the validation task
- With the new semantics - define a general negation operator (*not yet implemented*)

# New features (since 2022)

- Newly supported validation task types
- POs (based on Rodin)
- Evaluation of visualizations - manual task

# New features (since 2022)

- Sequential execution of tasks/expressions
- Incremental checking of VOs - if the same task appears in multiple VOs, it only needs to be checked once
- Automatic checking of entire projects - VO manager automatically switches between machines and checks all VOs
- Persistent checking results: if a machine's source code - has not changed since its VOs were checked, the results are preserved (currently only works at runtime)

DEMO