7/22/22 GroMEt Overview

* Topics: Function Networks, Schema, JSON export, Metadata, Uncharted/Jataware
* What is GroMEt?
  + Purpose: Layered models, syntactic foundations and relations, build up sophisticated semantics
  + Assumption: No one model for everything, many frameworks have something to offer.
  + Focus: Function networks (computation graph), idioms to define patterns,
* Function Networks
  + Boxes, Ports (inputs, outputs), internal computation
  + Abstraction through nesting
  + Influenced by category theory, supports algebraic manipulation
  + Wires: multiple types connecting ports
  + Arrows indicate value dependency
  + Substitution operations
* Schema
  + Relations stored in database:
    - Connectivity of function network
  + Subfunction network only possible in a block, but all in same DB.
* JSON Export
  + Flattens subfunctions out.
  + ? What happens with circular dependencies?
* Metadata
  + Generic: associated with module
    - Provenance (when, method)
    - Source code files
  + Boxes:
    - Source: line, file,
    - Text: document reference, variable, page, block, char start/end
  + ?Is there a schema for metadata?