* Layers (RDF4J Sails):
* Semiotic Layer: Verbs, Relationships.
* DOM Layer: Dynamic Object Model. CSPO Materialized Semiotic Layer.
* Sets Layer: DOM Layer CSPO Resource Arrangement.
* Augmentations Layer: Sets Layer FCA / Embeddings.
* Functional Layer: API.
* Verbs: action (rel end: amante) / passion (rel end: amado) / state (rel: amor: ama / amado). Relation parts attributes.
* Semiotics: CSPO Schema. DOM Statements Source.
* Occurrences: Objects.
* Concepts: Non Terminals.
* Signs: Terminals.
* Semantics / Pragmatics:
* (Context, Occurrence, Sign, Concept);
* (Context, Occurrence, Concept, Sign);
* Grammar:
* (Context, Concept, Occurrence, Sign);
* (Context, Concept, Sign, Occurrence);
* Syntax:
* (Context, Sign, Concept, Occurrence);
* (Context, Sign, Occurrence, Concept);
* DOM Layer:
* (Class, Instance, Attribute, Value);
* Sets Encoding / Arrangements:
* Subject, Predicate, Object Sets inside Context Set (CSPO Statements Resources Populated)
* SubjectKind Set: Statements Predicates / Objects intersection.
* PredicateKind Set: Statements Subjects / Objects intersection.
* ObjectKind Set: Statements Predicates / Subjects intersection.
* Kinds Population (Subject Example): Subjects Occurrences with same Predicates (type), same Objects (instance).
* Kind Reification (Subject Example): S: (SubjectKind, Subject, Predicate, Object);
* Augmentations:
* Schema Aggregation: Type / Relationships (Kinds / Roles) Inference. Clustering: Unsupervised Features Learning.
* Data Alignment: Type (Feature) Attributes Value Inference. Classification: (gender, salary range: scaling).
* Behavior Activation: Available Transforms (State Browsing) Inference. Regression: State (class attributes values in scenario: relationship flow).
* FCA:
* Object: Subject.
* Context: Predicate.
* Attribute: Object.
* FCA Attributes: Primes / one-hot Bitstring Encoding.
* FCA Context: Concepts / Objects Attributes.
* Embeddings: CSPOs FCA Contexts Objects URNs Attributes Primes Product / Bitstring OR.
* Vector Space Model: CSPO Dimensions. CSPO Points: Objects URN Embeddings.
* Similarity / Distance: Common FCA Embedding Attributes Factors. Common Super Concept / Object. VSM Vector Similarity.
* Transforms / Translation: Object, Object. Merge Attributes, extract Similarity on merged Subject and merged Objects (Transforms).
* State (flow): Attributes index (hasAddress), values (address: xyz) masks browsing (Concepts / Objects).
* Ontology Matching: Concept Lattice shape.
* Functional API:
* Runtime: RDF4J.
* REST Browsing State Based Dialog Wizard. DOM / DCI / CDI / Augmentations (FCA). Structured Prompts / Responses (Statements Flow, Relationships / Roles).
* URNs: Semantic Identifiers. Encoding. DIDs (Distributed IDs). Angular Encoding.
* Conversational State Transfer (COST): Distributed (P2P).
* Node.js: JSON-LD. Functional Resources (Monads, run-at: request client / server peer. Context State available Functors / Transforms).
* Parsing: Transforms.