Ensure you have prototype instances with possibly multiple fidelity assignments (if that makes sense in your model):

ttl

CopyEdit

:PrototypeA

a :Prototype ;

:hasFidelityLevel :LowFidelity, :MediumFidelity .

Sparqle :

PREFIX rdf: <http://www.w3.org/1999/02/22-rdf-syntax-ns#>

PREFIX owl: <http://www.w3.org/2002/07/owl#>

PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>

PREFIX xsd: <http://www.w3.org/2001/XMLSchema#>

PREFIX onto: <http://www.semanticweb.org/asifcomputer/ontology/2025/ui\_ux\_automation#>

SELECT ?proto (COUNT(?level) AS ?numLevels)

WHERE {

?proto a onto:Prototype ;

onto:hasFidelityLevel ?level .

}

GROUP BY ?proto

**Automated UI/UX Design & Client Requirement Fulfillment**

The SPARQL query result (**3 fidelity levels** for a prototype, e.g., Low, Medium, High) demonstrates how ontology-driven automation streamlines UI/UX workflows and meets client needs:

1. **Automated Progress Tracking**:
   * **How**: The query counts fidelity levels assigned to prototypes, ensuring iterative design stages (wireframe → mockup → interactive) are completed.
   * **Client Value**: Clients receive real-time reports (e.g., *"PrototypeA has passed 3 fidelity checks"*), ensuring transparency and adherence to timelines.
2. **Validation of Design Maturity**:
   * **How**: High-fidelity inclusion triggers automated checks (e.g., accessibility audits, responsive layout tests).
   * **Client Value**: Ensures final prototypes meet quality standards before development, reducing post-launch fixes.
3. **Alignment with Client Milestones**:
   * **How**: Clients define required fidelity levels (e.g., *"All prototypes must reach high-fidelity before sprint review"*). The ontology enforces this via SPARQL rules.
   * **Client Value**: Guarantees deliverables match agreed-upon scope and quality.