When you inspect a competency question like

“What is the acceptable task completion time threshold for power user personas?”

you can pull out the key “chunks” and decide how each should be modeled in OWL (as a class, a data‑property, an object‑property restriction/characteristic, or as an A‑Box individual). Here’s the breakdown:

| **Term or phrase** | **OWL role** | **Notes** |
| --- | --- | --- |
| **PowerUserPersona** | Class | A specialization of UserPersona. |
| **task completion time** | Characteristic concept | Refers to the kind of metric—maps to the class TimeOnTaskMetric (a subclass of EfficiencyMetric). |
| **acceptable … threshold** | Data‑property | The numeric cutoff. Model as hasThresholdValue (domain TimeOnTaskMetric, range xsd:decimal). |
| **hasPerformanceMetric** | Object‑property | Links a Persona to its EvaluationMetric instances. |
| **PowerUser1**, **FastCompletionMetric** | Individuals (instances) | Concrete A‑Box members you’ll assert so SPARQL can return results. |

**How you’d model each in OWL:**

1. **Classes**

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:PowerUserPersona a owl:Class ; rdfs:subClassOf :UserPersona .

:TimeOnTaskMetric a owl:Class ; rdfs:subClassOf :EfficiencyMetric .

1. **Object‑property**

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:hasPerformanceMetric

a owl:ObjectProperty ;

rdfs:domain :Persona ;

rdfs:range :EvaluationMetric .

1. **Data‑property**

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:hasThresholdValue

a owl:DatatypeProperty ;

rdfs:domain :TimeOnTaskMetric ;

rdfs:range xsd:decimal ;

rdfs:comment "Acceptable time (in seconds) for task completion."@en .

1. **Individuals**

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:PowerUser1 a :PowerUserPersona .

:FastCompletionMetric

a :TimeOnTaskMetric ;

:hasThresholdValue "2.0"^^xsd:decimal .

1. **Connecting them**

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:PowerUser1 :hasPerformanceMetric :FastCompletionMetric .

### ****Key Automation Benefits****

1. **Personalization**: Designs adapt to power users’ efficiency needs.
2. **Consistency**: All teams use ontology-backed rules, reducing guesswork.
3. **Scalability**: Add new metrics (e.g., error tolerance) without rework.

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 ?persona ?metric ?threshold

WHERE {

?persona rdf:type onto:PowerUserPersona ;

onto:evaluatedBy ?metric .

?metric rdf:type onto:TimeOnTaskMetric ;

onto:hasThresholdValue ?threshold .

}