D2 - Competency Questions

Giulio Billi & Cono Cirone

December 2, 2025

Competency Questions List

Group Member: Giulio Billi

1. **Question:** Which outdoor activities in Berlin have a "Free" budget?

   - **Rationale:** Verifies the system can filter by the intersection of three distinct parameters (Location, Setting, Budget).
   - **Type:** Selection
   - **Predicate Arity:** N-ary
   - **Relation Type:** Object Property
   - **Domain-Independent Elements:** Spatial ("Berlin")

2. **Question:** Is there any Museum in Munich that operates on Sundays?

   - **Rationale:** Verifies the ability to link venues to specific days of the week while filtering by location.
   - **Type:** Binary
   - **Predicate Arity:** N-ary
   - **Relation Type:** Object Property
   - **Domain-Independent Elements:** Spatial ("Munich"), Temporal ("Sunday")

3. **Question:** What is the category of the "Mercedes-Benz Museum"?

   - **Rationale:** Verifies that a specific venue is correctly linked to its classification in the taxonomy.
   - **Type:** Selection
   - **Predicate Arity:** Binary
   - **Relation Type:** Object Property
   - **Domain-Independent Elements:** None

Group Member: Cono Cirone

4. **Question:** How many indoor Nightlife Venues in Hamburg have a "Medium" budget?

   - **Rationale:** Tests the aggregation of specific venue types with budget and location filters.
   - **Type:** Counting
   - **Predicate Arity:** N-ary
   - **Relation Type:** Object Property
   - **Domain-Independent Elements:** Spatial ("Hamburg")

5. **Question:** Which park in Hamburg close after 18:00?

   - **Rationale:** Tests the data property logic required for filtering by specific hours.
   - **Type:** Selection

- **Predicate Arity:** Binary
- **Relation Type:** Datatype Property
- **Domain-Independent Elements:** Spatial ("Hamburg"), Temporal ("18:00", "after")

6. **Question:** What is the duration of the guided tour "Old Town Walk"?

   - **Rationale:** Ensures that the system can display the length of a tour.
   - **Type:** Selection
   - **Predicate Arity:** Binary
   - **Relation Type:** Object Property
   - **Domain-Independent Elements:** Temporal