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Quiz 2: Data Modeling and JSON Schema Results for Yufu Liao

Score for this quiz: 89 out of 100

Submitted Sep 17 at 8:45pm

This attempt took 50 minutes.

Move To... This element is a more accessible alternative to drag & drop reordering. Press Enter or Space to move this question.

Question 1

12 / 20 pts

Match up each definition below with the corresponding term.

You Answered 18937

The union of several entity types.

Aggregation

Generalization

Correct! 48811

In a relationship, a sequence of entities uniquely defines another entity or sequence of entities.

Functional Dependency

You Answered 69346

An entity type made up of parts from several other entity types.

Generalization

Aggregation

Correct! 80763

In a relationship, a sequence of entities defines a set of related entities.

Multi-Valued Dependency

Correct! 10118

A relationship is represented by an entity.

Reification.

Question 2

20 / 20 pts

Provide a JSON schema for a list, each of whose elements should be a string specifying a date and time.

Your Answer:

```
{  "type": "array",
  "items": {
    "type": "string",
    "format": "date-time"
  }
}
```

}

Question 3

20 / 20 pts

Provide a JSON schema for an ordered n-tuple, whose first element is a string, whose second element is an integer, whose third element is a floating point number, whose fourth element is a date, and any remaining elements should be strings.

Your Answer:

```
{
  "type": "array",
  "prefixItems": [
    {"type": "string"},
    {"type": "integer"},
    {"type": "number"},
    {"type": "date"},
  ],
  "items": {"type": "string"}
}
```

Question 4

17 / 20 pts

Provide a JSON schema for a record, with these fields:

1. There should be a field called "name" and it should be a string.
2. There should be a field called "cwid" and it should be an integer.
3. There should be a field called "gpa" and it should be a floating point number.
4. There should be a field called "dateOfGraduation" and it should be a date.
5. There should be a field called "alumnusEmail" and it should be an email address.

The first three fields are required. The fifth field is required if the fourth is present. There should be no other fields besides these.

Your Answer:

```
{
  "type": "object",
  "properties": {
    "name": {"type": "string"},
    "cwid": {"type": "integer"},
    "gpa": {"type": "number"},
    "dateOfGraduation": {"type": "string", "format": "date"},
    "alumnusEmail": {"type": "string", "format": "email"},
  },
  "required": ["name", "cwid", "gpa"],
  "dependentRequired": [
    "alumnusEmail": ["dateOfGraduation"]
  ],
  "additionalProperties": false
}
```

dependentRequired should be in flower brackets "alumnusEmail":["dateOfGraduation"] incorrect, "dateOfGraduation" : ["alumnusEmail"] is correct.

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Question 5

20 / 20 pts

Name the four operations for composing JSON schemas:

What is the operation corresponding to specialization?

What is an operation corresponding to generalization?

Answer 1:

Correct! allOf

Correct! 6384

allOf

Answer 2:

Correct! anyOf

Correct! 882

anyOf

Answer 3:

Correct! oneOf

Correct! 456

oneOf

Answer 4:

Correct! not

Correct! 7054

not

Answer 5:

Correct! allOf

Correct! 2665

allOf

Answer 6:

Correct! anyOf

Correct! 715

anyOf

Correct Answer 7864

oneOf

Quiz Score: 89 out of 100

Quiz Submissions

- [Attempt 1: 89](#)