# Reading Quiz 04 - DAO Pattern and REST API

**Due** Jun 20 at 11:59pm          **Points** 10          **Questions** 10
**Time Limit** 15 Minutes          **Allowed Attempts** 2

# Instructions

This quiz is worth 10 points. Once you begin the quiz you will only have 15 minutes to complete it. Therefore, please go over the material shown below before taking this quiz. Upon completion, you will immediately see your score, but you will not see the correct answers until after the quiz has closed.

You will have 2 attempts and Canvas will record your highest grade. However, you are not guaranteed to get the same questions on each attempt as it is choosing 10 questions from a pool of 20 each time.

Before taking the quiz, make sure you go over:

- DAO Pattern recordings and slides
- REST API recordings and slides

## Attempt History

|  | Attempt | Time | Score |
|---|---|---|---|
| **KEPT** | **Attempt 2** | 9 minutes | 10 out of 10 |
| **LATEST** | **Attempt 2** | 9 minutes | 10 out of 10 |
|  | **Attempt 1** | 15 minutes | 8 out of 10 |

Score for this attempt: **10** out of 10
Submitted Sep 28 at 9:09pm
This attempt took 9 minutes.

| Question 1 | 1 / 1 pts |
|---|---|

In the Bookstore project, which components access DAO objects through the application context?

○ Database components

○ Model objects

**Correct!**          ● REST API components

○ Vue components

## Question 2                                        1 / 1 pts

In the implementation of a DAO find method, suppose we use an SQL constant with the form: SELECT [fields] FROM [table] WHERE [key] = ?

How is the value of "?" obtained?

○ from a getter in the Connection resource

○ from a getter in the ResultSet resource

○ from a setter in the BufferedReader resource

**Correct!**          ● from a setter in the PreparedStatement resource

## Question 3                                        1 / 1 pts

A ResultSet object holds the result of an SQL query that returns a collection of rows, and a Result object holds the result of an SQL query that returns a single row.

○ True

**Correct!**          ● False

## Question 4                                                                    1 / 1 pts

Which of the following is NOT a resource that you would normally see in a try-with-resources statement of a DAO find method (implemented with JDBC)?

Correct!

- ⦿ BufferedReader

- ○ Connection

- ○ PreparedStatement

- ○ ResultSet

## Question 5                                                                    1 / 1 pts

In the version of the DAO Pattern that we use in the Bookstore project, the model classes only have accessors, which makes them immutable. Which of the following is NOT a benefit of immutable model objects?

- ○ immutable objects are easier to reason about than mutable objects

Correct!

- ⦿ immutable objects are more efficient than their mutable conterparts

- ○ immutable objects don't change state, so they can be used safely across multiple threads

- ○ lists of immutable model objects are easier to work with because you can't accidentally change the value of list objects from outside the list

## Question 6                                                            1 / 1 pts

What do model objects represent?

○ columns in the database

**Correct!**          ⦿ rows in the database

○ tables in the database

○ types in the database

## Question 7                                                            1 / 1 pts

What is a REST API?

○ An application programming interface that allows a developer to define constraints for communication.

○ An application programming interface that literally rests until it is interacted with.

○ An application programming interface that that can follow the six constraints of REST.

**Correct!**          ⦿ An application programming interface that that follows the six constraints of REST.

## Question 8

**1 / 1 pts**

A representation of a resource is a unique copy of that resource, not the resource itself.

**Correct!**

- ⦿ True

- ○ False

## Question 9

**1 / 1 pts**

What is the relationship between URIs, URLs, and URNs?

- ○ URLs are URIs. URNs are something else.

- ○ A URN is the address part of the URL which is part of the URI.

- ○ The URI is a URL with the communication method defined. The URN is the address part of the URI.

**Correct!**

- ⦿ A URN can be a URL, and both are always URIs.

## Question 10

**1 / 1 pts**

Who can interact with a REST API?

- ○ Nobody unless it is explicitly made open and available.

Only users with the correct REST keys.

**Correct!**

◉ Anyone, unless the REST API includes an authentication layer or similar access restrictions.

○ Anyone, even if the service includes an authentication layer or similar access restrictions.

Quiz Score: **10** out of 10