

Task assignment for position “Java developer”

TLDR: This task is about implementing of web based database browser (similar to desktop application [DBeaver](#)) with basic functionality and for single database vendor only. Browser should be able to register multiple database connections and browse their data and structure.

The result should be RESTful service with its own database.

This task should be implemented in Java. Database for persistence of data is your choice. If no other information about technology specified, you can use whatever technologies/frameworks you like.

Non-functional requirements:

- Use spring-boot (Spring MVC)
- Use git and send us your repository with a solution

Task 1:

Implement backend for saving, updating, listing and deleting connection details to you favourite relational database.

E.g. If you choose the [MySQL](#) database, you should persist at least the following properties:

- *name* - custom name of the database instance
- *hostname* - hostname of the database
- *port* - port where the database runs
- *databaseName* - name of the database
- *username* - username for connecting to the database
- *password* - password for connecting to the database

Connection details themselves should be stored in database of your choice.

Task 2:

Design and implement REST API for browsing structure and data using your stored database connections from Task 1. Your API should support the following operations:

- Listing schemas (if your selected database supports them)
- Listing tables
- Listing columns
- Data preview of the table

Resources should contain as much information you can find (data type, if it is primary key, etc.).

Bonus tasks:

Design and implement REST API endpoints for statistics:

- Single endpoint for statistics about each column: min, max, avg, median value of the column.
- Single endpoint for statistics about each table: number of records, number of attributes.
- Document this REST API

Happy coding :-)

If you have any question about assignment or solution feel free to ask.

When you are ready, submit your solution to email adam.juraszek@ataccama.com.

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