## Dark Springs Bottled Water Database User Guide

## User Scope Definition

This database aims to store and manage information on sales and operational aspects of Dark Springs day-to-day management. It provides comprehensive information on employees, customers, billing, contract, delivery, and allows users to extract, delete, update, insert information if needed.

## Business Scenarios

* **Scenario 1: Employee Working Hours Monitoring Program (Well-being Initiatives)**

Dark Springs deeply concerns its employees’ well-being, and hence, puts strong emphasis on work-life balance. The company does not allow delivery persons to be assigned to more than three routes. By implementing the function check\_job, the database will display an error message and prevent additional job assignments to delivery persons that have already taken three routes.

* **Scenario 2: Employee Evaluation Deletion Automation**

This database will periodically delete evaluation information on those who have left firms for three years, as Dark Springs wants to avoid storing irrelevant information. By implementing a schedule yearly\_delete\_evaluation it automatically removes evaluation records for targeted employees. Moreover, this schedule will activate the trigger delete\_evaluation, that once the evaluation record is removed from the evaluation table, the associated row of evaluation will be removed automatically in the evaluation\_detail table.

* **Scenario 3: Different Grant Access for Different Roles**

This database also creates roles for different types of users such as HR team and Financial team to increase database security. For example, the HR team might be concerned about employee evaluation but don’t necessarily have to access information on billing. By granting access to different tables according to different roles will help users efficiently find relevant information and meanwhile does not violate data privacy concerns.

* **Scenario 4: Using SQL Package to Update Evaluation Weights**

This database also implements a package called update\_evaluation\_pkg, which can automatically compute an employee’s performance with an updated evaluation standard. Using new weight of deliveries, sales, leads, and the specific employee ID as input, calculates and updates employee’s new evaluation score and accumulated score with its new weight.

* **Scenario 5: Review the List of Expired Contract**

For the table contract, we can have a list of consumers whose contract has expired by comparing service\_end\_date (contract expiration date) with current date. The user/employee then can use this list to determine if they should remove the expired contract or they may contact consumers for potential business opportunities to renew the contract. The reason why we did not automate this process (automatically delete the contract if it has expired) is that some consumers might want to work with Dark Springs again, and we want to keep the old contract for reference.

* **Scenario 6: Review Delivery Detail by Product Type**

Dark Springs can assess the popularity of different types of products by using join statements to integrate information from two three including delivery, delivery detail, product. For example, they may know the quantity of each type of product and calculate the sum of order numbers by month to adjust their supply strategy to boost sales and better manage inventory.

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