

Reporting App



You must implement the back-end system of an application used for reporting financial information. The back end will expose REST endpoints with functionality, which are consumed by a separate front-end system. Also, it will store the data in an SQL database.

You must implement the following endpoints:

- **add a report header** – allows a user to add a new report header in the database. The following business rules are defined for this endpoint:
 - If the type is `BALANCE_SHEET` and there is already a report header with the same combination of type and `creationDate` in the database, the request will be rejected, and the user will receive the message “There is already a `BALANCE_SHEET` report for the specified date”.
 - The request to add an item has the following structure:

Field name	Present on the request	Mandatory on request	Present on response	Other validations
id	no	no	yes	PK, auto-generated on DB level
title	yes	yes	yes	String with max length of 200
type	yes	yes	yes	May be only one of the following values: <code>BALANCE_SHEET</code> , <code>PROFIT_AND_LOSS</code> , <code>CASH_FLOW</code> .
creationDate	yes	yes	yes	Date, cannot be in the future
creationUser	yes	yes	yes	Integer positive value

- **delete a report header** – allows a user to delete a report header stored in the database. The user must specify the id of the report header they want to delete.
 - If the report header is not found in the database, the request will be rejected, and the user will receive the message “The report header does not exist”.
 - If the report header was deleted, the response will contain only a successful HTTP code, no body.
- **get the list of all report headers** – allows a user to get a list with all report headers stored in the database. The user can optionally filter by the type. The response will contain all the details of the report headers (all the fields for each report header record).

Unit tests should be implemented for the service methods, with a coverage of at least 70% per line.

The type of the SQL DB is chosen by you.