

# Coding task

## Purpose

Assess candidate coding skills and style

## Short description

Design and implement REST interface to consume data-snapshots from one client, validate and persist data in storage, distribute persisted data to other clients via REST interface.

## Technological stack and limitations

- Language: Java
- Build tools: Maven/Gradle
- Frameworks: no restrictions

## Requirements

- **REQ-01:** As a client I want to upload CSV file via HTTP request
  - a. CSV file contains header with following attributes:
    - PRIMARY\_KEY
    - NAME
    - DESCRIPTION
    - UPDATED\_TIMESTAMP
  - b. The last line of file is always empty
  - c. "PRIMARY\_KEY" attribute must be non-blank string
  - d. "UPDATED\_TIMESTAMP" attribute if present must be a ISO8601 timestamp string
- **REQ-02:** As client I want get persisted data by PRIMARY\_KEY attribute via HTTP request. Request parameter(s) should be passed in the request URL.
- **REQ-03:** As service owner I want to remove record from storage by PRIMARY\_KEY attribute via HTTP request
- **REQ-04:** As service owner I want no invalid records from uploaded CSV file to be saved

## Non-functional requirements

- Authentication: not required
- Logging: standard for web services
- Error reporting and monitoring: standard for web services
- Reliability: standard for web services
- Deployment: standard java-based application deployment options
- Performance:
  - file upload time less than 60 minutes
  - get record time less than 1sec
  - remove record time no restrictions

Planned efforts: 2 - 4h