

Challenge API Documentation

Welcome to the Challenge END API documentation. This API provides functionalities to perform statistical calculations (mean and sum) on certain columns in a given CSV file and return the results in JSON format. All logs are recorded in a file called api.log. The API is built using Flask, and it supports the following endpoints:

Health Check

Endpoint: GET /health/

Description

This endpoint can be used for health checks. It returns a simple JSON response with the message "OK!" to indicate that the API is up and running.

Request Parameters:

None

Request Body:

None

Response:

- HTTP Status:
 - 200: OK
- JSON Response: "OK!"

Example Usage: curl -X GET http://127.0.0.1:5000/health/

Calculate Statistics on CSV Data

Endpoint: POST /stats/<string:column_name>/<string:separator>/

Description:

This endpoint accepts a CSV file with specified column name and separator and calculates statistical values based on the given column. The CSV file should be uploaded as a file named "file" in the POST request.

Request Parameters:

- **column_name (string):** The name of the column for which statistics need to be calculated.
- **separator (string):** The separator used in the CSV file. Usually ';' is used.

Request Body

- **Form Data:** The CSV file should be uploaded using the "file" field in the form data.

Response:

- HTTP Status:

- **200** : JSON containing the calculated statistics
 - **"Summe pro Zeiteinheit"**: A dictionary containing the sum of the specified column for each unique value in the "Zeitindex" column.
 - **"Durchschnitt pro Zeiteinheit"**: A dictionary containing the average (mean) of the specified column for each unique value in the "Zeitindex" column.
- **401** : incorrect Column name
- **402** : incorrect separator
- **403** : body file missing
- **404** : body file not csv
- **405** : 'PID' or 'Zeitindex' column missing
- **406** : incorrect given column name
- **500** : Internal Server Error

Example Usage:

```
curl -X POST -F "file=@test.csv" http://127.0.0.1:5000/stats/Krankenhauskosten/;/
```

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