# RESTful Notes API Guide

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## **Table of Contents**

erview
. General
1.1. HTTP verbs
. HTTP status codes
. Errors
ources
. Register Company
. Upload products
. Upload sales report
Sales report
. Revenue report
. Net-Profit report

## **Overview**

These are the API's for importing financial data and outputing the report accordingly.		

# Chapter 1. General

### 1.1. HTTP verbs

Verb	Usage
GET	Used to retrieve a resource (idempotent)
POST	Used to create a new resource
PUT	Used to update an existing resource (idempotent)
DELETE	Used to delete an existing resource

## **Chapter 2. HTTP status codes**

RESTful notes tries to adhere as closely as possible to standard HTTP and REST conventions in its use of HTTP status codes.

Status code	Usage
200 OK	The request completed successfully
202 Accepted	The request has been accepted for processing, but the processing has not been completed. The request might or might not be eventually acted upon, and may be disallowed when processing occurs.
204 No Content	An update to an existing resource has been applied successfully
400 Bad Request	The request was malformed. The response body will include an error providing further information
404 Not Found	The requested resource did not exist
409 Not Found	Attempt to create a duplicate resource
500 Internal server error	Any Unhandled

## **Chapter 3. Errors**

Whenever an error response (status code >= 400) is returned, the body will contain a JSON object that describes the problem. The error object has the following structure:

```
HTTP/1.1 400 Bad Request
Content-Type: application/json; charset=UTF-8
Content-Length: 62

[ {
    "field" : "fieldName",
    "message" : "Error message"
} ]
```

## Resources

### **Chapter 4. Register Company**

id and version fields should be removed from all requests. Mapping fields is the information about csv headers when parsing product csv

#### Request

```
$ curl 'http://localhost:8080/register-company' -i -X POST \
   -H 'Content-Type: application/json' \
   -d '{
 "id" : null,
 "version" : null,
 "companyName" : {
    "companyName" : "A"
 },
 "fieldMapping" : {
    "productFieldName" : "Description",
    "costFieldName" : "Purchase price",
    "currencyFieldName" : "Currency",
    "productCompanyIdFieldName" : "Prod. Id"
 },
 "products" : null,
  "orders" : null
```

#### Response

```
HTTP/1.1 200 OK
```

#### 4.3. Error

#### Request

```
$ curl 'http://localhost:8080/register-company' -i -X POST \
   -H 'Content-Type: application/json' \
   -d '{
 "id" : null,
 "version" : null,
 "companyName" : {
    "companyName" : null
 },
 "fieldMapping" : {
    "productFieldName" : null,
    "costFieldName" : null,
    "currencyFieldName" : null,
    "productCompanyIdFieldName" : null
 },
 "products" : null,
 "orders" : null
```

```
HTTP/1.1 400 Bad Request
Content-Type: application/json
Content-Length: 423
[ {
  "field" : "fieldMapping.currencyFieldName",
  "message" : "must not be blank"
}, {
  "field" : "companyName.companyName",
  "message" : "must not be blank"
}, {
  "field" : "fieldMapping.costFieldName",
  "message" : "must not be blank"
}, {
  "field" : "fieldMapping.productCompanyIdFieldName",
  "message" : "must not be blank"
}, {
  "field" : "fieldMapping.productFieldName",
  "message" : "must not be blank"
} ]
```

## Chapter 5. Upload products

#### Request

```
$ curl 'http://localhost:8080/upload-product' -i -X POST \
   -H 'Content-Type: multipart/form-data' \
   -F 'productFile=@A.csv;type=text/csv'
```

#### Response

```
HTTP/1.1 200 OK
```

#### 5.3. Error

#### Request where company is not register

```
$ curl 'http://localhost:8080/upload-product' -i -X POST \
  -H 'Content-Type: multipart/form-data' \
  -F 'productFile=@A.csv;type=text/csv'
```

#### Response

HTTP/1.1 403 Forbidden

### Chapter 6. Upload sales report

#### Request

```
$ curl 'http://localhost:8080/upload-order' -i -X POST \
   -H 'Content-Type: multipart/form-data' \
   -F 'salesFile=@Sales.csv;type=text/csv'
```

#### Response

```
HTTP/1.1 200 OK
```

#### 6.3. Error

Request where company is not register

```
$ curl 'http://localhost:8080/upload-order' -i -X POST \
   -H 'Content-Type: multipart/form-data' \
   -F 'someFile=@Sales.csv;type=text/csv'
```

```
HTTP/1.1 400 Bad Request
Content-Type: application/json
Content-Length: 97

[ {
    "field" : "salesFile",
    "message" : "Required request part 'salesFile' is not present"
} ]
```

### Chapter 7. Sales report

#### Request

```
$ curl 'http://localhost:8080/sales-report/A' -i -X GET
```

#### Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 205

{
    "response" : [ {
        "orderNumber" : 1,
        "orderDate" : "01/27/20",
        "total" : 101.0,
        "lineItems" : [ {
            "product" : "P1",
            "quantity" : 1,
            "salesPrice" : 101.0
        } ]
    }
}
```

#### **7.3. Error**

#### Request when not data is present

```
$ curl 'http://localhost:8080/sales-report/A' -i -X GET
```

```
HTTP/1.1 404 Not Found
```

### Chapter 8. Revenue report

#### Request

```
$ curl 'http://localhost:8080/revenue-report/A' -i -X GET
```

#### Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 148

{
    "response" : [ {
        "year" : 2019,
        "total" : 99.9,
        "revenueDTOS" : [ {
            "month" : "2019-1",
            "revenue" : 99.9
        } ]
      } ]
    }
}
```

#### 8.3. Error

Request where company is not register

```
$ curl 'http://localhost:8080/revenue-report/A' -i -X GET
```

#### Response

```
HTTP/1.1 404 Not Found
```

Request when no sales data is present

```
$ curl 'http://localhost:8080/revenue-report/A' -i -X GET
```

```
HTTP/1.1 404 Not Found
```

### Chapter 9. Net-Profit report

#### Request

```
$ curl 'http://localhost:8080/net-profit-report/A' -i -X GET
```

#### Response

```
HTTP/1.1 200 OK
Content-Type: application/json
Content-Length: 152

{
    "response" : [ {
        "year" : 2019,
        "netProfit" : 99.9,
        "revenueDTOS" : [ {
            "month" : "2019-1",
            "revenue" : 99.9
        } ]
      } ]
    }
}
```

#### 9.3. Error

Request when company is not registered

```
$ curl 'http://localhost:8080/net-profit-report/A' -i -X GET
```

#### Response

```
HTTP/1.1 404 Not Found
```

#### Request when not data is present

```
$ curl 'http://localhost:8080/net-profit-report/A' -i -X GET
```

```
HTTP/1.1 404 Not Found
```