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“The Service” - Report

The API

As “the Service” follows Restful guidelines, it is uses Http verbs such as POST, GET, PUT and DELETE.

Also it is implemented based on the resources. That means that every incoming request goes to a specific path. The name of each path makes it easy to understand what resource we are going to use.

Request

Method: **POST**

http://localhost:8080/product/name=##&price=##&code=##&ExpDate=##&AvDate=##

Creates a new product with the given values for name, price, code, expiration date and availability date.

Response

Status: **200**

Json interpretation of the created product

Status: **403**

If given values are wrong

Request

Method: **GET**

http://localhost:8080/products

Returns all products from the DB

Response

Status: **200**

Json interpretation of all products in DB

Status: **403**

If given values are wrong

Request

Method: **GET**

http://localhost:8080/product/name?name=##

Returns the product, of which name is specified

Response

Status: **200**

Json interpretation of the requested product

Status: **404**

If no such product name exists

Request

Method: **GET**

http://localhost:8080/product/code?code=##

Returns the product,of which code is specified

Response

Status: **200**

Json interpretation of the requested product

Status: **404**

If no such product code exists

Request

Method: **GET**

http://localhost:8080/product/price/ascending

Returns all products, in an ascending order based on the price

Response

Status: **200**

Json interpretation of the requested list

Status: **404**

If DB is empty

Request

Method: **GET**

http://localhost:8080/product/price/descending

Returns all products, in a descending order based on the price

Response

Status: **200**

Json interpretation of the requested list

Status: **404**

If DB is empty

Request

Method: **DELETE**

http://localhost:8080/product?code=##

Deletes the specified by product code product

Response

Status: **200**

Json interpretation of the remaining list

Status: **403**

If product does not exist

Request

Method: **PUT**

http://localhost:8080/product/activate?code=##

Activates the specified by product code product by turning field IsAvailable=true

Response

Status: **200**

Json interpretation of the activated product

Status: **403**

If product does not exist

Request

Method: **PUT**

http://localhost:8080/product/deactivate?code=##

Deactivates the specified by product code product by turning field IsAvailable=false

Response

Status: **200**

Json interpretation of the deactivated product

Status: **403**

If product does not exist

BONUS

Something that we can do about the security of the service, is to have credentials for the user/administrator/data entry specialist. The hash of the password and username of the user would have to be trasmitted to the service. The service would check if those credentials are proper and if that user has access to the specific service. If yes, then the service yould continue in a normal way. If the user has no access or the credentials do not match ,then an error message should be sent back and the service will not do the desired by the user actions.

If a mobile app was to be created, but this time for the customers of the company, a very big part of the API, if not all of it, can be reused. That is due to the Rest Protocol. Just by changing the paths and the database, we can use the almost the same service for the user's use of megabytes, products that the user bought or for example some new services that the user will want to activate and also buy. Restful applications are versatile. With a good base code as foundation, we can create many applications just by reusing the code.