# **Happy Store API**

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# Basic information about the API environment

Simple Documentation on Happy Store API

API has been built using Java Spring framework.

Currently, only 1 method has been created, GET /products, as per according to the requirement.

Before executing the service, it is assumed that Java, Maven and Jetty has been installed.

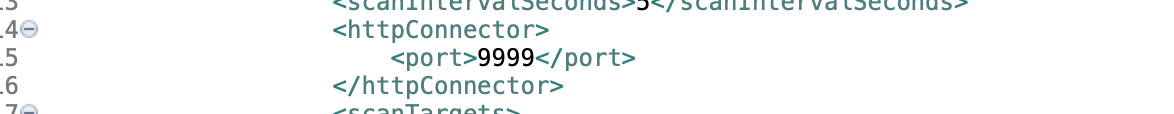
API can be run as local service where Jetty has been embedded in the code.

Command to run Jetty: *mvn jetty:run*

When service is running, the following URL will call the API service:

Port and URL is configurable but, in this instance, default configuration is set as *localhost*, with the port number of *9999*.

Configuration file: */pom.xml*



**Retrieving all products:**

*http://localhost:9999/product*

In the last section of the document, basic search to filter records will be explained.

# Assumption made based on given requirement

A few assumptions have been made prior to the development of the API per below:

1. Only 2 filtering is required, which is the category and pricing
2. Number of records permitted allowed to retrieve in each API call is restricted to 8 records
3. Category has been limited to 3-level downwards
4. Item displaying in multiple category within the frontend has not been taken in consideration
5. Only basic item information is stored, not considering comprehensive list such as shipping cost and discount.
6. No function is catered to add or update items

# Database

To create the different tables, please follow the sequence per below:

*happydb.sql* – create the database schema

*brand.sql* – create table to store the brand information

*category.sql* – create table to store the category and its different level

*product.sql* – create table that will store all basic product information, including the pricing and quantity

*media.sql* – create table that will store media reference filename for image and video, specific to each product.

# API Usage for GET /product

API explanation on GET /products usage:

This API is used to retrieve products found in the database.

Basic filter criteria such as selling price range and using category Id are available.

**Note:**

Category Id (*categories*) should rightfully be retrieved from a new API but for this development here, value to check via the database directly, in *category* table, using *category\_id* column.

Image link is not developed in this API and thus no image information will be provided for API result returned.

Method: **GET**

Path: **/product**

Optional parameters:

**page (Integer)**:

*The current page number to retrieve result. Please note that page number exceeding the record number will return 0.*

**categories (Integer)**:

*Multi category Id to search for items, separated by comma*

**start\_range (Double)**:

*Start range of the selling pricing to filter*

**end\_range (Double)**:

*End range of the selling pricing to filter*

Note: Next page will show sample usage and expected data

Sample API usage:

<http://localhost:9999/product?start_range=35>

**Sample expected response:**

{

"data": [

{

"brand\_code": "TARTE",

"brand\_name": "TARTE",

"category\_id": 3,

"created\_at": null,

"currency\_code": "SGD",

"description": "A five-in-one long wear, vegan primer that can be used under (or instead of) foundation for smoother, brighter skin. ",

"how\_to\_use": "-Wear alone or under foundation for smoother makeup application and enhanced coverage. \n-Dispense a small amount to the back of your hand.\n-Using a foundation brush or your fingertips, lightly dab onto face and gently blend.",

"ingredients": null,

"language\_code": "en\_US",

"product\_id": 12,

"qty": 5,

"retail\_price": 37,

"selling\_price": 37,

"sku": "1486752",

"title": "BB Tinted Treatment 12-Hour Primer Broad Spectrum SPF 30 Sunscreen",

"updated\_at": null

},

{

"brand\_code": "STELLAR",

"brand\_name": "STELLAR",

"category\_id": 1,

"created\_at": null,

"currency\_code": "SGD",

"description": "A set with a full-size Limitless Foundation, plus travel sizes of Brilliant Primer and Haze Cosmic Face Powder in a STELLAR makeup bag.",

"how\_to\_use": "-Apply Brilliant Primer with your fingers, a brush, or a sponge on clean, moisturized skin.\n-Allow primer to dry, and use a brush or sponge to smooth Limitless Foundation over skin. Remember, it’s oil-free, so if using a sponge it should be only slightly damp or the foundation will have a sheer application.\n-For full coverage, use the STELLAR technique to build. Let the first application dry, then apply more foundation where needed, and do not blend for 30 seconds.\n-After 30 seconds, gently pat to blend.\n-Let the product dry completely.\n-Use a large, fluffy brush to sparingly apply Haze Cosmic Face Powder all over.",

"ingredients": null,

"language\_code": "en\_US",

"product\_id": 7,

"qty": 2,

"retail\_price": 72,

"selling\_price": 45,

"sku": "2198711",

"title": "Limitless Foundation Customizable Set",

"updated\_at": null

}

],

"response": "success",

"response\_id": "lXTOYUjvTeQMAmCa",

"total": 2

}