How to get shoe size on ebay

Problem

Using the finding API returns a list of items without the shoe size http://svcs.ebay.com/services/search/FindingService/v1

Solution

There are several methods to get shoe sizes.

A) Use Shoes Size with Finding Service

This one will give you the most accurate shoes size of each item. I strongly suggest to use this method first.

1) Obtain aspect histogram

First, you need to have an overview of the shoes sizes. To obtain such information, you need to invoke the finding api with this appended after the url:

```
&outputSelector(0) = AspectHistogram
```

Then the result will include a histogram for each item specifics. For instance, the US Shoe Size will be useful.

```
▼1: {@name: "US Shoe Size (Men's)",...}
   @name: "US Shoe Size (Men's)"
 ▼ valueHistogram: [{@valueName: 'US Shoe Size (Men's) {@valueN
   ▶ 0: {@valueName: "5", count: ["z"]}
   ▶ 1: {@valueName: "7", count: ["1"]}
   ▶ 2: {@valueName: "7.5", count: ["2"]}
   ▶ 3: {@valueName: "8", count: ["36"]}
   ▶ 4: {@valueName: "8.5", count: ["18"]}
   ▶ 5: {@valueName: "9", count: ["52"]}
   ▶ 6: {@valueName: "9.5", count: ["73"]}
   ▶ 7: {@valueName: "10", count: ["100"]}
   ▶ 8: {@valueName: "10.5", count: ["84"]}
   ▶ 9: {@valueName: "11", count: ["72"]}
   ▶ 10: {@valueName: "11.5", count: ["31"]}
   ▶ 11: {@valueName: "12", count: ["53"]}
   ▶ 12: {@valueName: "13", count: ["32"]}
   ▶ 13: {@valueName: "14", count: ["16"]}
   ▶ 14: {@valueName: "15", count: ["1"]}
   ▶ 15: {@valueName: "Not Specified", count: ["19"]}
```

You can also find the histogram for **euro size**. But for this example, it is not so useful as you can see, most of them are not specified.

```
▼ 7: {@name: "Euro Size",...}
   @name: "Euro Size"
 ▼ valueHistogram: [{@valueName: "EUR 38", count: ["1"]},
   ▶ 0: {@valueName: "EUR 38", count: ["1"]}
   ▶ 1: {@valueName: "EUR 40,5", count: ["1"]}
   ▶ 2: {@valueName: "EUR 42", count: ["1"]}
   ▶ 3: {@valueName: "EUR 42,5", count: ["3"]}
   ▶ 4: {@valueName: "EUR 43", count: ["6"]}
   ▶ 5: {@valueName: "EUR 44", count: ["9"]}
   ▶ 6: {@valueName: "EUR 44,5", count: ["5"]}
   ▶ 7: {@valueName: "EUR 45,5", count: ["1"]}
   ▶ 8: {@valueName: "EUR 46", count: ["5"]}
   ▶ 9: {@valueName: "EUR 47", count: ["1"]}
   ▶ 10: {@valueName: "EUR 47,5", count: ["1"]}
   ▶ 11: {@valueName: "EUR 48", count: ["1"]}
   ▶ 12: {@valueName: "Not Specified", count: ["511"]}
```

2) Call finding API with Aspect Filter for each size

https://developer.ebay.com/devzone/finding/CallRef/findItemsByCategory.html#sampleaspectFilter

With the size histogram, we can call finding API with Aspect Filter for each size. For example, if you call the API with:

```
aspectFilter(0).aspectName=US Shoe Size (Men's) &
aspectFilter(0).aspectValueName=9.5
```

The result will be the following. And you can see the result item count matches the count of size 9.5 in the histogram:

```
\[ \text{**/jQuery31105908817932266273_1496318852794(\{,...\})
\[ \text{findCompletedItemsResponse: [{ack: ["Success"], version: ["1.13.0"], timestamp: ["2017-06-01T12:08:07.399Z"],...\} \[ \text{v0: {ack: ["Success"]}, version: ["1.13.0"], timestamp: ["2017-06-01T12:08:07.399Z"],...\} \[ \text{ack: ["Success"]} \]
\[ \text{v0: {domainDisplayName: ["Athletic"],...\}} \]
\[ \text{v0: {domainDisplayName: ["Athletic"],...\}} \[ \text{v0: {domainDisplayName: ["Athletic"],...\}} \]
\[ \text{v0: {domainDisplayName: ["Athletic"],...\}} \]
\[ \text{v0: {domainDisplayName: ["Athletic"]},...\}} \]
\[ \text{v0: domainDisplayName: ["Athletic"]} \]
\[ \text{paginationOutput: [{pageNumber: ["1"], entriesPerPage: ["100"], totalPages: ["1"], totalEntries: ["73"]}] \]
\[ \text{v0: {@count: "73", item: [{itemId: ["322524456924"],...\}, {itemId: ["222513713441"],...\},...]} \]
\[ \text{v0: {@count: "73", item: [{itemId: ["322524456924"],...\}, {itemId: ["222513713441"],...\},...]} \]
\[ \text{viem: [{itemId: ["322524456924"],...\}, {itemId: ["222513713441"],...\},...]} \]
\[ \text{viem: ["2017-06-01T12:08:07.3992"]} \]
\[ \text{version: ["1.13.0"]} \]
```

Now you are sure all the items in this list are having a size of 9.5. Repeat this for all sizes and you will have the whole list (except those not specified).

3) Not specified

Some items don't have a US size. Instead they have a UK size or a EU size. I suggest repeat step 2) for EU shoe size to fill in the missing information.

Item specifics

Condition: New with box: A brand-new, unused, and unworn item (including handmade items) in the original packaging (such as ... Read more

EU Shoe Size: 42.5 Brand: Nike
Main Colour: Green

B) Extract Shoe Size from Title

We probably don't need to use this method, as I notice Method A has covered 95% of the items. This method is also less reliable.

Many item titles contain shoe size information:

Air Jordan 4 Kaws Size 9.5 NEW WITH BOX
Nike Air Jordan IV Retro 4 x Kaws Cool Grey Size 11
AIR JORDAN RETRO 4 KAWS SIZE 10.5
Nike Air Jordan IV 4 Retro Kaws Sz 9
Nike Air Jordan 4 Retro KAWS Mens 10.5 Grey Suede 930155-003
Nike Air Jordan 4 IV Retro Kaws Cool Grey/White Sz. 10

You can extract the shoe size using the keywords "Size, Sz, Sz.". Some titles has less obvious keywords such as "Mens 10.5". These may not be in US shoe size and it is possible that they have typos. So tedious checking is required.