

Scala developer test

Source data

A GET HTTP call to the product API URL (see additional information below) produces a response with content type "application/json". The response contains a JSON object, whose property "data" contains a JSON array of product objects. As seen from the example, the product object contains the product name in four languages, the product price, where effective price = gross / divisor (i.e. in the first product in the example we have $51500 / 100 = 515$ GBP), and some other product data in which we are not interested for this exercise.

Problem

Build a simple web application that responds to the url `http://localhost:port/q=query-string` returning a list of products whose descriptions in English match the query string. *port* is a value of your choice, and *query-string* is the query string that will be supplied by the user of your API. The content type of the response is "application/json" and the structure of the response JSON is given below.

Additional information

- The choice of web platform/server is entirely up to the candidate, but the main language must be Scala.
- A product matches the query when its name in English contains the exact query string as one word. I.e. "Stripe-trimmed open-knit cotton-blend sweater" matches Stripe, trimmed, sweater. It does not match "cotton-blend" or "blend sweat". For the purposes of this the delimiters are space bar and hyphen - the characters contained in the string " -"

Resources

Product API URL

<http://lad-api.net-a-porter.com/product/summaries?business=NAP&categoryIds=2&country=GB>

Sample response from your app

Sample response from "http://localhost:port/q=query-string" from your finished app

```
[
  { "product-id": "428236", "name": "Stripe-trimmed open-knit cotton-blend sweater",
    "price": 515 },
  { "product-id": "444634", "name": "The Perfect cotton-chambray shirt", "price":
    210 }
]
```

Note: The above contains only two products, based on the sample data given below - in reality the API will give you several thousand products (but no more than ten thousand)

Sample response from the product API URL

```
{
  "data": [
    {
      "name": {
        "en": "Stripe-trimmed open-knit cotton-blend sweater",
        "de": "Pullover aus einer Baumwollmischung in Lochstrick-Optik mit Streifenbesatz",
        "fr": "Pull en coton mélangé à mailles ajourées bordé de rayures",
        "zh": "□□□□□□□□□□□□□□"
      },
      "price": {
        "divisor": 100,
        "duty": 0,
        "tax": 8583,
        "gross": 51500,
        "net": 42917,
        "currency": "GBP"
      },
      "onSale": false,
      "brand": {
        "id": 122,
        "name": {
          "en": "Chloé"
        }
      },
      "id": 428236,
      "categories": [
        {
          "id": 2,
          "children": [
            {
              "id": 49,
              "children": [
                {
                  "id": 6130
                },
                {
                  "id": 6383
                },
                {
                  "id": 2821
                }
              ]
            }
          ]
        }
      ],
      "colourIds": [],
      "saleableStandardSizes": [
        {
          "id": "00004_S_Clothing",

```

```
        "name": "S"
      },
      {
        "id": "00005_M_Clothing",
        "name": "M"
      },
      {
        "id": "00006_L_Clothing",
        "name": "L"
      },
      {
        "id": "00007_XL_Clothing",
        "name": "XL"
      }
    ],
    "badges": [
      "In_Stock",
      "exclusive"
    ]
  },
  {
    "name": {
      "en": "The Perfect cotton-chambray shirt",
      "de": "The Perfect Hemd aus Baumwoll-Chambray",
      "fr": "Chemise en chambray de coton The Perfect",
      "zh": "The Perfect 棉质衬衫"
    },
    "price": {
      "divisor": 100,
      "duty": 0,
      "tax": 3500,
      "gross": 21000,
      "net": 17500,
      "currency": "GBP"
    },
    "onSale": false,
    "brand": {
      "id": 504,
      "name": {
        "en": "Current/Elliott"
      }
    },
    "id": 444634,
    "categories": [
      {
        "id": 2,
        "children": [
          {
            "id": 39,
            "children": [
              {
                "id": 6229
              },
              {
                "id": 6070
              }
            ]
          }
        ]
      }
    ]
  }
]
```

```

        }
      ]
    }
  ],
  "colourIds": [
    115
  ],
  "saleableStandardSizes": [],
  "badges": [
    "In_Stock"
  ]
}
],
"colourIds": [
  60
],
"saleableStandardSizes": [
  {
    "id": "00001_XXXS_Clothing",
    "name": "XXXS"
  },
  {
    "id": "00002_XXS_Clothing",
    "name": "XXS"
  },
  {
    "id": "00003_XS_Clothing",
    "name": "XS"
  }
]

...
...  <- More stuff here. We are only interested in the "data" property above.
...

}
}

```