

Coding Challenge - NodeJS

Problem Definition

Build an API to fetch the activities of a customer. The API signature should be compliant with REST style. The data is supplied in CSV format. Please see the below section for details.

Input

Data set is available over [here](#)

Format of the file is.

CustomerId,Timestamp,Action,ProductId,Count

Field Name	Description	Sample value
CustomerId	Customer's unique Id	65E55021ADBBC412CA2EE2A16E22E88D
Timestamp	Time stamp	17/05/2017, 07:54:51.000
Action	Action performed by customer. This will always be PRODUCT_VIEW	PRODUCT_VIEW
ProductId	Product Identifier	1C13E32B66374084
Count	Count of product view	1

Output

Please create an express application that provides endpoints for the below use cases

1. An endpoint that accepts customer id as path param and returns all activities of that Customer
2. An endpoint that accepts the customerId, and should display the summary details of products viewed and their total count

Both the API should support optional end date and start date param (in YYYY-MM-DD) to filter for dates based on Timestamp field

Sample Response 1:

```
[
  {
    "customerId": "DC652918C6542D1473E6419C8472E150",
    "timestamp": "08/12/2017, 17:03:10.000",
    "action": "PRODUCT_VIEW",
    "productId": "B44A30717A7207C578ADDA0D76CDE5A3",
    "count": 1
  },
  {
    "customerId": "DC652918C6542D1473E6419C8472E150",
    "timestamp": "08/12/2017, 17:03:16.000",
    "action": "PRODUCT_VIEW",
    "productId": "B44A30717A7207C578ADDA0D76CDE5A3",
    "count": 1
  },
  {
    "customerId": "DC652918C6542D1473E6419C8472E150",
    "timestamp": "08/12/2017, 17:04:36.000",
    "action": "PRODUCT_VIEW",
    "productId": "8D0F73C8BD775EA18E837635516A0DA7",
    "count": 1
  }
]
```

Sample Response 2:

```
{
  "products": [
    {
      "productId": "B44A30717A7207C578ADDA0D76CDE5A3",
      "count": 45
    },
    {
      "productId": "12B6329E739654EFDDDB21DBCC5018D95",
      "count": 87
    },
    {
      "productId": "8E2E5F5DF6CD2867B98464DA7C40A125",
      "count": 43
    },
    {
      "productId": "2B79E880D8C8B29BC4035565CA532AEA",
      "count": 1
    }
  ]
}
```

Solution Guideline

The API implementation should be done in nodeJS. Data from the link can be stored locally and used in the application.

Evaluation

The evaluation of this assessment will be performed across various parameters which are listed below:

- a) setting up of REST project in NodeJS
- b) working API to fetch activities of the customer
- c) code explanation/walkthrough
- d) above all, a can-do attitude

Coding Challenge - Python

Problem Definition

Write a **Python job** that retrieves the SKU details of the given product using the Shopalyst Product Knowledge Graph API.

API Details

```
Method: GET
EndPoint :
https://dev.shopalyst.com/shopalyst-service/v1/products/<productId>
```

Context

Consider 9 To 5 Matte Lip Color lipstick product on nykaa.com -

<https://www.nykaa.com/lakme-9-to-5-primer-matte-lip-color/p/152930?ptype=product&productId=152930&skuId=152930>

The same product is represented in the Product Knowledge Graph as -

<https://dev.shopalyst.com/shopalyst-service/v1/products/929323BCA2A04A74961E0043E9A55B60>

Each Shade has an SKU Id associated with it. Using the response of the above API, print the SKU details

Program Structure

Python program that takes productId as input, calls the Product Knowledge Graph API, and displays the SKU details

Output

The following details of each individual SKUs associated with the given product have to be displayed

- skuld
- The shade of each SKU
- offerPrice
- title for the SKU

Sample output

```
-----  
Product 1  
skuId : 152934  
shade : MR21 Brick Blush  
offerPrice : 299.0  
title : Lakme 9 to 5 Primer + Matte Lip Color - MR21 Brick Blush  
  
-----  
Product 2  
skuId : 152935  
shade : MR22 Scarlet Surge  
offerPrice : 299.0  
title : Lakme 9 to 5 Primer + Matte Lip Color - MR22 Scarlet Surge  
  
...  
  
-----  
Product 37  
skuId : 456983  
shade : Nude Touch MP24  
offerPrice : 299.0  
title : Lakme 9 To 5 Matte Lip Color - Nude Touch MP24  
  
-----  
Product 38  
skuId : 456986  
shade : Mauve Matter MM12  
offerPrice : 299.0  
title : Lakme 9 To 5 Matte Lip Color - Mauve Matter MM12
```

Glossary

SKU: In the field of inventory management, a stock keeping unit is a distinct type of item for sale, such as a product or service, and all attributes associated with the item type that distinguish it from other item types

Additional productId for testing : 12C7BFC3752D4209