

## **Tech Challenge**

**Position:** Senior Software Engineer (Python)

Assignment Duration: 7 days

# **Assignment Overview**

You are required to create a Product REST API using the provided CSV file. This file contains product records, with each product represented in a single line. Product attributes are separated by commas in the following order:

- 1. Product SKU (integer)
- 2. Brand Name (string)
- 3. Product Slug (string)
- 4. Product Title (string)
- 5. Quantity (integer)

### **Deliverables**

- Source Code
- Documentation

### Requirements

- Use Python3
- The program should be self-contained and easy to run using any technology of your choice. This means we should be able to run the program easily.
- Provide clear documentation on:
  - How to set up and run the program.
  - o Details of the REST API



# **Required Functionality**

#### Following REST Endpoints:

- 1. List Products
  - Product listing endpoint should return 10 products by default.
  - Should return,
    - o Product ID
    - SKU
    - o Product Title
    - o Brand Name
    - o Product Slug

Note: product ID is not in the file, you need to find a way to return an ID

- Must support query parameters limit and skip
- Should be able to filter by brand name
- 2. Get Product
  - Get a single product using product ID and should return all fields.
- 3. Create New Product
  - Create product endpoint should accept:
    - Product SKU
    - o Brand Name
    - Product Title
    - Quantity

### **Bonus Points**

- 1. Docker Integration
- 2. Delete Endpoint
  - Delete a product using product ID.
  - A deleted product should return a 404 response in the product get request. See point number 2 in required functionality.



- 3. Coding Standards follow PEP8 or any other coding standards with reasonable flexibility ( doesn't have to follow all PEP8 rules )
- 4. Good Code Structure
- 5. OpenAPI based Rest API documentation