

"API Client" Exercise

Prerequisites:

- [Networks, and Processing Data from the Internet](#), including APIs
- ["Web Requests" Exercise](#)

Business Prompt

In previous "grocery store" exercises, we have been processing grocery product data from a local CSV file. This allowed managers at different locations to keep their own inventory of products. But to improve consistency of record-keeping across stores, the store owner now wants managers at all stores to share the same inventory of products.

As a lead developer on your team, the professor has deployed the "Groceries API" web service to a public server available at <https://groceries-api-csv.herokuapp.com>. He explains, each store can use its own "API Client" application to issue HTTP requests to the API, and the API will perform the corresponding operations on a shared CSV inventory of products stored on the server.

Objective

Your objective is to write a command-line Python application that will allow users in any store to create, read, update, and destroy products from this shared inventory.

Challenges

First, read the [API Documentation](#), which describes how to make requests to perform certain CRUD operations.

NOTE: You'll see some `curl` examples in there, but that is a command-line utility, and there aren't actually any Python code examples in there. The parts of the documentation you should focus on for each operation are: "what kind of request do I need to make?" (e.g. GET, POST, etc.), and "which URL do I make the request to?"

After consulting the docs, issue an appropriate HTTP request in Python to satisfy each of the challenges below.

List Products

API Documentation: [List Products](#)

Request information about all products, then loop through and print the "id" and "name" of each.

Show a Product

API Documentation: [Show Product](#)

Choose a product identifier from the list, then request information about that specific product, then print all the product's attributes.

Destroy a Product

API Documentation: [Destroy Product](#)

Request to delete the previously-selected product from the inventory.

Create a new Product

API Documentation: [Create Product](#)

Request to create a new product in the inventory.

Update a Product

API Documentation: [Update Product](#)

Request to update the new product you recently created.

Solutions