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Task 6: Sample Data

To populate our database we opted to obtain real world commerce data focussing on the following categories:

- Laptops
- Desktop Computers
- Headphones & Earbuds
- Keyboards & Computer Mice
- Monitors
- Smartphones
- Tablets

The data was obtained via querying <u>SerpApi</u>, a trusted interface for scraping search engine results. The API was queried with the following parameters:

```
{
    "engine": "google_shopping",
    "q": <search_string>
}
```

Passing "google_shopping" as the value for the "engine" parameters instructs the API to return scraped results from the <u>Google Shopping</u> engine.

The value passed for the "q" parameter is the search string that will be inputted into the engine.

The following algorithm was followed to obtain similar products from different retailers:

```
initialize a list of categories
for each category in categories:
    query the API with q = category, save first n products of response
    for each of the n products in response
        query the API with q = product title
        record responses in data structure
dump all responses to a structured JSON file
```

The database was populated based on extracted data from the generated JSON file via a python script. For reference, the scripts can be found in our repository <u>here</u>.