Scraping Challenge: UNES Grocery Chain

Objective

Understand how to scrape products and prices from the UNES grocery chain.

Instructions

1. Access the Website

- Navigate to UNES Spesa Online.
- Click on **"ORDINA ONLINE E RITIRA IN NEGOZIO"** ("Order Online and Pick Up at the Store").
- Enter the postal code `20121` and select **"ritiro in negozio"** ("Pick Up at the Store").
  This service allows customers to order groceries online and pick them up at a physical store, an alternative to home delivery.

2. Retrieve Store Information

- Obtain the names and details of all stores available in the selected area, including:
- Address
- Coordinates
- Any other meaningful information available.

3. Select a Specific Store

- Choose the **Vimodrone** store from the list and confirm the selection.

4. Develop a Scraping Strategy

- Formulate a strategy to scrape all products in a **time-efficient and resource-optimized manner**.

5. Analyze Product Information

- Retrieve and document the general structure of product information, including:
- Price
- Promotions
- Weight
- Internal ID
- Image URLs
- Any other relevant details.

6. Retrieve All Stores

- Develop a strategy to scrape information for all UNES stores across Italy.
- **Hint:** The "Punti Vendita" section on the main page provides a list of all stores.
- Extract detailed information for all these stores.

BONUS Challenge

1. Explore the UNES Mobile App

- Download the UNES app for **Android** or **iPhone**.

2. Analyze Mobile Endpoints

- Identify the **mobile API endpoints** used by the app for its services.
- Perform a **complete scraping** using the mobile endpoints.

3. Compare Approaches

- Comment on the differences between scraping via the website and using mobile endpoints.
  Include:
- Pros and cons of each approach in terms of **time** and **computational power**.
- Potential challenges for **daily scraping operations**.

Deliverables

- A clear and well-documented report on your findings.
  - The report may contain code snippet to clarify.
  - The report should contain all the endpoints identified.
- Full code of the developed solution is not required.
- A comparison between the two approaches (web scraping vs. mobile endpoint scraping) in term of execution time, number of requests and resources employed (if meaningful).