**Quality Control (QC) Performed**

* **Error Handling**: Robust exception handling around Selenium commands to manage timeouts and element detection issues.
* **Data Integrity Checks**: Verification of the presence and correctness of key elements like restaurant names and links before appending to the list.
* **Redundancy Checks**: Ensure that the same restaurant data isn't scraped multiple times due to page reloads or navigation errors.

**Data Statistics**

To assess the quality and coverage of the scraped data, the following statistics should be generated:

* **Total Count of Restaurants**: This metric will tell how many unique restaurants were scraped.
* **Completeness of Data**: Calculation of not null versus null stats for each field (Name, Cuisine, Time Taken, Distance, Rating, Promo Text, and Image Link).

**Report**

**Approach and Methodology**

* The project uses Python with Selenium WebDriver for simulating user interactions on the GrabFood website to scrape restaurant data.
* Data is parsed using BeautifulSoup and saved in NDJSON format, followed by compression into GZip format for efficient storage and transport.

**Challenges Faced**

* **IP Blocking**: Continuous blocking by the CloudFront server despite attempts to rotate IPs and user agents, which required significant time troubleshooting.
* **Dynamic Content**: Difficulty in handling dynamically loaded content and ensuring all data is loaded before scraping.
* **Unavailable Data**: Certain desired data such as longitude and latitude were not available on the webpage, limiting the scope of data collection.

**Possible Improvements**

* **IP Rotation and Proxy Management**: Implementing more robust IP rotation and proxy management tools to avoid detection.
* **API Access**: Exploring possibilities to access the underlying API directly instead of scraping, which could provide more reliable and structured data.
* **Enhanced Data Parsing Logic**: Developing more sophisticated parsing logic that can adapt to changes in the website's layout or structure.