eBay Sports Card Sold Data Scraping

Overview

This project involves extracting sold item data from eBay and automatically updating it in a Google Sheet on a daily basis.

The system ensures real-time tracking of sales data, eliminating the need for manual updates.

By leveraging web scraping and automation, this solution provides an efficient way to monitor eBay sales trends, pricing strategies, and market demand.

Objectives

- **Extract Sold Data from eBay** – Scrape sport, season, set, variation, player name, sold price, sold date, card number, card link from eBay's sold listings.
- **Ensure Data Accuracy** – Validate and clean the extracted data, removing duplicates or errors.
- **Automate Daily Updates** – Implement a scheduled process that updates the Google Sheet automatically every day.
- **Organize Data for Analysis** – Format the data in a structured manner for easy reporting and insights.

How It Works

Create Google Service Account

Step 1: Create a Google Cloud Project

1. Go to the **Google Cloud Console**.
2. Click the project dropdown at the top and select **"New Project"**.
3. Enter a **Project Name** and click **"Create"**.
4. Once created, select your new project.

Step 2: Enable Google Sheets & Google Drive APIs

1. In the **Google Cloud Console**, go to the **APIs & Services → Library**.
2. Search for **Google Sheets API**, click on it, and then click **"Enable"**.
3. Search for **Google Drive API**, click on it, and then click **"Enable"** (needed for file access).

Step 3: Create a Service Account

1. Go to **APIs & Services → Credentials**.
2. Click **"Create Credentials"** → **"Service Account"**.
3. Enter a **Service Account Name** (e.g., `ebay-scraper-service`).
4. Click **"Create & Continue"**.

5. Grant **Editor** or **Owner** role (optional, but useful for managing Sheets).
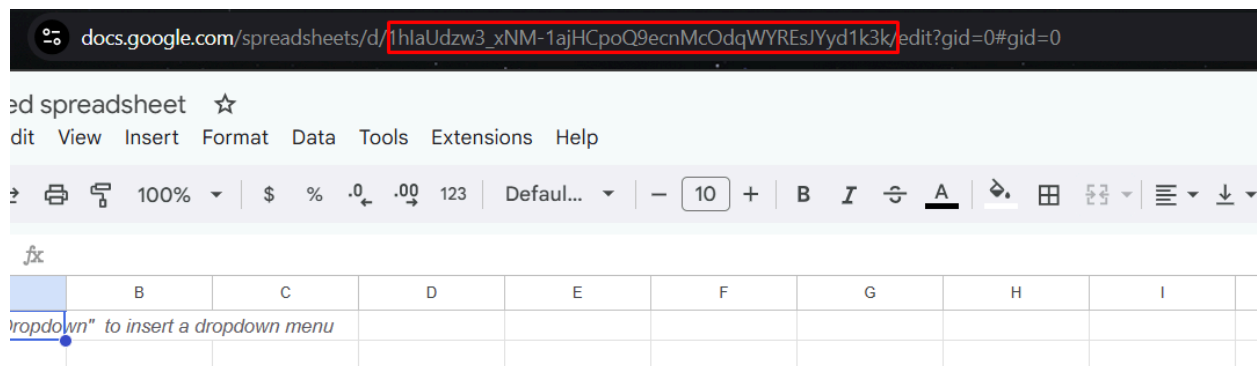6. Click **"Done"**.

Step 4: Generate JSON Credentials

1. In **APIs & Services → Credentials**, find your newly created service account.
2. Click on it, then go to the **"Keys"** tab.
3. Click **"Add Key" → "Create new key"**.
4. Select **"JSON"** and click **"Create"**.
5. A JSON file will be **downloaded to your computer** (this is your credential file).
6. Rename it "**ebay-sheet.json**" and move it to C:\.

Step 5: Share Google Sheet with the Service Account

1. Open your **Google Sheet**.
2. Click **"Share"** (top-right corner).
3. Copy the **email address** from your service account in **Google Cloud → IAM & Admin → Service Accounts**.
4. **Paste** the email in the Google Sheet sharing box and give it **Editor** access.
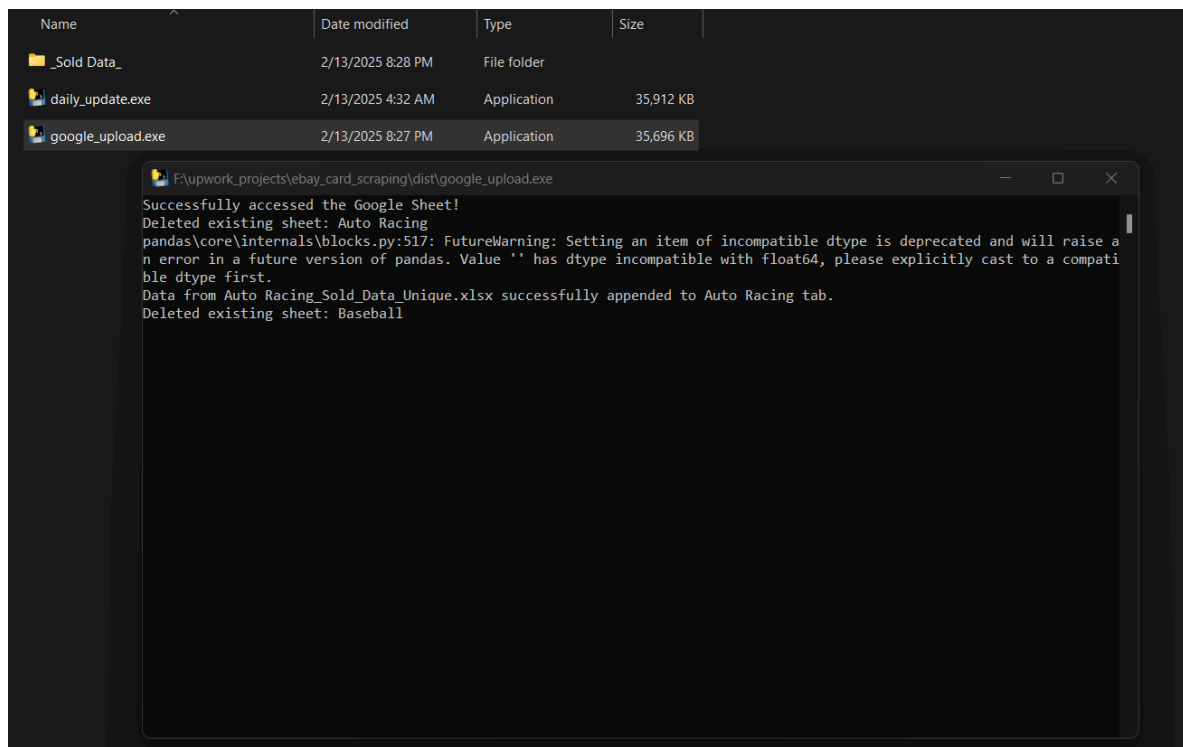5. Click **"Done"**.

[Create New Google Sheet](#)

1. **Go to Google Sheets**.
2. Click the **"+" (Blank spreadsheet)** button.
3. Rename the sheet by clicking on **"Untitled Spreadsheet"** at the top.
4. Give me your Google Sheet ID

[Daily update](#)

Step 1: Upload Past Sold Data to Your Google Sheet(Only Once Required)

1. Extract "**eBay-Scraping.zip**" file.
2. Run **google_upload.exe**. Check your google sheet. You can see past sold data.

Step 2: Daily Update Implemetation

1. Press `Win + R`, type `taskschd.msc`, and press **Enter**.
2. In the **Task Scheduler**, click **"Create Basic Task"** (on the right panel).
3. **Name the Task:** Enter a name like `"eBay Data Scraper"` and click **Next**.
4. **Trigger (When to Run):** Select **Daily** and click **Next**.

5. **Start Date & Time:** Choose a start date and time (e.g., every day at 00:00 AM) and click **Next**.
6. **Action (What to Run):** Select **"Start a Program"** and click **Next**.
7. Click **Browse** and select **daily_update.exe**.
   (e.g. F:\eBay-Scraping\daily_update.exe)
8. Click **Next**, then **Finish**.