

EVOASTRA MINI PROJECT

WEB SCRAPING

Web scraping car details from
ackodrive.com

TEAM : CP36 TEAM F

TOPIC : Renault car listings (Mumbai)

TOOLS USED : Python, Pandas, BeautifulSoup

MENTOR : Aniket Manwatkar

TEAM MEMBERS:

- 1. MOHSIN TARIQ
- 2. ABHISHEK SANDIP BADWAR
- 3. LINGABARANI M. G.
- 4. MALKA NAAZ
- 5. PRATHMESH NANDAWDEKAR
- 6. MANJUNATH S
- 7. PRINCY MISHRA

ABOUT OUR PROJECT

PROJECT OBJECTIVE : The objective of this mini-project is to develop skills in web scraping by extracting and analyzing car details from AckoDrive.com

PROJECT LEARNING : Web scraping, data cleaning, and presenting structured data for analysis.

BRAND : Renault

- DATA FIELD EXTRACTED :**
- Name
 - Brand
 - Model
 - Year
 - Price
 - Fuel type
 - Transmission
 - Location

TASKS

1. Scrape car data for assigned brand & location.
2. Collect 5 key attributes per car listing.
3. Save results to a CSV file for analysis

PROJECT REQUIREMENTS

DELIVERABLES

1. .ipynb notebook
2. Presentation (PDF)
3. Project Report

TOOLS AND LIBRARIES USED

LIBRARY	PURPOSE
Requests	To send HTTP requests and retrieve data from website
BeautifulSoup	For parsing HTML and XML documents
Pandas	Data cleaning and storage
Time	To control delays during scraping

IMPLEMENTATION WORKFLOW



STEP 1 - IMPORTING LIBRARIES

Imports tools for automation, parsing, and data handling

```
1 import requests  
2 from bs4 import BeautifulSoup  
3 import pandas as pd  
4 import time
```

STEP 2 -DATA EXTRACTION

```
1 base = "https://ackodrive.com"
2 # Replace the car name to derieve data from cars.
3 car = "renault+cars"
4 city = "Mumbai"
5 url = f"https://ackodrive.com/collection/{car}?city={city}"
6
7 headers = {"User-Agent": "Mozilla/5.0"}
8
9 response = requests.get(url, headers=headers)
10 soup = BeautifulSoup(response.text, "html.parser")
11
12 car_cards = soup.find_all("div", class_="BuyCarCard_card_AsGXF")
13 print("Cars Found:", len(car_cards))
14
15 data = []
16
17 for car in car_cards:
18
19     # Title
20     title_tag = car.find("a", class_="BuyCarCard_carName_SAJVh")
21     title = title_tag.text.strip() if title_tag else None
22
23     # Car page link
24     link = base + title_tag.get("href") if title_tag else None
25
```

```
26     # Price
27     price_tag = car.find("p", class_="BuyCarCard_priceRange_2q8tm")
28     price = price_tag.text.strip() if price_tag else None
29
30
31     fuel = None
32     transmission = None
33
34     if link:
35         detail_res = requests.get(link, headers=headers)
36         detail_soup = BeautifulSoup(detail_res.text, "html.parser")
37
38         # Fuel and Transmission
39         spec = detail_soup.find("p", class_="SpecsAndFeatureCard_card_text_wxvgC")
40
41         if spec:
42             parts = [p.strip() for p in spec.text.split("*")]
43             fuel = parts[0] if len(parts) > 0 else None
44             transmission = parts[1] if len(parts) > 1 else None
45
46             time.sleep(1)
47
48         data.append({
49             "Title": title,
50             "Price": price,
51             "Fuel Type": fuel,
52             "Transmission": transmission,
53             "Location": city,
54         })
55
```

STEP 3 -DATA CLEANING

```
1 df = pd.DataFrame(data)
2
3 df["Title"] = df["Title"].str.strip()
4 df.replace({"": None}, inplace=True)
5
6 df.index = df.index + 1
7
8 print(df)
9
10
```

	Title	Price	Fuel Type	Transmission	\
1	Renault Kiger (2021-2025)	₹7.2 lakh – ₹13.3 lakh	Petrol	CNG	
2	Renault Triber (2019-2025)	₹7.2 lakh – ₹10.3 lakh	Petrol	CNG	
3	Renault Kwid	₹4.9 lakh – ₹7.4 lakh	Petrol	CNG	
4	Renault Kiger	₹6.5 lakh – ₹12.1 lakh	Petrol	CNG	
5	Renault Triber	₹6.5 lakh – ₹9.8 lakh	Petrol	CNG	

	Location
1	Mumbai
2	Mumbai
3	Mumbai
4	Mumbai
5	Mumbai

STEP 4 - EXPORT TO CSV

```
1 df.to_csv("Mini_Project-Group_F.csv", index=False)
2 print("CSV file saved as Mini_Project-Group_F.csv")
```

CSV file saved as Mini_Project-Group_F.csv

STEP 5 - FINAL DATA

Title	Price	Fuel Type	Transmission	Location
Renault Kiger (2021-2025)	₹7.2 lakh – ₹13.3 lakh	Petrol	CNG	Mumbai
Renault Triber (2019-2025)	₹7.2 lakh – ₹10.3 lakh	Petrol	CNG	Mumbai
Renault Kwid	₹4.9 lakh – ₹7.4 lakh	Petrol	CNG	Mumbai
Renault Kiger	₹6.5 lakh – ₹12.1 lakh	Petrol	CNG	Mumbai
Renault Triber	₹6.5 lakh – ₹9.8 lakh	Petrol	CNG	Mumbai

CHALLENGES

Kilometres driven data could not be extracted because the listings were for brand-new cars, and the website does not display any running information for new vehicles.

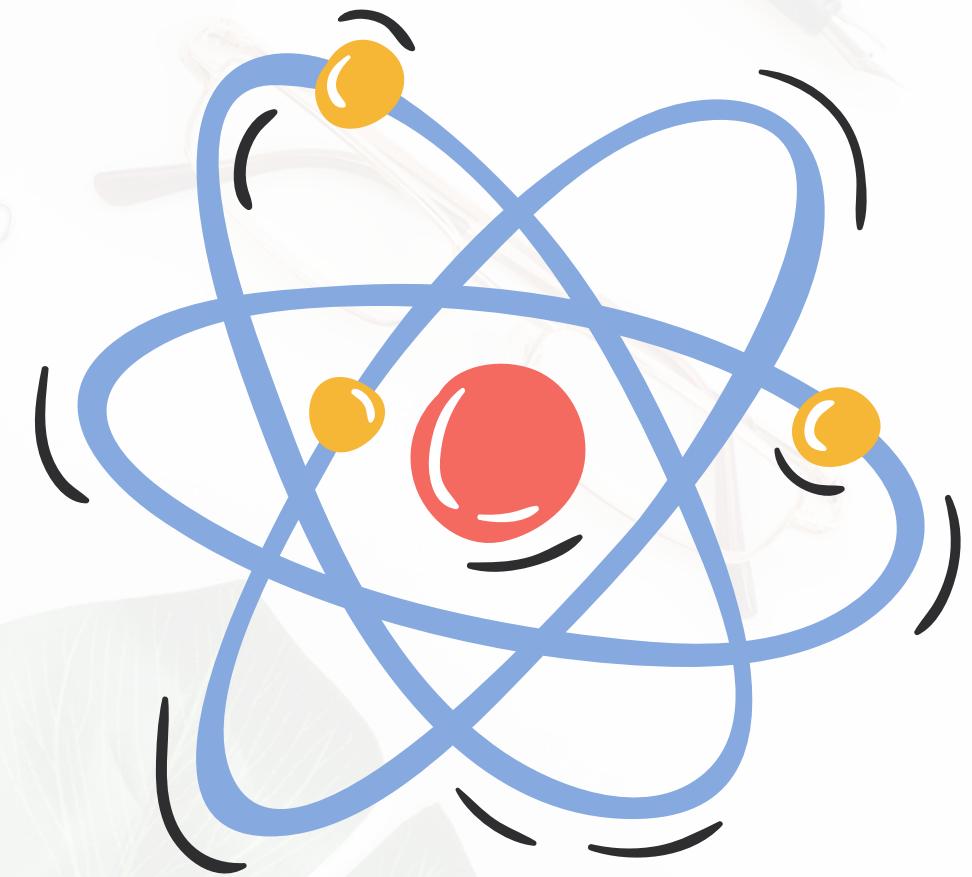
CHALLENGES AND SOLUTIONS



SOLUTIONS

We verified multiple pages and confirmed that AckoDrive only provides kilometres driven for used cars, not for new ones. Since the data was not available on the site, we documented this limitation and proceeded with the remaining attributes that were present.

LEARNINGS



- Dynamic website scraping
- Handling missing and inconsistent data.
- Importance of automation and ethical scraping practices.

THANK YOU



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