

# Python Developer - Web Scrapping Task

As part of our hiring process, we would like to assess your skills in Python programming and your understanding of Object-Oriented Programming (OOP) concepts. The task involves web scraping data from a website and returning the extracted information in the form of a JSON.

## Task Description:

Write a Python script using the requests and any python libraries to scrape data from this [website](https://parivahan.gov.in/rcdlstatus/?pur_cd=101) webpage. The script should send an HTTP request to the website, parse the HTML, extract relevant information based on the website's structure, and return the data in JSON format .

## Instructions:

1. Use Python for the implementation.
2. Implement Object-Oriented Programming (OOP) concepts where appropriate.
3. Scrape data using Xpath and any Python library.
4. Organise the extracted data into a JSON format as given below sample.

## Website:

For this task, you will be scraping data from the following website:

[https://parivahan.gov.in/rcdlstatus/?pur\\_cd=101](https://parivahan.gov.in/rcdlstatus/?pur_cd=101)

## Data to Extract:

1. Identify and extract data from the website (e.g. current\_status, holder\_name, ratings, driving\_license\_validity\_details, etc).
2. Extract the identified data and organise it into a JSON.

## Note:

The request includes CAPTCHA challenges that require providing the correct CAPTCHA value in the request payload. To address this, utilise any Python image library to open and view the CAPTCHA image. Manually input the correct CAPTCHA value into the request payload as needed.

For this sample:

dl\_number : "MH0320140015542"

dob: "21-06-1992"

Response format should be as given below:

```
{  
  "current_status": "ACTIVE",  
  "holder_name": "A*M*DA*I S*A*K*",  
  "old_new_dl_no": "NA",  
  "source_of_data": "SARATHI",  
  "initial_issue_date": "25-Apr-2014",  
}
```

```
    "initial_issuing_office": "RTO,MUMBAI (EAST)",
    "last_endorsed_date": "06-Aug-2018",
    "last_endorsed_office": "RTO,MUMBAI (EAST)",
    "last_completed_transaction": "ISSUE OF DRIVING LICENCE , RENEWAL
OF DL",
    "driving_license_validity_details": {
        "non_transport": {
            "valid_from": "25-Apr-2014",
            "valid_upto": " 24-Apr-2034"
        },
        "transport": {
            "valid_from": "01-Aug-2018",
            "valid_upto": "31-Jul-2021"
        }
    },
    "hazardous_valid_till": "NA",
    "hill_valid_till": "NA",
    "class_of_vehicle_details": [
        {
            "cov_category": "TR",
            "class_of_vehicle": "3W-GV",
            "cov_issue_date": "25-Apr-2014"
        },
        {
            "cov_category": "NT",
            "vehicle_category": "MCWG",
            "cov_issue_date": "25-Apr-2014"
        },
        {
            "cov_category": "TR",
            "vehicle_category": "LMV-TR",
            "cov_issue_date": "25-Apr-2014"
        }
    ]
}
```