**Assignment: Whitepages.com Scraper and Remove Request**

**Overview**

This Python script is design to scrape data from the Whitepages website for a specific name and location. It collects information like age, full name, location, and phone number (if available) for individuals matching the search criteria. Additionally, the script automates the process of submitting a removal request for the listing found on Whitepages.

**Prerequisites**

Technical specification to run this script

1. Python (version 3.6 or above)
2. Google Chrome browser
3. ChromeDriver executable (compatible with your Chrome browser version) available in the system's PATH.

**External Libraries**

The script utilizes the following external libraries, which need to be installed before running the script:

1. Please create a python virtual environment and install to requirements.txt file
2. Selenium: For automating web browser interactions.
3. selenium\_stealth: For handling browser automation detection.
4. bs4 (BeautifulSoup): For parsing HTML content.

You can install these libraries using the following command:

bash

>> pip install selenium beautifulsoup4

**How to Run**

1. Open a terminal or command prompt.
2. Navigate to the directory where the script is located.
3. Run the script using the following command:

bash

>> python views.py

**Script Description**

**Step 1: Scraping Whitepages Data**

1. The script starts by importing necessary libraries and defining helper functions.
2. It then sets up a Chrome WebDriver instance with special stealth options to avoid detection while scraping the Whitepages website.
3. The extract\_phone\_number(href) function takes a link (href) to a Whitepages listing page, visits the page, and extracts the phone number if available. It returns the extracted phone number or "No Number Were found" if the phone number is not available.
4. The fill\_form\_and\_submit(full\_name, location, phone\_number, href) function automates the process of filling out a removal request form on the Whitepages support page. It takes the full name, location, phone number, and the listing URL as inputs, fills the form accordingly, and submits the request.

**Step 2: Main Script Execution**

1. The main script starts by setting up the Chrome WebDriver with stealth options.
2. It navigates to the Whitepages search URL containing the specified name and location (e.g., '<https://www.whitepages.com/name/Jhon/NY?fs=1&searchedName=jhon&searchedLocation=ny>').
3. The script waits for the page to load and collects the HTML content of the page.
4. It uses BeautifulSoup to parse the HTML content and extract relevant information such as age, full name, location, href, and phone number (using the previously defined extract\_phone\_number function).
5. For each individual's listing found on the page, it then fills the removal request form using the fill\_form\_and\_submit function and appends the extracted data to the result\_list.
6. Finally, it prints the list of collected data.

**Important Note**

1. The script uses ChromeDriver to control the Chrome browser. Ensure that you have the appropriate version of ChromeDriver installed (compatible with your Chrome browser version) and available in your system's PATH before running the script.