

**Title: Geocoding Application using OpenCage API**

The "Geocoding Application using OpenCage API" project is a Python script that allows users to convert human-readable addresses into geographic coordinates (latitude and longitude) using the OpenCage Geocoder API. Geocoding is a fundamental process for mapping and location-based services, and this script simplifies the task of obtaining precise geographic data for a given address.

**Key Features:**

**1.** User-Friendly Interface: The script provides a user-friendly interface that prompts the user to input an address they want to geocode.

**2.** OpenCage Geocoder Integration: The project leverages the OpenCage Geocoder API for geocoding purposes. It initiates a geocoding request to the OpenCage API using the provided address.

**3.** Error Handling: The script includes error-handling mechanisms to manage exceptions that may occur during the geocoding process, providing informative error messages to the user.

**4.** Display of Geographic Information: Upon successful geocoding, the script retrieves the latitude and longitude of the given address and displays this information to the user. If the location is not found, it informs the user accordingly.

**5.** Security: The OpenCage API key used in the script for geocoding is protected and not exposed in the code, ensuring secure usage.

**How to Use:**

**1.** Run the script.

**2.** Enter an address that you want to geocode when prompted.

**3.** The script will communicate with the OpenCage Geocoder API and display the latitude and longitude of the provided address.

This project simplifies the process of geocoding addresses, making it suitable for various applications such as location-based services, mapping, and data analysis. Users can easily integrate this script into their projects to obtain geographic coordinates for specific addresses.