**Location Tracker using the photos Location**

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**1. Introduction**

This documentation provides an overview of the LocaionOpenStreeApi service, which allows users to extract location information from photos using the OpenStreetMap Api. The service accepts image files as input, analyse the embedded PS data to obtain latitude and longitude coordinates, and then use the coordinates to retrieve the corresponding address information from the OpenStreetMap database

**2. Features**

* **GPS Location Extraction**:- The LocationOpensStreetApi service enables users to upload photos with embedded GPS data and automatically extracts the latitude and longitude coordinates from the metadata. This feature allows users to obtain accurate location information from their images without manual input.
* **Address Retrieval**:-With the extracted latitude and longitude coordinates, the service communicates with the OpenStreetMap API to retrieve the corresponding address information. Users can quickly obtain the full address of the location where the photo was taken making it convenient for the geotagging and location-based application
* **Spring Boot Implementation**:- The LocationOpensStreetApi is built on the Spring Boot framework, making it easy to deploy and integrate into existing Java-based application. The service takes advantage of Spring’s features for efficient handling of RESTFul API’s and dependency injection.
* **Configurable File Upload**:- The service includes a MultipartConfig configuration that allows users to specify the maximum file size and request size for photo uploads. This ensures smoot and secure handling of images files while preventing potential issues with oversized uploads.

**3. Usage**

**Input Parameters**

To calculate the EMI, you need to provide the following input parameters:

* MulltipartFile “file”: This parameter represents the image file that contain embedded GPS data. It is sent as a multipart request in the HTTP POST method to the “/photo/location” endpoint . The service will extract the GPS data from this image file to obtain the latitude and longitude coordinates
* The multipart request should contain a file field with the image to be processed. The image file can be in various formats such as JPEG, PNG, etc as long as it contains the necessary GPS metadata
* **Input Parameters and output**

The request and response In postman would look as follows

