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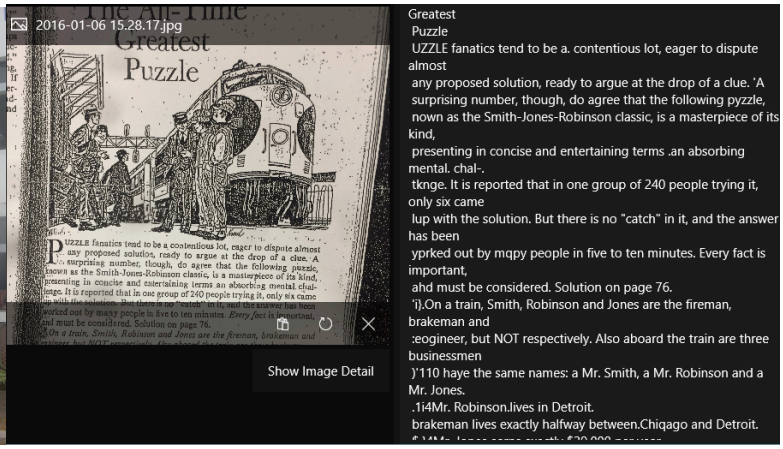

TEXT EXTRACTOR

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PROBLEM STATEMENT

Extract and Organize the regional text in the community assets Photographs -With an emphasis on transparency and accountability various ministries under Government of India have taken initiative of geo tagging the respective assets. While geo tagging the assets the latitude, longitude, photograph and other important attributes are being captured. -However, there is additional information of immense value embedded in the photographs in Regional Languages which are currently not used in decision making process due to lack of automated system for extraction & organizing the information embedded in the photograph .

Objective

The objective of this solution is to guide the government/concerned authority in executing their programmes/yojanas strategically by pinpointing hotspots via information of various community assests and natural assets extracted by geotagged images using text extraction and deep image analysis. On the other hand providing the user an interactive interface for image viewing embedded on a map template connected through a social media network.

Solution

A community asset (or community resource, a very similar term) is anything that can be used to improve the quality of community life. Development planning has been a central tenet of modern India's growth and strategy planning.

Our app will focus on extraction of information from the image by text extraction followed by the identification of the regional language , if any present in the image which will contribute in analysis of that image. Apart from from this we will simultaneously extract many more assests of the image like the objects and the background data being depicted in the image , which would serve as a much more fruitful input for our conerned authority .The extracted data will then be plotted on the map indexed by geotags using a user friendly GUI.

We will extract the text from these images and identify objects and things and will make the application figure out whether it is a hospital or a post office or a water body or any other community asset . We will map these images on their respective coordinates on the map i.e, geomapping and our app will try to find patterns in their locations on the map. With information of the population in that particular area, our app will conclude whether or not the present community is sufficent with these assets and our app will generate a report on the community

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indicating the conditions in that area. This will help in the decision making process on a very broader way.

Project Outline

An image carries many assets (directly viewable or deductable), which includes text (written/printed on notices, navigation/warning boards, etc.), scenary and objects.

- Our app will extract meaningful information from these clues using deep learning models and will plot this information on the map indexed by geotags.
- Clustering of this information by locality would give relevant information about entire localities which is the number of community assests of that clustered area which will give an inference of its possible development index, which would serve its purpose as eyes for the government on a local level and help the administration address local issues and map out execution for large scale government programmes.

Input: Image Output: India Post Office Sector 09 , 160009 + Geotag + Image Analysis

- An interface provided on the photo clicking end would also have a direct post function, where users can simply click a photo and our deep learning model detects the problem and reports it to the concerning authorities.
- This kind of system would geniunely help more government initiatives to be successful (imagine demonetisation, swacch bharat, etc. getting micromanaged) .
- The user will be provided a map interface where he/she can view their images as per their geotags.

- This data will simultaneous look for any previous yojna of similar concern being implemented in the same locality before and if there are shortcomings in execution, possible scams could be detected as well.
- These suggested plans will also be automatically scheduled in optimum manner.

For example in the above input images the app will give an output that the image contains a hospital named Apollo Hospital or Raurkela GOVT. Hospital . It will also tell that an ambulance is being shown in the image standing on a metalled road , thus giving an automated overview of the secanario in brief , which could then be organised and analysed in an optimum manner to become a fruitful input for the concerned authorities and decision making bodies .

The App will also detect any natural assest being depicted in that area followed by its analysis and then linking it to the that particular geotag.