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Intelligent Transport Planning System Using GIS

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Abstract

Major Countries like UK, Canada, Germany, USA, Australia and Japan also following advanced traveller information technologies has speed and great efficiency in comparison to other countries.The transport planning system in Chennai city is very difficult and to find tourist places, road networks, hospitals, bus and railway stations, etc is also difficult in Chennai city. My proposal list out all the areas in the city limit and shows the tourist places in that area and its path and plot it then shows place images also and integrate with websites. Development of proposed system is based on integration of two well-versed information technologies like Geographic Information System (GIS) and World Wide Web . mixture of these two technologies is effective use to develop a coordinated ATIS that targets different types of travellers like owner's vehicle and normal outside visitors.

Index terms— Geographical Information System (GIS), and Intelligent Transportation System (ITS).

I. INTRODUCTION

The Advanced Traveller Information System (ATIS) is a type of intuitive transportation system application areas that implements prominent computer, exchanging information and information technologies. By using Geographic Information System (GIS) is a computer system design to record, save, handle, examine, be in charge and present all types of geographical data. In the recent years the Intelligent Transportation System (ITS) has made huge values of narrative technique and traffic information. ITS is a coordinating system that implements existing or prominent computer, sharing information, information and vehicle sensing technologies.

The road paths are collected by using Google Maps in the Chennai city and display a source to destination path. First we have to select one particular area in the Chennai city and search a tourist places then the tourist places will list out with images and URL link also available in map itself. Then we have to select a particular place and find a path from our location to that place. All the tourist places in that area is plotted over the Google map with images and URL links and it is easy to find the places. The power to know everything about your trip all in one place. It is an efficient way and easy to implement in Google maps and by using Google API we can implement this. All the images are stored in database and use those images for particular places. It is easy to collect from Chennai city only and my proposal also only for Chennai city.

II. EXISTING SYSTEM

In India already some cities are using Advanced Traveler Information System (ATIS) Hyderabad, Bhuvan, Delhi, Amritsar etc. But that is just shows the plotted marks in Google maps and shows the Source to Destination paths only. It is effectively used in Bus stations, Railway stations and Major tourist places. It is very convenient and useful for tourist peoples and drivers.

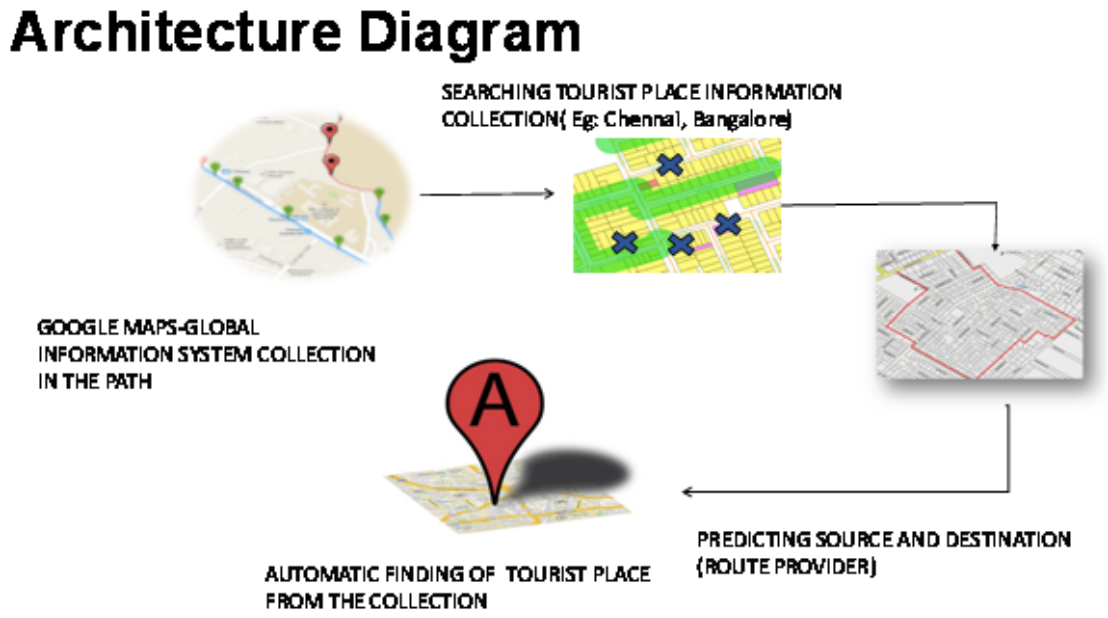
And to manage travelers demand they using geo-spatial collection of information are a new technology in database system which allow saving, extracting and maintaining the spatial data. The traveling plan is necessary to select nearby point of interests like accommodation, tourist, transportation, medical facilities. It is an easiest way to find places like Restaurants, Cinemas, hospitals, Museums, etc. In the Ahmadabad city the Web-Based Passenger Information System is implemented which collects the passenger information system and public transports and make it easier but it is complex to collect data and maintain for daily activities. These all used only for source to destination findings only but I proposed integration of images and URL links with that Google maps.

III. PROPOSED SYSTEM

In this Intelligent Transport Planning System in Chennai city shows the plotted all tourist places in a particular area. User has to select particular area in the Chennai city limit and based on the selection the tourist places will plot out in a map and move the cursor to the plot points it shows the image of the place and URL available means the URL link also integrated there. If we click that point it goes to that URL page and easily finds the shortest path also by using Google maps.

This proposed shows tourist places, hospitals, temples, theatres, malls, bus and railway stations and road networks, etc. By using Geographic Information System (GIS) in Google maps we can integrate and shows a Chennai city map and using Google maps API and database for collecting and storing the images in tourist places of Chennai city and link the URL also in that plotting point itself.

An Intelligent Trip Modelling System (ITMS) is developed to predict the travelling path of location profile for a selected route based on the search information available at the trip starting time. Experiments show that ITMS is capable of providing accurate predictions of dynamic search changes and particular specific location at the beginning of a trip and can generalize well to prediction of path profiles on the routes other than that the system was trained on.



Pre trip Planning

The role of the ATIS tool is for travelers to plan their trips ahead of time, enabling them to make informed choices among the various modal options and selecting a route that offers the best possible mix of speed and cost savings.

En-Route Information Sharing

Another central role of the ATIS tool is to enable travelers to receive information en route and make travel adjustments in a time-saving and safe manner. The ability of travelers to access the ATIS tool en route will depend on the ability of the tool to accommodate mobile device users. Ideally, the tool will enable users to safely access information from a reliable connection. Additionally, the opportunity for "push" alerts (sending users updates on incidents and unexpected delays) can improve en route information sharing.

ATIS Operational Improvements

The ATIS should offer the opportunity for participating organizations to make operational improvements to the ATIS tool in the future if new data needs arise. Meeting the data needs of a functional and successful ATIS tool requires high-performance standards. The timeliness, accuracy, and reliability of data will be critically important.

The strengths and weaknesses of their own data collection processes, their existing data sources, and their potential future or expanded sources of information.

Some organizations may have benefit from the coordinated data sharing effort and recognize opportunities for future coordination to maximize resources, prevent overlap in resource allocation, and access shared data to better coordinate programming.

Mostly, operational improvements will only take shape after the ATIS tool has been implemented and partner agencies are encouraged to revisit discussions about operational improvements as part of the routine ATIS maintenance and coordination efforts.

IV. FUTURE ENHANCEMENTS:

We have presented an Intelligent Transport Planning System in Chennai city it is developed to find the tourist locations in the Chennai city and filter by area wise with this we can integrate images and URL of that particular location and shortest path and alternate path from source to destination.

V. CONCLUSIONS

Implementation of GIS in grouping with other ahead in development communication computer technologies to traveler communication information sharing systems enables the clearly visible especially information of information related to fixed route facilities, such as offices, schools, colleges, medical hospitals, places of tourist places,

etc., trip planning and spatial and attribute communication information on other transportation facilities within the cities, including bus stations, main roads, airports, shipyards and railway stations.

It provides

- Plot the shortest path between the source and destination places in the map.
- Finding the closest facility like Restaurants, Petrol stations, etc.,
- By selecting the area it shows the entire tourist places in that area with plotted points.
- In that plotting points itself we integrated images and URL of the specific location.
- Search box also there to search the particular places in Chennai city.

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