

## System for Providing News Associated with Location

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**Abstract**— It is the age of science, when news updates are much needed to people of each profession. Sometimes we met with conditions when instantaneous news about any area or a region of glob has been highly demanded. The main objective of this research is to get the frequent news of any specific area or region. The rapid growth of technology enforces us to be innovative and make a system with instantaneous characteristics. Systems (applications, news channels, radio etc) those exist so far are delayed based service providers as well as time instant ability is concern. Here in this research we have designed a system which will give instant information to user about target region. Our research is an integration of Google maps and Google news. It is a tool which gives the news about a place being searched on map by using place markers. Although this job can be achieved by the users but by using two tabs on the browser, one window showing the Google map and the other window for news and that too have to be searched about the place. So, this application makes the work of the user simpler instead of going for two tabs, it can be achieved in a single page. The paper gives a path to researchers to enhance the live news feature and improve instinctive nature of news.

**Keywords**— Google maps, Google news, Instinctive nature, JavaScript and JSON

### I. INTRODUCTION

The world is changing rapidly thus the catalyst for these changes are news, digitization and automation of all existing systems, accuracy and efficiency as well. Actually the smartness and innovation comes front in the form of accuracy and efficiency. These were really important factors for the measuring rate of development. As far as growth in aspect of news is to be concern, it's really much needed that the news must me indoor or location specific with frequent updates [1]. There are various algorithms those can be used for exactness of any specific information around a location. If any area of land is suffering with flood, earthquake, drought and/or any other human or natural calamities. We want news of allied region very intermittently. Some time people suffering in these disasters area may be the part of our family. Thus the news updates of these areas frequently needed to us. The applications, radios and/or news channels telecast a lot of news to us, but the news for which we wait broadcasted by these means later. On putting this context in front we can conclude that there is a big need of a system who will give demanded information/news to us within a second. When a vaster or any person who is planning to go in a trip can use the features those are available in this

application [2]. Although there is lot of work has been done towards android city based application [2]. Some time there may be an action associated with a specific location, Thus we need to fix an alarm over that location. An alarm will ring when location of phone will be same as the location for which the alarm was set [3] [4]. It is the kind of application which is something unique for the users who are searching for a place all over the world and came to know the recent news about the place and if there is no place being searched then also it shows there is something new in that place has happened. In this tool we are not giving vague information or the news just for displaying the performance of our research instead giving the actual and correct information using Google news website where news is being linked or updated by the newspaper sites, any kind of delay is not in our hands. The stakeholders of this research are: (1) People who want to get information about any area (2) The news reporters (3) Person planning to visit special area (4) Various applications. Section II has all details about the work has been so far. Section III has the information about the implementation methodology has been followed by us. Section IV has details about the results and aims were achieved, while conclusion of the study is centered in section-V with future scope also.

## II. RELATED WORK

In the study we have gone through two types of studies. First is the set of features of existing applications those were found and not found in them and second is the set of studies have been done so far. Here Table 1 shows the application those were targeted in study as benchmark applications with features. Several open source applications are available in service provider's domain; those facilitate us by latest news. We have targeted the flaws of the available applications and tried to sort out them in target study. The applications those have some certain features are the benchmarks of our study, while the features those are not inherited by them are the scope of innovation for our study. Table 1 explains the features those were available in the benchmark application and of those features also who are not available on them.

Table 1. Features found and features were not found in existing services

Application Name	Android App?	News about places of a city	Off-line access	Weather with location	News for cities
Indian Express	✓	No	✓	No	No
DailyHunt	✓	No	✓	No	No
NDTV	✓	No	No	No	✓
The Hindu	✓	No	✓	No	✓
Times of India	✓	No	✓	No	✓

Here, all of the applications provide android app to access news directly from their interface. As it can be seen from the table some features are available in all applications while some features specially Location based news, weather information with locations are not available. Thus our study is based on all those features those are not available in the given applications but are must to keep them.

Paper titled as "Design and Implementation an Online Location Based Services Using Google Maps for Android Mobile" show the implementation of API's and services of Google and their mapping with Google Map [5]. Here implementation has been targeted over Android mobiles. This mapping has been done using all open source services. In "Google Maps and RSS Integration in Android" P. Patel et al has worked for RSS integration of Google Maps with android. The OS used was android in order to its availability with maximum reach among all the OS [6]. In "Implementation of Location based Services in Android using GPS and Web Services " A. Shukla et al has implemented few Google dependent services with classical implementation based API's. Which give a future direction around how to implement the API and connect the plug-in based o Google API's. Here GPs, Maps and some more faculties provided by Google are used [7]. The services used in our study have been directed by Impact of Ajax in Web

Applications as how to use AJAX during design of the system. AJAX is widely and frequently used technology for the implementation of any project [8].

## III. METHODOLOGY

### A. Terminology

**JavaScript:** It plays an important role in this project. To use Google maps API JavaScript code is mainly used. It is responsible for initializing the map, show marks, remove marks, show info windows, changing place markers logo etc. in any Google map interface. JavaScript uses the data which was fetched by the PHP file and makes the appropriate changes in the app like updating pacemakers when map is dragged etc.

**PHP:** It is primarily used for creating the database. As stated in the mythology section, a file called IN.txt which was downloaded from <http://www.geonames.org/> contains all the information about the places in India. Using a PHP code written in import.php is used which reads the CSV file line by line, extract data and finally store those data into the database. PHP is also used to make http request, which fetches the recent news from Google in RSS feed bypassing appropriate arguments. The data fetched are parsed and only title and link values are taken and others are discarded. The further job like showing news in info window is done by JavaScript. One more job of PHP in this system is to access database and fetch markers information every time screen is dragged or loaded. It first finds the range of latitude and longitude values. Using this values query is made to select only those markers which come in this range. Database is also accessed to find the place whenever a search is made either by zip code or by city. Effective search technique is need for getting result fast.

**MYSQL:** It is used for storing place markers information into the database which can be accessed by the system anytime. PHP is used for storing and retrieving data from and to the database. As stated above, data is stored one time only using import function. Data modification is not done afterwards. Query language is used by PHP file to search data information from the database.

**JSON or JavaScript:** Object Notation is not a language. It is just a technique used to deal with the markers information. A single marker has 6 to 7 information which can be very tedious to handle without the help of JSON. Thus, the only use of JSON is to use markers information easily in the system. Ajax is also a technique of JavaScript which helps in dynamic updates of data without refreshing the page. Our system uses this technique to update the markers when the map is dragged. Asynchronous request is made to the database which fetches the markers information. It is added

the map when available (JavaScript code is used to add the markers to map.).

**Ajax:** It is also used when any pacemaker is clicked for news. Online request is made the Google for news. The time when the news is fetched, spinning gif is displayed which indicates that the news is being fetched. When fetching is complete the gif is replaced with news.

**B. Implementation**

Target stockholders and all the entities of the study are discussed in figure 1.

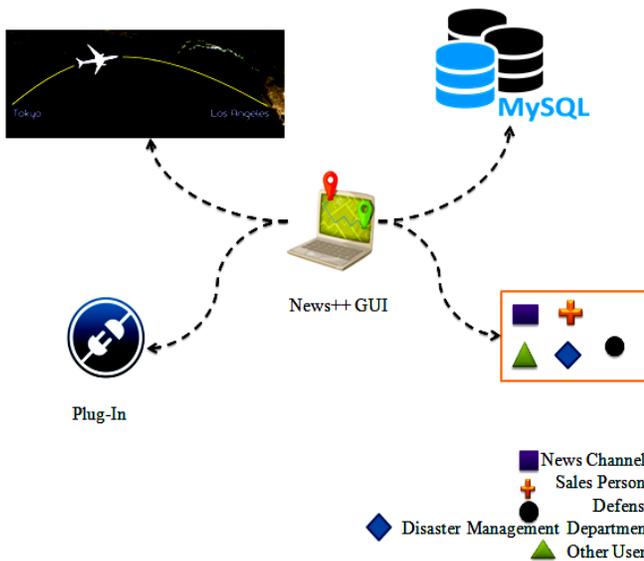


Figure 1. Stakeholders of News++

As it can be seen in figure1that News channels, Sales executives, Defense, Disaster management department and other community of users are the stakeholders of this system. These users use system directly and get benefits from it. In other hands air services, network and communication based services are also make a countable volume of users. Plug-in is just the bridge between two different modules by which they both can communicate together. MYSQL is the server on which database has been made.

In working User will give location and location validation has been checked then in favorable cases searching in database has been performed else a message of invalid location will be given to user. If user validation succeeded then in later on state if user again wants to search for a location he/she can do so.

The flow of the execution has been discussed in the below figure 2.

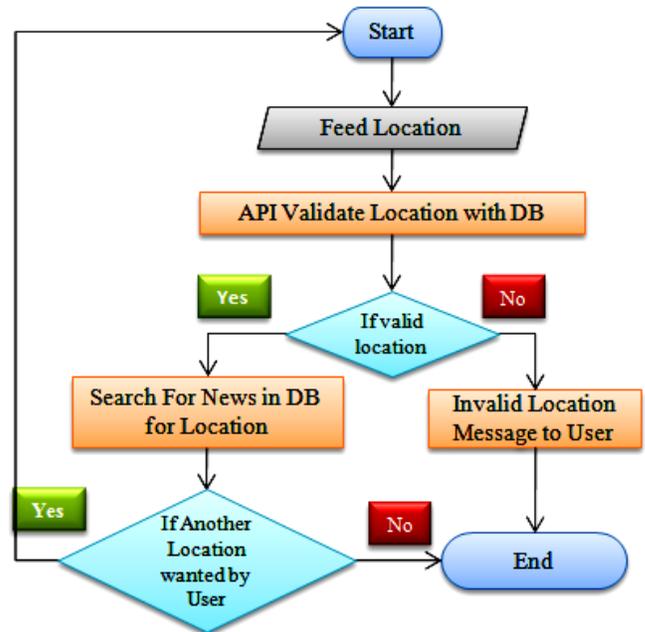


Figure 2. Execution Flow chart of News++

Interaction among the entities has been linked together by a flow. All the interactions are mutually associated together with an order [1,2..5]. It is mentioned figure 3.

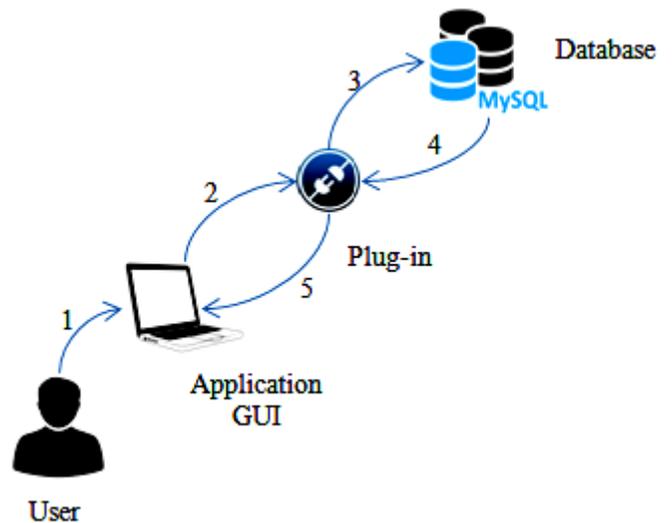


Figure 3. Order of interaction between entities

In the whole mechanism Marker plays a crucial role since it fetches information from the database and gives it to the users. It is mentioned in the given diagram figure 4.



Figure 4. Role of Marker with respect to whole mechanism

**IV. RESULTS AND DISCUSSION**

The need was to design a system which will give news of a location mapped with geostatic maps. The designed system has all the features those were kept in track in the objectives. Table 1 Gives details about feature those exist and doesn't exist in the existing systems so far. Users need to feed the location and it'll implicitly traced by system. Figure 5 shows how the location will be given to the system.



Figure 5. Giving location to the system

Here oval in the figure 5 shows the Text box where user gives the name of City, location or landmark.

After the insertion of city or location searching of that location has been done in the system's database and corresponding news cell will be selected to show. This can be seen in the figure 6. Initially according to location a searching query will be fired and then news as per closer to the location will be shown. Here in this testing case which has been shown in figure 6 Indore, GPO 452001 is given to system. Here Indore in universal set of GPO which is a sub domain of Indore thus Indore has its text color as Maroon in hexadecimal it is #800000. In text area 452001 is the pin or zip code of that are. GPO is the local zone for which we had searched. This can be done for any city in India.

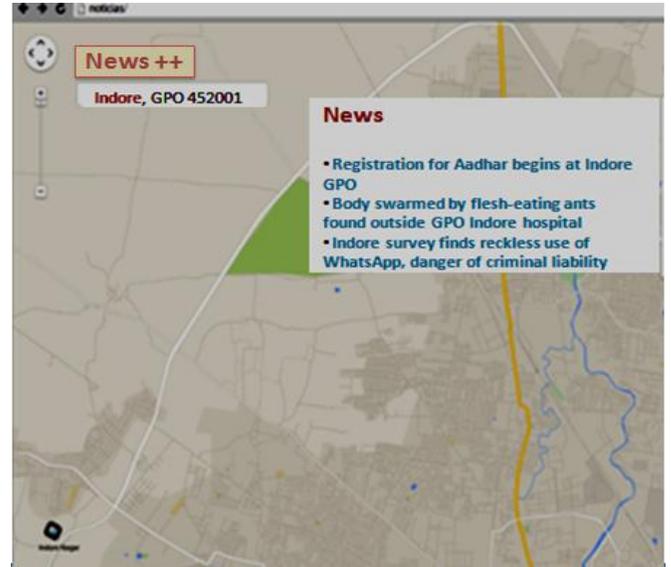


Figure 6. How News will be shown of given location

In order to existing systems so far our system has better features and user friendly behavior with accuracy of news. Some of features those have been merged in our system compare to the old existing systems are mentioned in table 2.

Table -2 Comparisons of features in existing systems and designed system

Application Name	Android App?	News about places of a city	Off-line access	Weather with location	News for cities
Indian Express	✓	No	✓	No	No
DailyHunt	✓	No	✓	No	No
NDTV	✓	No	No	No	✓
The Hindu	✓	No	✓	No	✓
Times of India	✓	No	✓	No	✓
News++ (Noticias+)	✓	✓	No	✓	✓

It is clear from the table 2 that designed system has two new features news about city oriented and news of whether also location specific.

**V. CONCLUSION FUTURE SCOPE**

The idea behind developing this application is to help users, when the user wants to know the news also associated with the location searched. The local news channels can't do this task as they show the news in a rotation like sports news, Bollywood news, world news, local news. Some news can't be watched whenever required.

Although, we have tried our best to present the information effectively, yet, there can be further enhancement in the Application. We have taken care of all the critical aspects,

which need to take care of during the development of the Project Like the things this project also has some limitations and can further be enhances by someone, because there are certain drawbacks that do not permit the system to be 100% accurate. Future aspects can be regarded as the modifications, modifications which have to be done in future. As our application deals with the maps and maps are of the places. So actually modifications will be required in our project if there is a place which is formed newly e.g. Telangana is a newly formed place in India recently got separated from the state Andhra Pradesh.

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