CITY GUIDE WEB PORTAL

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ABSTRACT

Search services related to a city have been developed recently. It can help citizens and users of this service to find places of their interest easily. This paper is aimed at developing a web portal that provides details about the locations in city selected by the user.

Web portals are a must for the modern municipality. They provide fast, convenient and user-friendly Public services to business and citizens and deliver high levels of customer satisfaction.

The web has become the single most important communication channel in our society. Every business has a website, and Google has become the place where most of us go to get answers to our questions. Government has gone online, and citizens have their own personal web presences, their Facebook walls and their social media profiles. But the web is not just limited to communication. It connects people, and lets them interact and share. With this functionality comes a great opportunity for businesses to use the web to provide and deliver services to their clients. E-services promise convenience and flexibility for customers, and greater efficiency. With the advent of smart phones, citizens and businesses now carry the web with them, everywhere they go. It is their reference library, their legal advisor, their tourist guide and their communication hub. Customers expect first class online service.

I. INTRODUCTION

It is a web portal for the city. As we know in the world of internet the information can be found using any of the device which is internet enabled so this is an attempt to make an efficient portal which will provide information about the places so that user can select the places according to his choice. The portal provides the facility to search nearby places such as hotels, hospitals, schools and information about them. As the visitor not knowing about the city, this portal will help them to find out the required place. Also it contains a guide of how to reach to place from the user's current position. Google maps are used for showing the place and navigate the user to the specific place.

This paper incorporates different services, steering you towards the very best activities that the city has to offer. It is a kind of online city guide that provides information about businesses in the categories of dining, entertainment, retail, travel, and professional services in cities. Further, it also includes location based services for locating different places on map. This is a useful way to find details about particular locations for those users who are visitors or new to the city.

The locations are like Hotels, Banks, ATMs, Restaurants, Theatres, Tourist places, Shopping Centers, Transportation Services, and Hospitals etc. It provides Category based searching for the locations. For the

selected category, it provides the full information (address, contact number and other information) for any selected option.

Currently many potential travellers obtain information and change their destination by a single click of mouse, demonstrating the underlying need for top-quality Web portal to promote such destinations. This promotional efficiency can be further strengthened if the portal besides presenting information about tourist destinations also provides information about services and facilities available at these destinations [5].

II. WEB PORTAL DEVELOPMENT TECHNOLOGY

The technology and tools for development of a web portal are falls under two main categories i.e. server side and he client side technologies. The server side technology consists of an language PHP which is used in the development of this web portal also the framework is used as it provides an application that is in full compliance with the business rules, that is structured, and that is both maintainable and upgradable, also the operating system Linux apache is used which includes the database like MySQL, Oracle. At Client side we can use JavaScript, HTML, CSS, XML and its variants. Also for data sending and receiving JSON can be used as it is lightweight format that is used for data interchanging maintaining the Integrity of the Specifications.

III. USER INTERFACE DESIGN

User interface is created in flat design according to guideline and it's very easy to navigate in web portal flat design leads to very good user experience. Designing a good user interface is an iterative process. First, we design and implement a user interface using appropriate techniques. Then we evaluate the design. The results of the evaluation feed the next design and implementation. We stop the process when you have met your design goals or you run out of time and/or money [2,3]

IV. WEB PORTAL FOR CITY

All the things around us are going online the information can be found in an instance with the help of internet. We can use it to develop a city guide portal which will help the peoples to find the right place for which they are looking for. It will not only help the visitors but also useful for the peoples in the city. Also for businesses which are started newly, this portal will help them to reach to all the peoples around them. The format for a web portal is given in the below sitemap which is fixed and easily understandable by the end user. The information about the all types of events such that cultural, social, technical which are in city can be displayed on web portal so that users can know about the events. And the rates of things in the local market and weather information about city can be provided. User can store his favorite places and make reviews about them so other peoples can understand and know about that place.

Fig. 1 Web Portal Structure
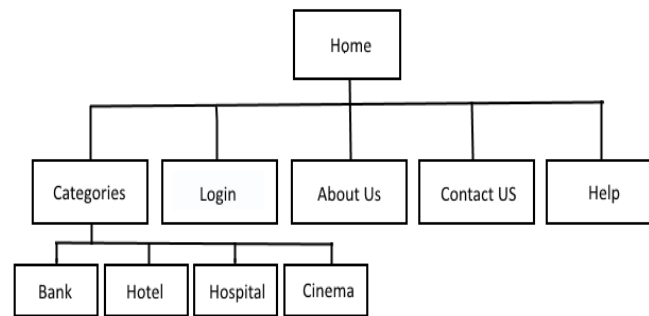
a. Assumptions and Dependencies

Is although basic password authentication and role based security mechanisms will be used to protect the web portal from unauthorized access; functionality such as inserting, deleting and updating are assumed to be sufficiently protected under the existing security policies provided by the database system proposed for implementation.

i. System Development Software Tools

- MySQL database to store and secure information.
- PHP, JavaScript, CSS, HTML to develop the system.
- Apache Server testing the application during development.

ii. System Hardware Development Tools

- Microprocessor: AMD Athlon™ X2 Dual Core QL-66 2.2GHz
- RAM: 2 GB of RAM
- Hard Disk: 160 gigabytes (GB) on installation drive

iii. End-user Characteristics

Every user must have basic knowledge of English.

- He/she should be able to work with computer.
- All users must have his/her unique login name and password to access the web portal.
- The user should know in details of the operation and working of the system [6].

V. FEATURES OF THE WEB PORTAL

It provides various services which help users in enriching the local geographical data by collaborative editing of local mapping information by users itself.

Following are main features of the web portal:

a. Location Search

As is predominantly a location finding platform we think location search should be the most important and helpful feature which it should have in it. By using the location search feature user can find the place of his or her interest. We have categorized places by their types like Hospitals, ATMs etc. There are around ninety categories of places from which user search from and our application shows location which are in close proximity of user

mostly which are of more relevant to user. Location search is one of the most important parts of our application and more location categories will be added [1].

In this work we applied a two level search in order to find better and more relative results based on user queries. This was done by using additional keywords, or vocabulary that refers to the field or category which the user query belongs to. This method is implemented in four different ways, those are a keyword that is point to single category, a keyword that have more than one category, the use of vocabulary with synonymous or use a description for the category. The process of our search retrieves results using category (keyword) search. The following steps are used to get such results:

Level 1-

1.   Take the search query or the keyword from the user

     a)   Look for the correctness of search query

     b)   Look if the query is either a keyword or category itself

     c)   Look if city is selected

2.   If query is category then go to level 2

3.   If city is selected then go to level 3

4.   Set found=0

     a)   Search the keywords in database and get the category of the keyword in which the results are to search.

     b)   if the database contains keyword then

          -increase found

5.   If found=0 no results are found

6.   If found =1 go to level 2

7.   If found >1 give choice to user in which category to look for

Level 2-

1.   Get the category of the keyword

2.   Set result=0

3.   Look for the given keyword in the respected category

4.   If keyword is found then increase result

5.   Display those results to user

Level 3-

1.   Get the city which is selected

2.   Set result=0

3.   Look for the given keyword in respective city and category.

4.   If keyword is found then increase result

5.   Display those results to user

The above algorithm is tested in different cases and the suggested results are shown in order to measure the efficiency of the proposed search. Section shows the obtained results.

TABLE 1

SEARCH METHOD

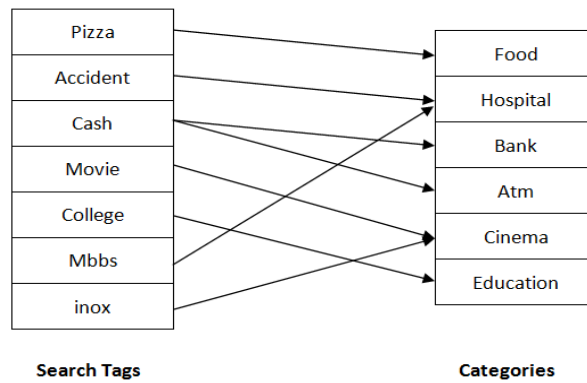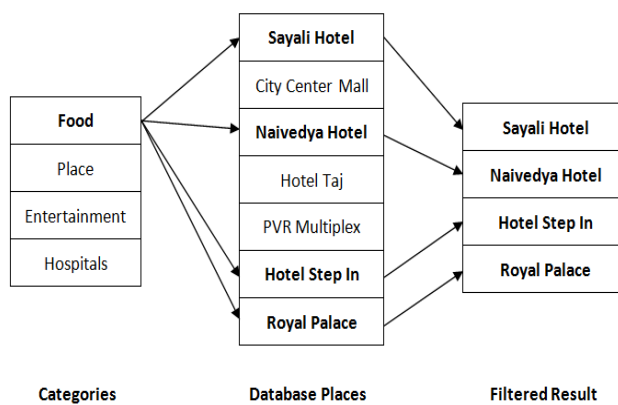| Keyword	Category	City	Suggestion
Pizza	Food	Jalgaon	Dominos
Hotel	Hotel	Nasik	Royal Palace
Heart attack	Hospital	Pune	Orchid Hospital
Cash	ATM	Mumbai	SBI Bank ATM

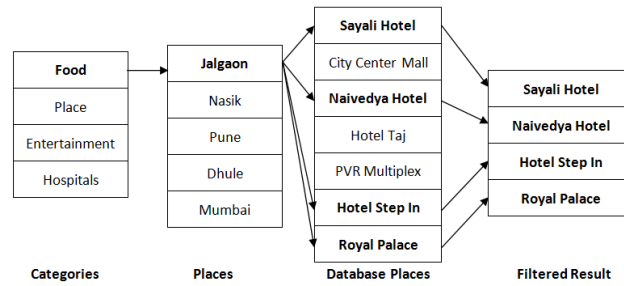**Fig. 2 Searching Level 1**

Fig. 3 Searching Level 2

Fig. 4 Searching Level 3

b. Social Login

Many application forces general users to go through the tedious process of creating accounts on their application/services. Its time consuming and it repels many sophisticated users away from application itself so we added Social Login to make the experience of creating account in a just single click. Nowadays many users have either Google or Facebook account already and both of these companies provides Authentication API to allow service like ours to make the login process a breeze. That's why we are using Social Login and we are very much assured that it will be helpful to our prospective users [3].

c. Location Editing

After Location Search, Location Editing is what we think is the second most important feature which is going to help user helping other users. What we mean by it that that location information is not static or constant, it changes or updates over the time and users from that locality have the exact information about it. Users can add Locations, edit existing one and in the process it helps in improving the overall usability. Custom locations added by users are stored on server database and then at time of place search we can display the locations to user. Users are provided with login systems so they can add the places and update the information about the existing places. Places added by users are verified by the admin.
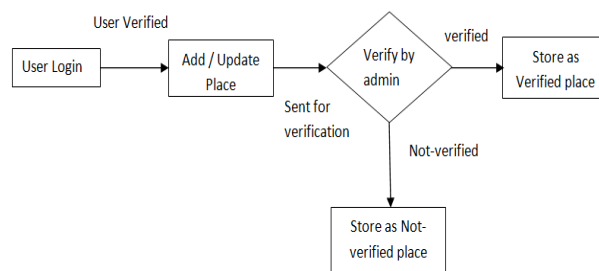

Fig. 5 Add/Update place

d. Filtering and Sorting results

Filtering is a way of reducing the number of results in a result listing. Users choose which criteria are important to them and view only relevant products. For example, price-conscious users may choose to view only products for under £10 (thereby filtering out all products over £10) [4].

1. According to search query obtain the results.

2. At first no filter is applied.

3. Display results to user.

4. If any filter is selected then

    a. Generate and run the query according to all filter values

    b. Get the refined results returned by the server on executing the query

5. Display the refined results to user.

Sorting is a method of changing the order of any result listing, where by users can choose which criteria they want the results to be listed by such as price, popularity, and alphabet. So, price-conscious web users may choose to list the products in order of price, from cheapest to most expensive [4].
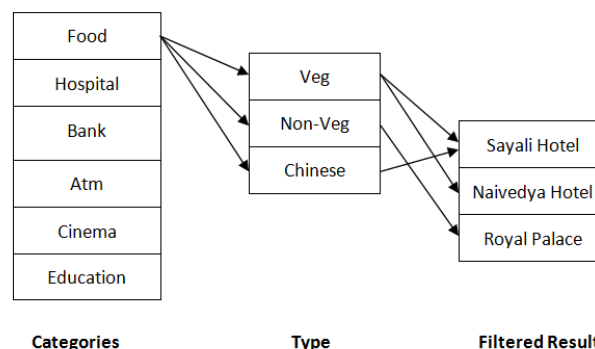

Fig. 6 Filtering Results

VI. CONCLUSION

It can be used in a variety of contexts, such as health, object search, entertainment, work, personal life, etc.

It include services to identify a location of a person or object, such as discovering the nearest banking cash machine (a.k.a. ATM) or the whereabouts of a friend or employee. LBS include parcel tracking and vehicle tracking services. LBS can include mobile commerce when taking the form of coupons or advertising directed at customers based on their current location. They include personalized weather services and even location-based games. They are an example of telecommunication convergence.

This concept of location based systems is not compliant with the standardized concept of real-time locating systems (RTLS) and related local services, as noted in ISO/IEC 19762-5 and ISO/IEC 24730-1.While networked computing devices generally do very well to inform consumers of days old data, the computing devices themselves can also be tracked.

So we are very much positive on a node that we are providing users a very powerful tool which will add up to the value of their live and our society.

VII. FUTURE SCOPE

As we know everything is going to be digitalized so we need to move on from tradition approach to new approach by using the technology. There are many ways through which we can find out our needs and complete it

in just few seconds. The digital cities concept is one of that. All the information regarding to city is known to the persons living in it but it is good to tell others how your city is, locations to travel and enjoy in your city. All the important things which are required for travelers as well as the peoples who live in city and know very less about their city. In future all the things are going to be digitalized it is the first step towards it. We need to move on with the technology and make our city open for all.

In future we can implement the municipal services, payments online so that peoples have ease to sue the services. Also the bills which we pay by standing for hours in a line can be paid and done by just and click.

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