

# Application for Searching Product nearby location

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**Abstract** - Ground Work for a product in nearby location is an application which is used to search for a product availability and it's quantity in the nearest available stores. In general if any person wants a product, he must go in search for that either by walk or by vehicle. In Internet here are so many applications available to find the nearest shop but we can't find whether the product is available in it or not. The main disadvantage is Wastage of time and money. Proposed "Ground work for a product nearby location" applications developed to search a product in nearby location which will make the user to get that products within less time-span. This application is applicable for various fields, like homely goods stores, medical stores, hospitals, blood donors as per the user needs which will prevent major damages. The main advantage of this application is to reduce time and money. This application mainly depends upon the Geo-location values and Database of the MOU shops. Database of the shop will be updated for every 10 minutes to the server. This updated database will be used in the application. When a particular store is selected, route-map to that particular store will be displayed.

**Key Words:** Memorandum of understanding, Geo-locations, Ground work

## 1. INTRODUCTION

Day to day life activity we gave more importance for shopping, by taking this as an advantage so many online website are hosted in network for the shopping but so many peoples are preferring traditional shopping. Why because, they may have fear about security on online. Coming to online shopping in most of the locations they are unable to provide their services efficiently, we have to wait for the booking product delivery, and some of the situation we have to pay the shipping charges also. This makes the customer has extra burden. There is no guarantee that the delivery product properly works, if it is not working at the delivery time we have consult the service provider of the particular product. These all things make some difficulties to the customer. Instead of this buying the product in near location is better. So we are concentrate on the traditional shopping problems. General problems on traditional shopping are lack of knowledge on the store location and availability of product in particular store. So in our Ground Work for a product in nearby location project we try to overcome some of these problems by providing information about the user needed products, and it's availability in nearest store and

also we gave the route map to the store from customer near location.

### 1.1 Related Word

There are also some applications like "places" in Google maps by which we can know the nearest store, hotels, reservation centers to the present location and also shows the route map for that nearest store. But it is not possible to show whether the products are available or not in the nearest stores. Whereas on using this application we lost our valuable time and money in our day-to-day life. This is the main drawback of this related work. The main disadvantage of this existed system is to waste of time and expenses. And also we didn't know whether the product is available or not in the store.

### 1.2 Proposed Work

Now a day's every individual has well knowledge about mobile and web applications. If an application is developed to search a product in nearby Geo location it will be easy for a user to get that products and it's quantity with in less time-span. If the application is a mobile application we can get the Geo-locations values of the current location by using GPS (Global Positioning System).if the application is web based application we can get the Geo-locations values of the current location by using Geocoding. Geocoding is the process of finding associated geographic coordinates (often expressed as latitude and longitude) from other geographic data, such as street addresses, or ZIP codes (postal codes).With geographic coordinates of both the address(which user enters) and the nearest store obtained, the specific Route-map can be achieved along with the distance. This application is applicable for various fields, like homely goods stores, medical stores, hospitals, blood donors as per the user needs which will prevent major damages.

The main advantage of this proposed system is to reduce time and expenses. We can also get exact route to the store where the product is available. Quantity of the product available in the store can also be obtained. In order to achieve this we use php and My-Sql. But it does not provide the results very fast and also it is difficult to maintain the database of all the stores in My-Sql. Because every shop maintains its own database. In order to overcome above drawbacks we shifted to Mongo DB, as it is a No-Sql database. To get quick results. We shifted to Perl language for easy connection to DB. We are design 5 modules for this

application. They are shopkeeper, registration, authentication, searching, geo-coder

### 1.3 PERL

Perl means Practical Extraction and Report Language, it is an one of the open source programming language. This is invented by Larry wall. It is use to use but sometimes difficult to learn. In perl only 3 data types. They are Strings, arrays and hashes. In strings we declared by \$, in arrays we declared by @ and count encoded with {}, [], (). Then finally hashes has declared with % it has in the form of key and value. In perl language some modules are already developed by some other persons. Those modules are directly call your program by use command.

Example for Strings, array, hashes like this

```
My $perl="username"; #declaration of string
```

Username is value of the string name->perl.

```
My @a=[1,2,3,4,"string",5]; #declaration of array
```

a is the name of the array which contains attributes 1,2,3,4,"string",5 it stores different types of data type values in single array.

```
My %b="mani"; #declaration of hashes
```

b is the name of the hash which contains value is "mani".

Example for function like this

```
Sub function_name
```

```
{
```

```
Declaration of code;
```

```
Redirect_to->(/rootname,info=>results)
```

```
}
```

### 1.4 MONGODB

MongoDB is a cross-stage, archive arranged database that gives, high execution, high accessibility. It is a No-Sql database. Main features of this database is Ad hoc queries, Indexing, Replication, Load balancing, File storage, Aggregations. Data stored in database in form of documents.

Connecting MongoDB by using

```
My $conn= MongoDB::Connection->new;
```

Show all collections of present database by using this command

```
>Show collections;
```

By inserting data into collections it will be defiantly generate table itself

```
>db.Tablename.insert ( id: 123,
```

```
    Name:{fname:"mani",
```

```
    Lname:"kanta"},
```

```
    Phone:123456789
```

```
);
```

Drop collection simply like

```
>db.tablename.drop();
```

It has used directly drop the total collection

Update collection by using like

```
>db.tablename.update({'id:2'}{$set:{id:3,name:'kanta'}});
```

It has used update id:2 value has changed to id:3 and name:'kanta'.

## 2. MODULE DESCRIPTION

In this session we are going to gave a complete information about the different which we are using in our application. This contains five modules, they are 1. Shopkeeper module 2.Registration module 3.Authentication module 4.Searching module and 5.Geo coding module

### 2.1 SHOPKEEPER MODULE

Database of the stores is the backbone of this application. To know whether the product is available or not in the store it is compulsory for every store to maintain database. First we must approach the shopkeepers and get permissions on their local database. After obtaining the permission of the database of those particular stores it is stored in the server. The server is built in such a way that the local database of the shop is updated automatically to the server for every 10 or 15 minutes. The attributes of the store database on which this application mainly focus are store name, product name, product quantity, geo locations, and product code.

### 2.2 REGISTER MODULE

Every user those who wants to use this application must first registers their details in the application. This module mainly focuses on security. If any user uses this application for first time he/she wants to register with the details like First Name, Last Name, Username, Password, E-mail, phone number. Those details with which the user register are stored in the 'Users' collection. If the registered user uses this application once again he/she can directly login into the application by using username and password. We can also add confirmation message or mail to the email or phone number entered during registration process.

### 2.3 AUTHENTICATION

When you need to verify that a client is who he claims to be, you for the most part approach here for a username and a password. When you have both, you can check them against your database of username/password sets. In the event that they match, the client has passed the Authentication stage. From here on wards if you keep the session open all you have to do is to remember the username.

#### 2.3.1 AUTHORIZATION

You may need to permit client to have entry to some asset, yet confine her from getting to an alternate asset, which thus is open just for client bar. The methodology of checking access rights is called Authorization. For Authorization all you need is a validated username or some other property which you can commission against. Case in point, you can approve against IP number, permitting just your neighborhood clients to utilize some administration. At the same time be cautioned that IP numbers or session\_ids might be caricature (fashioned), and that is the reason you ought not do Authorization without Authentication. At the point when your confirmation handler returns OK, it means that user has correctly authenticated and now \$c->connection->user will have the username set for subsequent requests.

### 2.4 SEARCH MODULE

Searching, utilizing a PC to discover a thing with specified properties (e.g. specified content) among an accumulation of things utilizing a search algorithm a web search engine is a software system that is intended to search for data on the World Wide Web. The query items are for the most part displayed in a line of outcomes regularly alluded to as search engine results pages (SERPs)). The data may be an authority in website pages, pictures, data and different sorts of documents. Some web search tools contain mine information accessible in databases or open registries. Not at all like web indexes, which are kept up just by human editors, have internet searchers likewise administered ongoing data by running a calculation on a web crawler. Search based applications (SBA) are software provisions in which a web crawler stage is utilized as the center framework for data get to and reporting. SBAs use semantic advances to total, standardize and characterize unstructured, semi-organized or organized substance crosswise over

various vaults, and utilize characteristic dialect innovations for getting to the totaled data.

### 2.5 GEO CODING MODULE

Geocoding is the procedure of discovering particular geographic directions (regularly communicated as scope and longitude) from other geographic information, for example, road addresses, or ZIP codes (postal codes). With geographic directions the characteristics might be mapped and entered into Geographic Information Systems, or the directions could be installed into media, for example, computerized photos through geo tagging. A geo coder is a bit of programming or a (web) benefit that aide in this procedure.

A basic technique for geocoding is location insertion. This system makes utilization of information from a road geographic data framework where the road system is as of now mapped inside the geographic direction space. Every road portion is ascribed with location ranges (e.g. house numbers starting with one portion then onto the next). Geocoding takes a location, matches it to a road and particular fragment, (for example, a square, in towns that utilize the "piece" assembly). Geocoding then interjects the position of the location, inside the reach along the section.

### 3. DATABASE STRUCTURE

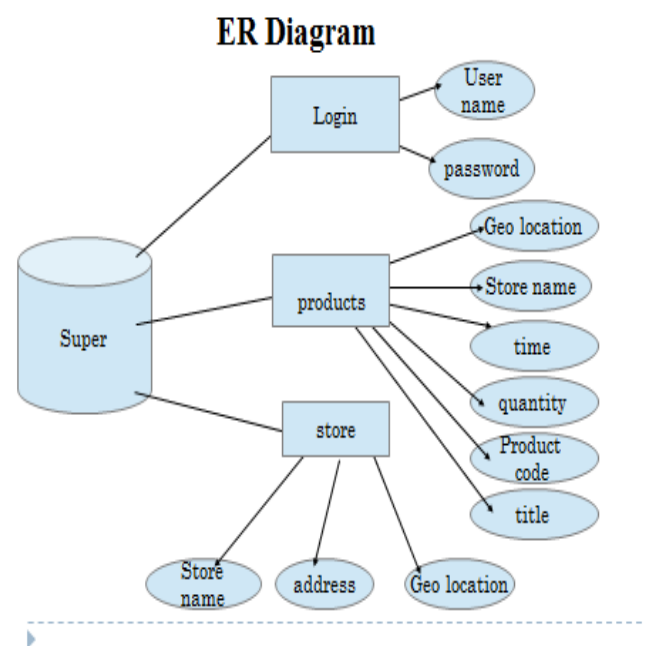


Fig: 3.1 database structure

This is the complete database structure we are used in our application. In this **Super** is the main database and it contains three collections login, products, store. Each has different its own entities.

#### 4. DATAFLOW DIAGRAM

Flow description above fig:4.1 is first start from the home page. It asks user login details. If the user details is already existed his/her directly redirect to search pages if the details correct otherwise it goes to login page and display an authenticated error. If the user does not exist he has to register by using registration page.

For existed and correct authenticated user have rights to search for the product in search page. It asks the details about the product name and location of the user if it is a GPRS supported device it automatically retrieves the location of the user after user clicks the search button it displays top 10 nearest item located shops with quantity of that product. In this he has a option to choose any one of the 10 results. Suppose any one of the list it gives the GEO-graphic location and path from present location of user.

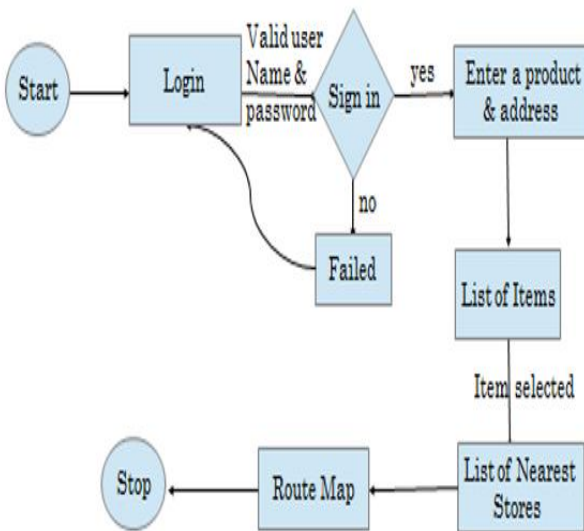


Fig: 4.1 dataflow diagram

#### 5. RESULT

To show the result we take a small example .we are searching a product name "Clink shampoo" from user location then it will shows the nearest shop address with route map for that product like this image.



Store Name	Quantity	Distance
More11	52	84.4263546440632
More34	86	66.2755748574979
More38	98	72.0928022192212
More15	80	59.3980978691574
More45	36	75.9303032133278
More48	44	66.6295067803332
More37	17	65.0636739318064
More44	33	53.3801291313312
More2	83	38.5959590001268
More5	11	69.4600926562437

Fig:5.1 list of top 10 nearest shops

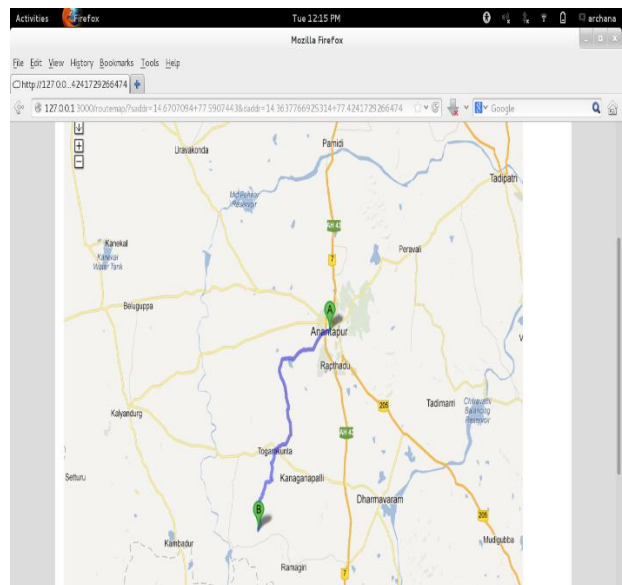


Fig: 5.2 route map for selected shop

This is the final result of this application.

#### 3. CONCLUSIONS

This is one of the best applications to find the user required items in nearest location. We can overcome the drawbacks of existing system like time and risk in searching for the product, expenses involved in the vehicles. The main advantage of the proposed system is that we can not only know the product availability in the store but also the available quantity of that product and also the route-map for all

the stores wherever the product is available along with distance. This application feels the user very comfort to the user.

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