RealTimeLocator.io

Github Link : https://github.com/LazyHooks/RealTimeLocator.io

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Introduction & Problem Identification :

In the current era of technology, online purchases are becoming extremely common. However this has left out parts of the retail supply chain. Local shopkeepers are missing out on their sales because many of them are unfamiliar with selling goods online or dont have the capital to set up such a business. The second reason being that when a person wants to buy something, they have no guarantee that the required item is available in said shops. Also in this day and age , it is very important for someone to know how a product is performing in the market and what their demand is.

Objective:

The objective of this software is the following :

- ➢ Keep the current inventories of these shops up to date in a database in real time for customers to search availability of products on.
- ➢ Show how the current product is doing on the market, with trend graphs, as well as show products that are trending or estimated to be doing well in the foreseeable future to inform shop owners of new products they should start stocking up on.

Additional objectives:

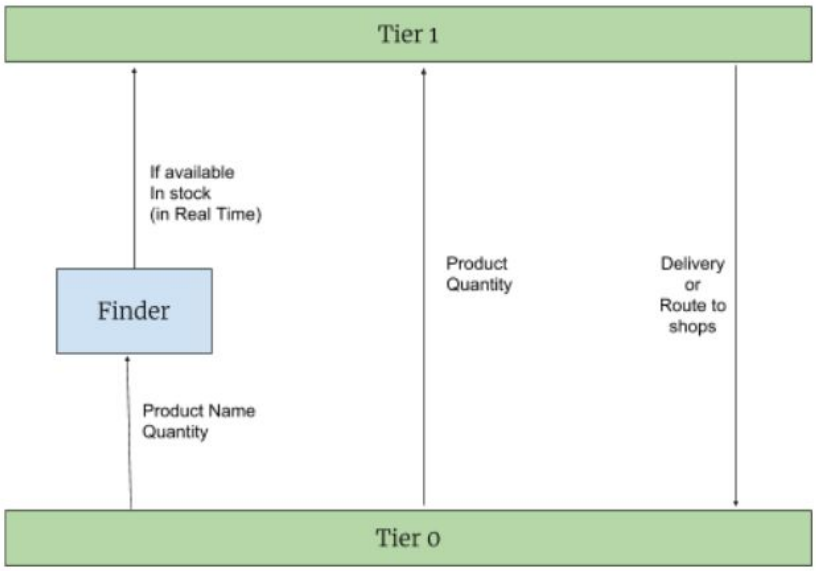
- ❑ Implement a tally system so shop owners don't have to feed data to the databases separately, the tally program they use to keep track of sales can automatically synchronize with the database.
- ❑ Have additional options so that shopkeepers can add their delivery services (managed by them) in the application for better customer attraction.
- ❑ Be versatile enough to be compatible with any tier of the business ladder.
- ❑ Have filters or APIs that detect when something illegal as per guidelines is uploaded as a product or any content not safe for work is uploaded as pictures or in description of products.

Technical Specifications :

APIs used: Google Maps, GooglePlaces, Keras, Paralleldots.
Frameworks : Angular5, Ionic3.
Languages : TypeScript, python.
All dependencies to be installed with npm install.

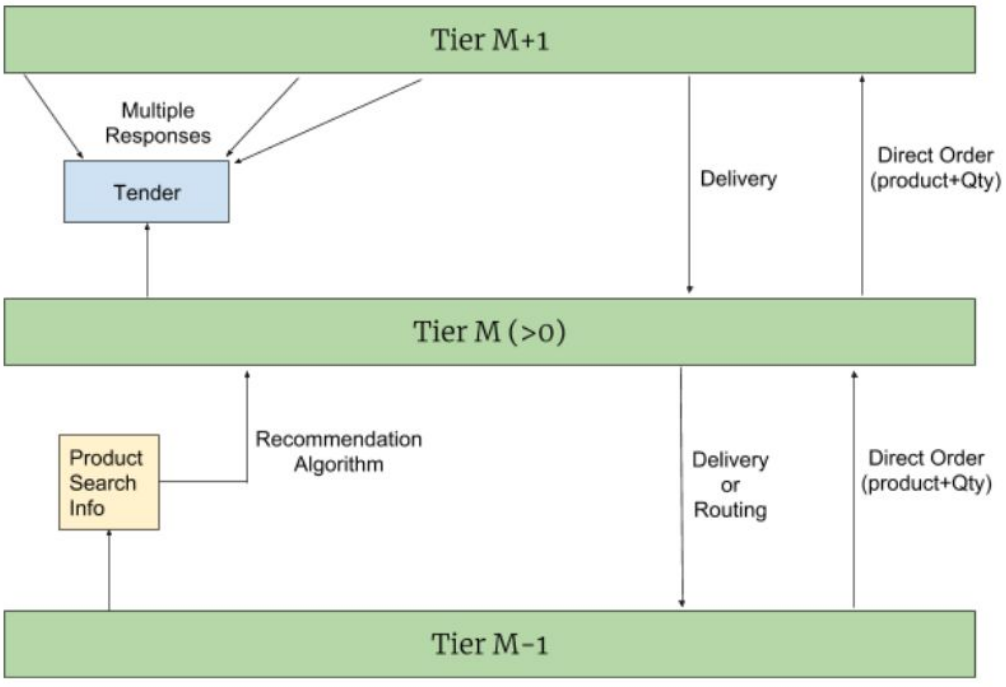
For Consumers / Users:

The User can search for the required item by Name and specify the quantity, the app then returns the results of where the item is available in desired quantity (in stock) at that exact moment. The user now has a choice of using the inbuilt route directions to pick up the order himself or get it delivered to his location.



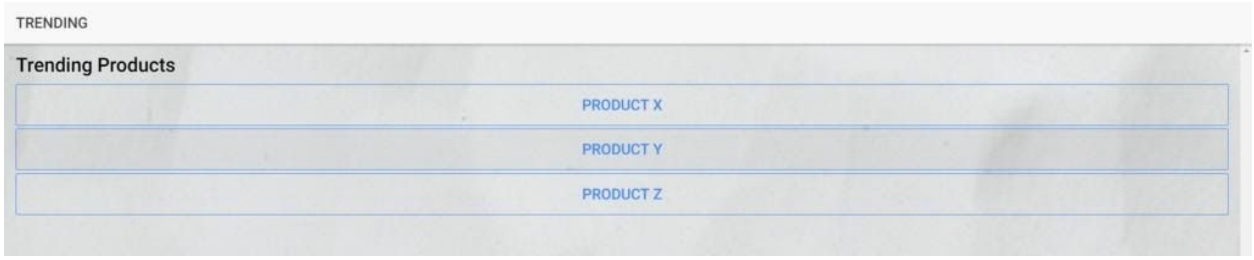
For any other tier other than Tier 0:

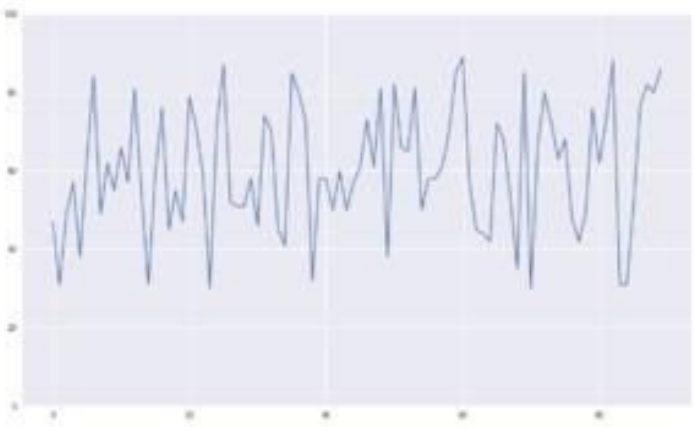
For users above level 0, The user can restock / buy from the Shops in the Tiers above him via the following ways:
He can either agree to the listed price and place an order with the desired quantity or
He can Issue a tender specifying the products and quantities respectively and let Users of Tier (M+1) send in their respective quotes.



The recommendation system:

For Users of any Tier other than Tier 0, there exists a recommendation algorithm which uses past usage data from all users and recommends shopkeepers to keep certain products to increase their sales. Shopkeepers can also visit the trending area to see which products are trending and accordingly keep those in their inventory. Any user also can check the popularity graph or “trend” of a certain product of the past 90 days via the statistics section.





Graph of an item where no trend can be deduced

Graph of a Bestseller Item

Graph of a currently "Trending" item.

(these are the ones that are recommended)

Final Thoughts :

If well implemented , this can integrate normal shop-owner personal records of inventory with a database and find the same for customers who want to know where an item is available. It can also help sellers find what to stock up on and what new products to sell. This would result in the shopkeepers , small and big, wholesale and retail to get information across to customers in an easier fashion.