RETAIL STORE STOCK INVENTORY ANALYTICS

TEAM DETAILS

TEAM ID	PNT2022TMID27847
DOMAIN NAME	RETAIL AND E-COMMERCE
PROJECT NAME	RETAIL STORE STOCK INVENTORY ANALYTICS
TEAM MEMBERS	SHRIAKILANDESWARI R DHARSHINI K HARIPRIYA G KARPAGAVALLI S

PROBLEM STATEMENT

Inventories are necessary for sales, which generate profits and poor management of inventories results in excess inventory, resulting in a lower return on capital invested, affecting the cash conversion cycle. The approximate cost to hold inventory is very high, so maintaining excessive levels of inventories can ruin the business, as they have to reduce prices and absorb losses, and if missing could reduce sales, now maintain inventory levels according to sales forecasts. Good planning and sales forecast before setting optimal inventory levels, appropriate inventory management requires close coordination between the areas of sales, purchasing and finance. The problem faced by the retailers is they do not have any systematic system to record and keep their inventory data. It is difficult for the owner to record the inventory data quickly and safely because they only keep it in the logbook and not properly organized.

PROPOSED SOLUTION

- To develop a software that will be able to maintain stocks and purchase, forecast the sales, generate reports in less time.
- It is helpful for retailers because the status of the stock, purchase, demand products can be accessed at any instant and decisions can be taken easily in the mobile.
- The retailers can manage and forecast their business easily even without experience and take decisions quickly.

TECHNICAL ARCHITECTURE

WORKING DEMO

https://inventorymanagementsystems.herokuapp.com/
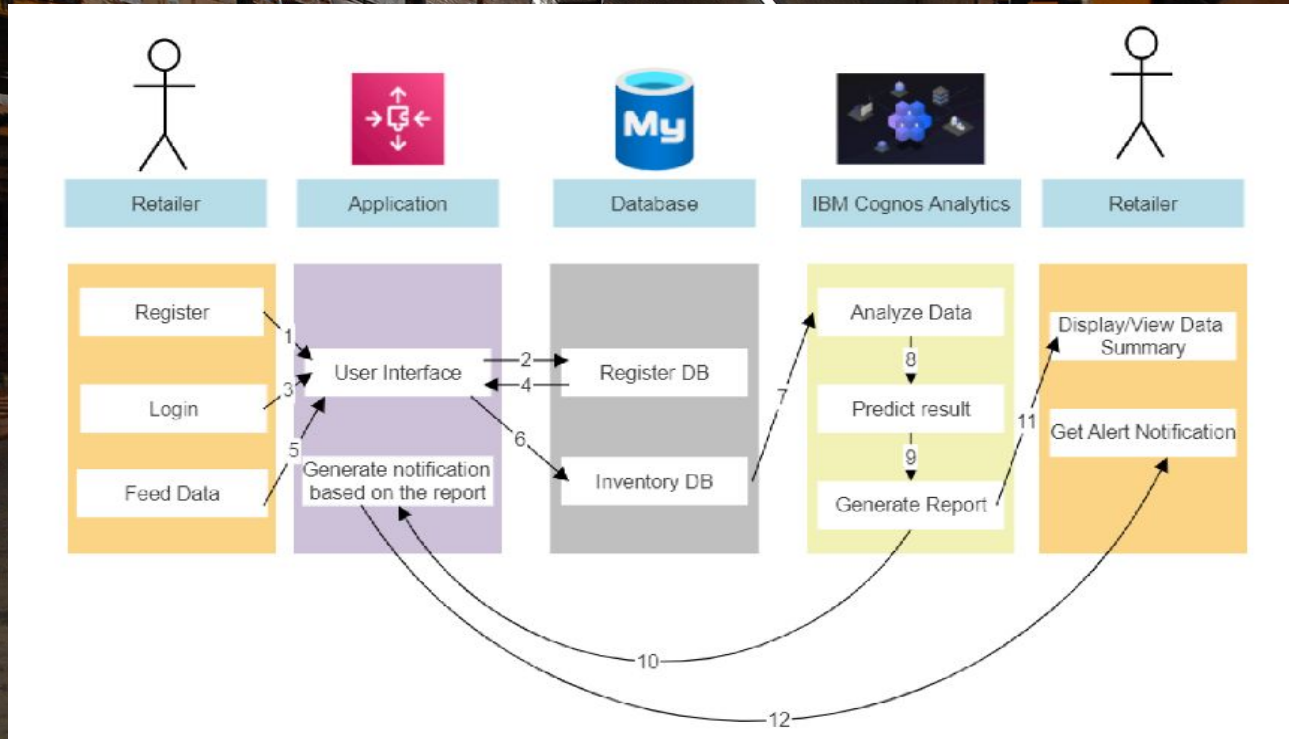
PERFORMANCE METRICS

The retailer stock store management system is used to manage the products and the purchase deliverables and thus make analysis through it. The response time is also quick and makes the task easier for the retailer to manage the inventory.

Testing accuracy = 100

Validation accuracy = 100

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Response time percentiles (approximated)
Type      Name                                           50%    66%    75%    80%    90%    95%    98%    99% 99.9% 99.99
%   100% # reqs
--------|-------------------------------------------|------|------|------|------|------|------|------|------|------|-----
-|------|------
GET      /                                               11     11     12     12     12     12     12     12     12      1
```

FUTURE SCOPE/SCALABILITY

- As of now the application has been developed only for the retailers to manage stock, add purchase and make orders.

- In addition to it, the customers should also be provided with an interface where they can make their orders without even making a phone call and do payments after purchase from their comfort zones.

- At the same time after the customer places the order, the retailer is notified and the customer is validated to provide the products.

- Then, a mobile application can be implemented in future for the retailers so that the live stock details and data can be viewed to manage the stock report.

THANKS