

④ Stock Maintenance System

① Introduction :-

1.1 purpose:-

It is designed to track and manage inventory levels of goods in warehouses and retail locations. automate stock entry, track product movements, generate alerts for low stock levels,

1.2 Scope :-

System will handle complete inventory life cycle, from receiving goods in the warehouse to updating stock after sale or consumption. It will ensure that stocks are maintained.

1.3 Functions :-

Track inventory :-

monitor goods entry and leaving the warehouse.

Stock levels :-

update stock in real time.

Warning alert :-

trigger purchase order when stocks are low.

② General description:-

Users :-

- Wharehouse staff
enter shift info
- Managers
manage shift levels, reader goods and generate report.

Funtions :-

- Stock entry and exit
log goods entry and leaving the wharehouse, including details
details such as quantity, product IP etc ..
- Stock alert :-
~~Notify managers when stocks are low~~
- Stock reports :-
generate stock movement report.

③ Functional requirements:-

Stock Tracking :-

System will track incoming and outgoing goods and update stocks in real time.

Low stock Alerts :-

Notifications will be triggered when stocks fall below a pre-defined threshold.

Automatic purchase orders :-

Automatically generate purchase order & supplier when stock is low

④ Interface requirement :-

User interface :-

Will have user friendly dashboard for ~~short term~~ warehouse staff to log in info.

Admin interface

- will have access to many monitoring tools, graphical and detailed stock reports

(8) Performance Requirements :-

- Response Time :-

Stock queries and generation of result must be within 5 seconds.

- Scalability :-

must support up to 10000+ users

(6) Design constraints :-

Hardware integration :-

- System must integrate with basic 2 DFP scanners for tracking stock entry and exit.

Database :-

- use of robust relational database like MySQL to store stock data.

⑦ Non Functional Attributes:-

- Data Integrity :-

Stock data must be constantly updated to prevent discrepancies between physical and system stock.

- Security :-

ensure only authorized personnel can modify data.

8 Schedule & Budget

Timeline :-

- Project will be completed within 4 months.

Budget :-

- A budget of \$ 40,000 is allocated covering software development, integration with scanners and deployment.