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CISC 592
Software Architecture & Microservices

INVENTORY MANAGEMENT SYSTEM

Overview:

I am developing an Inventory Management System. This application will be free and opensource which makes it available to everyone and more features in futures. Unlike other IMS where you have to buy a standalone computer and tag scanner bringing initially cost higher, this work with any phone with camera and internet. Just with the phone one will be able to add an item to inventory with picture of the item and barcode. It will generate e-receipt which are easier to manage and more ecofriendly. It provides business insight using basic algorithm by estimating what to stock as per month and last sales. It will also provide information about the item which are sitting more than 90 days, so those can be sold in sale. Each customer is identified using his phone number (unique ID). Customer/shopkeeper's can be rated, and the rating can be shared with different business. The application will use local storage as it is cheap. The application can also generate Tax form by tracking previous sales and profit.

Product Functions:

1. Free/Opensource
2. Platform independent
3. No additional hardware required – just a mobile phone is enough.
4. E-receipt (environmentally friendly)
5. Business Insight
6. Customer Rating / Shopkeeper rating
7. local storage(free)
8. Generate Tax Form (future goals)

Operating Environment:

1. Web App (Browser) – Highest Priority
2. Android – Medium Priority
3. IOS - Low Priority

System Features:

1. Java
2. Spring MVC
3. Some camera API to scan information
4. Postgres Database
5. Various Machine learning algorithm for Business Insight

Quality Requirements:

1. From the very beginning of the project my main focus will be on algorithm or program run time. I will ensure the code meet certain performance benchmark.
2. UI should be simple and neat – with basic functionally.
3. Validate Intelligent statistics to maximize profit.