

POC for Inventory Management System

Inventory changes constantly. Throughout each day, sales, returns, new receipts – even damage and theft – affect inventory levels. While daunting, effective inventory management and inventory control are the most important jobs in a successful retail or wholesale business.

In the given context, management of product stocks gets harder with the increasing number of product quantities. A web based inventory management system can lessen the hassle and make life easier.

Let me assume, currently the cosmetic store is managing their product stock manually, may be written down in some sort of papers, which has the following cons:

- Tough to data entry (writing each buy and sell info)
- Time Consuming
- Manual Calculation have chances to raise error
- Real time stock determination is not possible
- Managing more than one inventory is very difficult etc.

Against these cons we would like to propose a web based Inventory management system, which will:

- Allow for easier data entry
- Keep track of vendors/suppliers
- Real time product stock can be known, which helps in decision making
- Error free management (if right data given)
- Managing multiple inventory is as simple as imagined

Requirements of the new system

- Provide a web based software solution
- Provide necessary training
- Remove calculation errors
- Help managing multiple inventory
- Provide real time output of current stock
- Help in decision making
- Help in producing purchase orders from vendors
- Help in keep tracking vendors
- Accessible over web

Scope

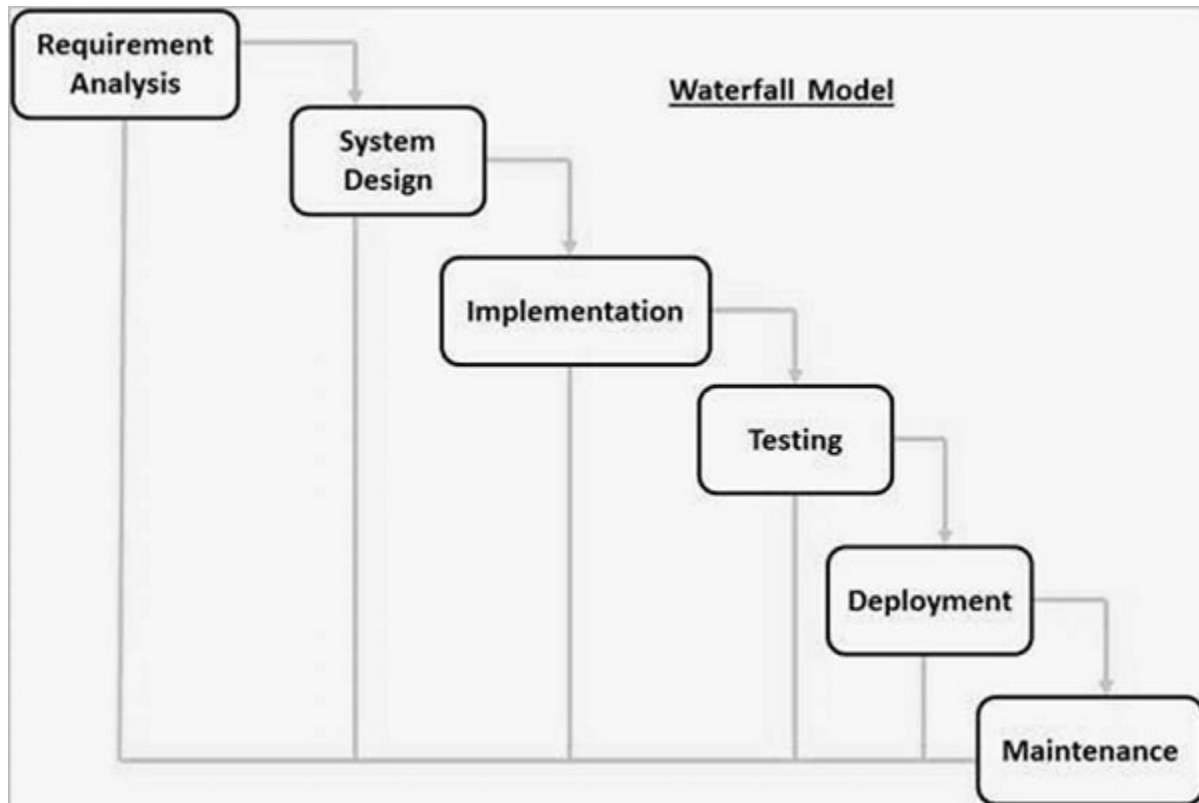
- Managerial Decision Based on Detail Report of stock
- Database backup
- Statistical data and visualization etc

Risk

- Client may change their mind
- Budget can go into creep etc

Project Design

As the requirements are straight and clear, and I am considering no change(requirement wise), I will follow the waterfall model to build the project.



Technology and Server

Server: Private servers to host the web server and database(MySQL).

Server Specification: CentOS, 4 Core, 8GB RAM, Nginx as web server

Web App Technology: Python (Django latest), HTML, CSS, Javascript, Django Admin

Security

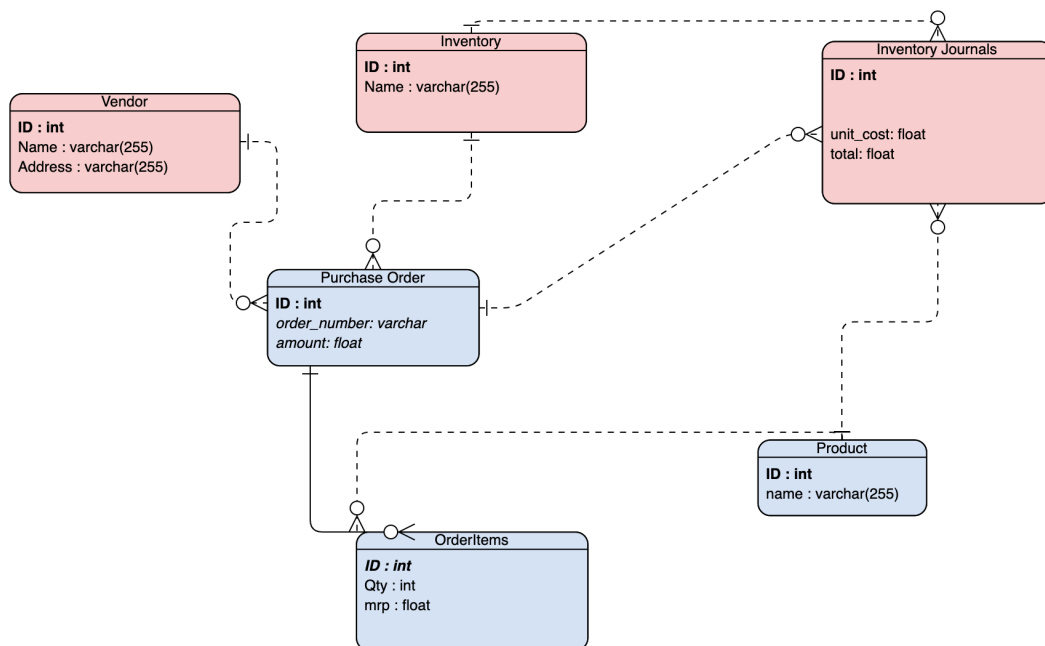
- User Authorization and Authentication
- Firewall

The System

- Product Management

- Add/Edit/View Product Information
- Vendor Management
 - Add/Edit/View Vendor
- Purchase Order Management
 - Add/Edit/View Purchase orders and order items
- Inventory Management
 - Add/Edit/View Inventories and maintain inventory journals

A Conceptual ERD for the project



A Brief Flow Chart

