# Inventory Management App

## Core Workflow:

1. Product comes either from a manufacturer or is produced locally.
2. Packs of barcode stickers are created. Each pack has a unique SKU# (Stock Keeping Unit Number) where SKU# and product type has 1-1 mapping. For e.g.

|  |  |  |
| --- | --- | --- |
| Product Type and Count | SKU# | Barcode count and SKU# |
| iPhone – 10 items | AA01 \* | 10 barcodes – AA01 |
| iPod – 50 items | AA02 | 50 barcodes – AA02 |
| iPad – 100 items | AA03 | 100 barcodes –AA03 |

\*This is just an e.g. idea is to use multiple parameters for generating SKU#. In the above example manufacturer code + product Code is used to generate the SKU#.

1. A CSV file is created which should have a list of all product type, quantity, SKU# and other product information.

* Steps 1-3 are external to the inventory management app

1. **User logs in** to the app or enters as a guest. There should also be a registration option on the same page.
2. **Product information** is uploaded in the app either by using the file in step 3 or by manually entering each product type with the feature to scan the barcode for SKU#. – Also see the notes below for an alternative.
3. User adds/updates the **inventory** in the app. This can be done in either of the following ways:
   1. Manually by adding/updating the inventory using the product information already in the app.
   2. By scanning the product barcode at the time of stocking.
4. User adds the **sales** by one of the following methods:
   1. By selecting an item from the inventory and entering the quantity.
   2. By scanning the product barcode and entering the quantity.
5. **Returns**: user scans the return or manually updates the inventory to sync between our app and aggregator’s software.
6. **Reports**: provide various kinds of reports which will help the user in different ways.
7. At any time, there should be an option to communicate via email (or other possible channels). This will be used for sending reports, sending enquiries to/from manufacturer or aggregator.

### Value and Proposals:

1. The above core workflow covers the following aspects:
   1. User profile
   2. Product information tied to the user profile.
   3. Inventory tracking
   4. Sales tracking
   5. Returns
   6. Reports with communication options
2. Our software will be cloud based. This will allow the user to manage inventory from multiple locations. Challenge will be to implement a real time app which can allow the user to have 1 profile for more than 1 location. For e.g. my updates to inventory at Noida branch will be reflected to the users using the same profile to manage inventory at Delhi branch.
3. VALUE: After a week based on our customer’s sales we project and propose a purchase order. We can take into consideration many variables like date, season, festivals, and normal time series to come up with this projection. We can play a lot with this data – time of promotion, min stock required, black sells more than blue etc. Also, a good inventory management and bar coding software is required in the market.
4. We can also give them data like on what days are their sales better
5. Sync our software to the aggregator so that the internal inventory always matches the one online

### Notes:

We can look into adding the SKU# generation within the app itself. User enters the product information in the app and the app generates the SKU# based on that info. This SKU# will then be used on the barcodes. If we do this we can reduce some pain in steps 3 and 5.

* This will allow/force the user to directly/first enter product info in the app rather than maintaining a CSV file.
* Since SKU# is now generated in the app, we can avoid any potential issues with SKU# by tracking them.