

## Criterion A

### Defining the scenario:

Client Name: Mr Pawan Saraf

Company Name: Cauvery Industrials

My client Pawan Saraf runs one of the biggest industrial tools shop cum retail store with a staff of 10 to 15 employees in Karnataka. He sells hardware products such as screws, bolts, etc to individual customers and companies(B2B and B2C). Due to his huge annual sales and daily transactions, the shop stores several sacks of the tools in a warehouse. The warehouse contains manual records in the form of stock registers, of all the stock that goes in and out of the warehouse. On a daily basis after all the point of sale transactions in the shop, one of the employees updates the physical record in the warehouse. This is often a tedious process which is also prone to errors caused due to wrong data entries. The manual data entry does not simultaneously reflect the sales made in the store and hence can lead to record discrepancy in the stock. Sometimes, the entries could be lost or deliberately stolen causing a huge setback to my client's business. The customers of the shop often need to contact my client via phone call to place orders if the shop is closed. <sup>1</sup>Therefore, after initial discussion, follow-up meetings and on-site visit to the store and warehouse, I intend to develop an app overcoming the aforementioned limitations of the current system. This app will provide an interface for the customers to place orders even when the store is closed. It will enable my client and other stakeholders to effectively manage the store and warehouse, point of sale transactions and stock updation. The client will also be notified when the stock has run out so that he can reorder when necessary.

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<sup>1</sup> Refer to Appendix 1 & 2

## Justification of Solution:

An app that allows users to place orders even when the shop is closed is the most efficient for my client who handles B2B and B2C transactions. This app will allow 24\*7 updation of stock making it easier for the admin to complete orders, encouraging more consumers to buy from my client due to more convenience and efficiency. My client will be able to cut costs because he wouldn't need to keep separate employees just to keep a record of the stock as all records will be stored in an online database.

The platform I will be using is Swift Data which is a database context that connects with SwiftUI, a programming language that I will use for coding the front end of the application. Swift Data and SwiftUI work together natively to make IOS apps which is suitable for my client since he has an iPhone. Another reason to use SwiftUI is because it allows easier navigation for apps along with efficient UI making the application more usable for all stakeholders.

An alternate solution would have been to create a website but after consulting with my client about this idea, he preferred the app since it is more convenient for users to order straightaway from their mobile phone rather than a website on a browser.

## Success Criteria:

- 1) Admin should be able to securely login with a unique user id and password
- 2) Admin should be able to add available products in stock along with quantity of supply
- 3) Admin should be able to remove products no longer available
- 4) Admin should be able to view orders placed by users and mark them as completed
- 5) Admin will receive notifications for restocking when supply is low
- 6) Admin should be notified about each new order
- 7) Users will be able to create accounts and login securely
- 8) Users will be able to place orders depending on stock availability

- 9) Users will be able to view product details such as name, price, etc.
- 10) Users and admin will be able to search through the products.
- 11) Users and admin will be able to track all their orders and view their order status.
- 12) Users and admin will be able to easily navigate through app with efficient UI and design

Word count: 497 words (excluding success criteria)