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Proposal: RECORDS MANAGEMENT SYSTEM.

1)

Below are the requirements I extracted. I presented the requirements to the Shopkeeper on 5th November 2020.

| USER REQUIREMENTS	SYSTEM REQUIREMENTS
1. Be able to itemize product with current cost using ranges to modify and input daily revenue	1. Be able to compute the inputs given using standard formulas
2. Be able to review previous record and even compare to the current month for improvement in sales.	2. Be able to generate monthly reports
3. Simple interface that is easy to learn	3. Be able to record daily profits and most sold product
4. Should run on her mobile phone	4. Alert her when the max credit is reached and alert her customers who are required to pay in the current month.
5. In future be able to view items in categories such as most selling products and maximize on that during the particular period to prevent overstocking	5. Be able to auto input the date
6. Be able to max out credit given to a customer in a month to Ksh 2000	

Table 1.1: Original User requirements.

Having presented the user requirements to the user the following were to be tweaked:

1. We went ahead to do away with most sold product on a daily since the main idea is a means of just putting into record the items and accounting for items within the shop.
2. The items should be clustered for example she said that she has different milk products with varying weight and prices.
3. Be able to identify an item either through a search filter or a drop-down menu to reduce the amount of time needed to account using the system.
4. The system should be able to take the quantity she puts in at the end of the day and give her the daily revenue when other deductions are set and that should go ahead to tally up to her monthly profits made with set deductions such as rent and other miscellaneous that have to be paid at the end of the month.
5. Since the shop is managed in shifts by two people the system should run on any mobile phone but only allow one user to make edits at a time.
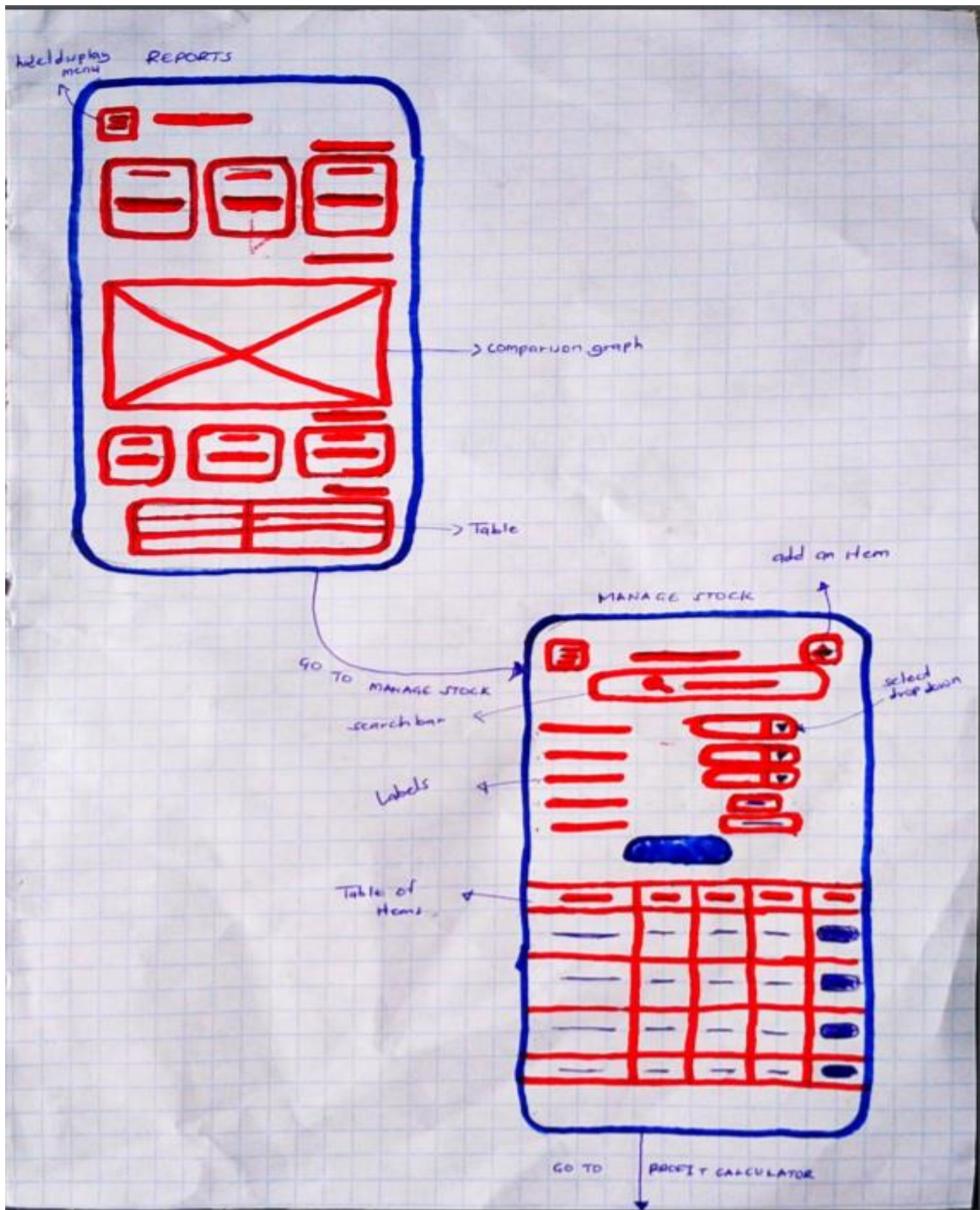
USER REQUIREMENTS	SYSTEM REQUIREMENTS
1. Should have a login page for security purposes	1. Be able to identify an item either through a search filter or a drop-down menu to reduce the amount of time needed to account using the system.
2. Simple interface that is easy to learn	2. Be able to get daily and monthly profits using the quantity and deductions set.
3. Should run on any mobile phone but allow only one user to make edits at a time.	3. Be able to generate monthly reports
4. Be able to itemize product in clusters with corresponding cost and weight	4. Be able to record daily profits and most sold product
5. Be able to review previous record and even compare to the current month for improvement in sales.	5. Alert her when the max credit is reached and alert her customers who are required to pay in the current month.
6. Be able to max out credit given to a customer in a month to Ksh 2000	6. Be able to auto input the date

Table 1.2: Revised User Requirements

2) Low Fidelity Prototype
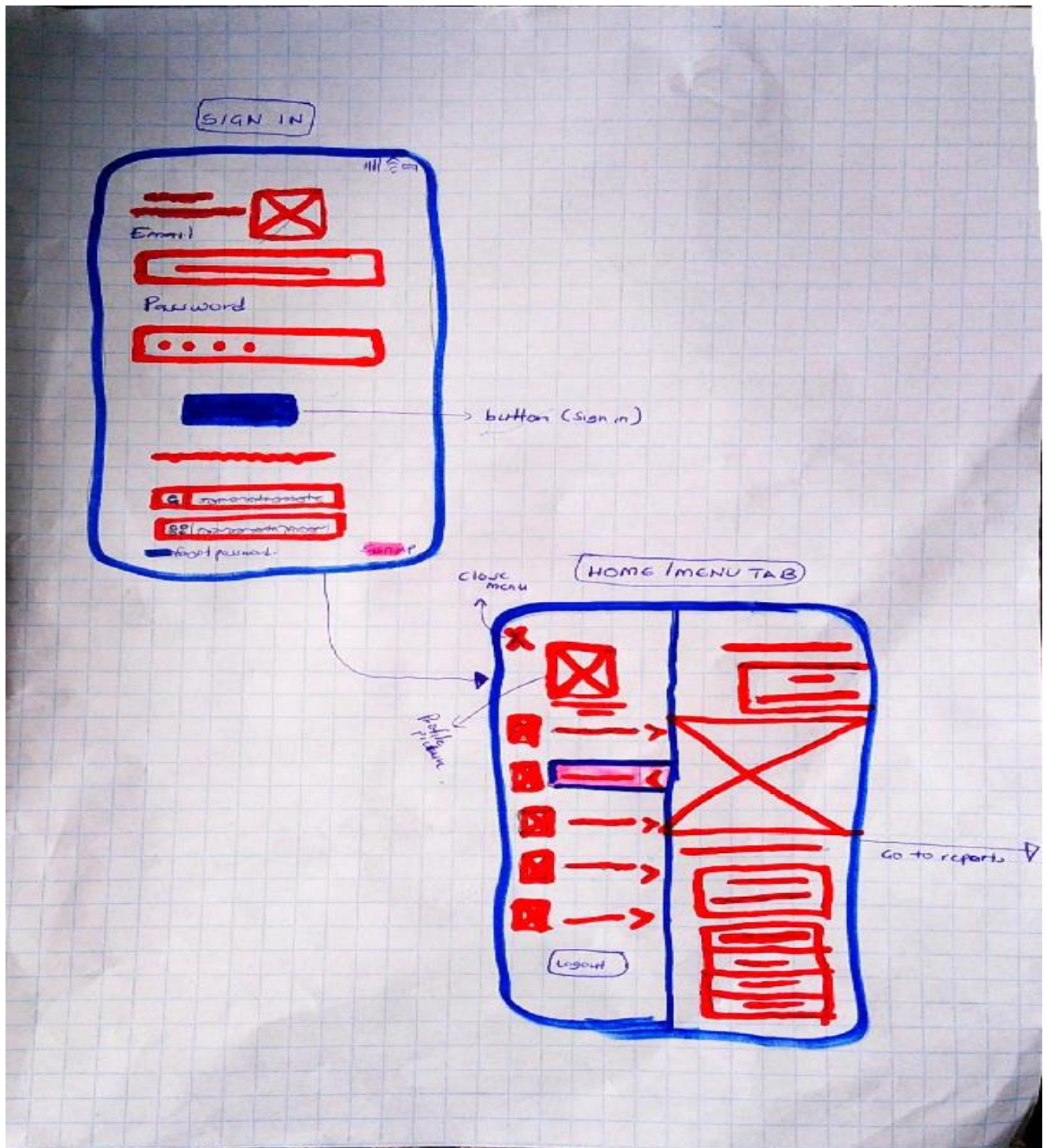
Screen 1 and 2: Log in(top) and Menu(bottom) screens respectively

Screen 3 and 4: Reports(top) and Stock management(bottom) screens respectively.

PROFIT CALCULATOR

11/16/20 — auto date time picker
→ select from an array
→ input field.

→ calculated result
→ sorting of results.

11/16/2020
→ Daily revenue result. based on item input.

TO DEBTORS

button

Default or highlighted

MANAGE DEBTORS

→ input field
11/16/20 — → calendar
→ order by drop down

30/10/20   21
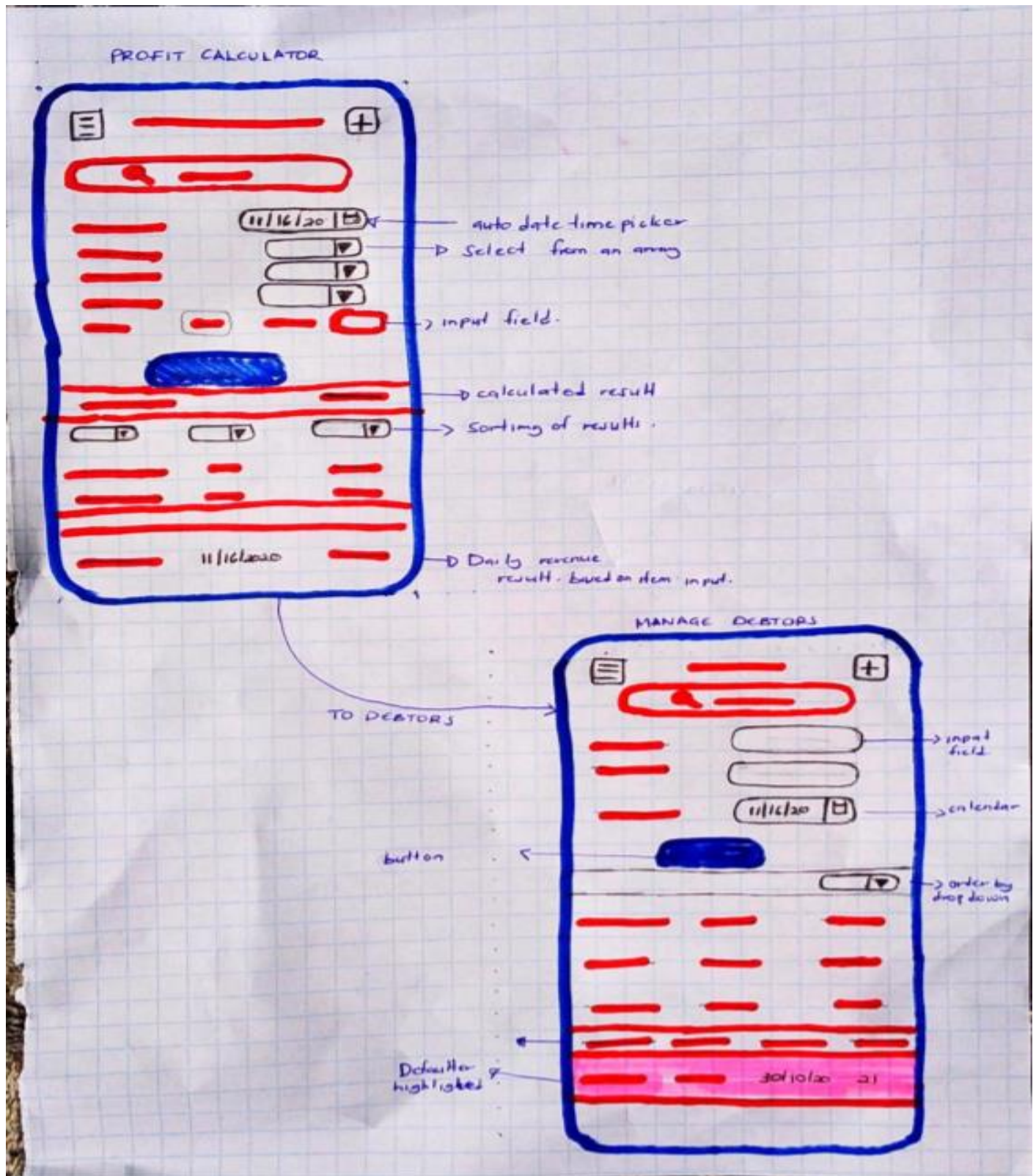
Screen 5 and 6: Profit Calculator (top) and Debtors Management(bottom) respectively.

Suggetions.

The following suggestions were made:

- ✓ Highlight the defaulter's section with red to be fully visible.
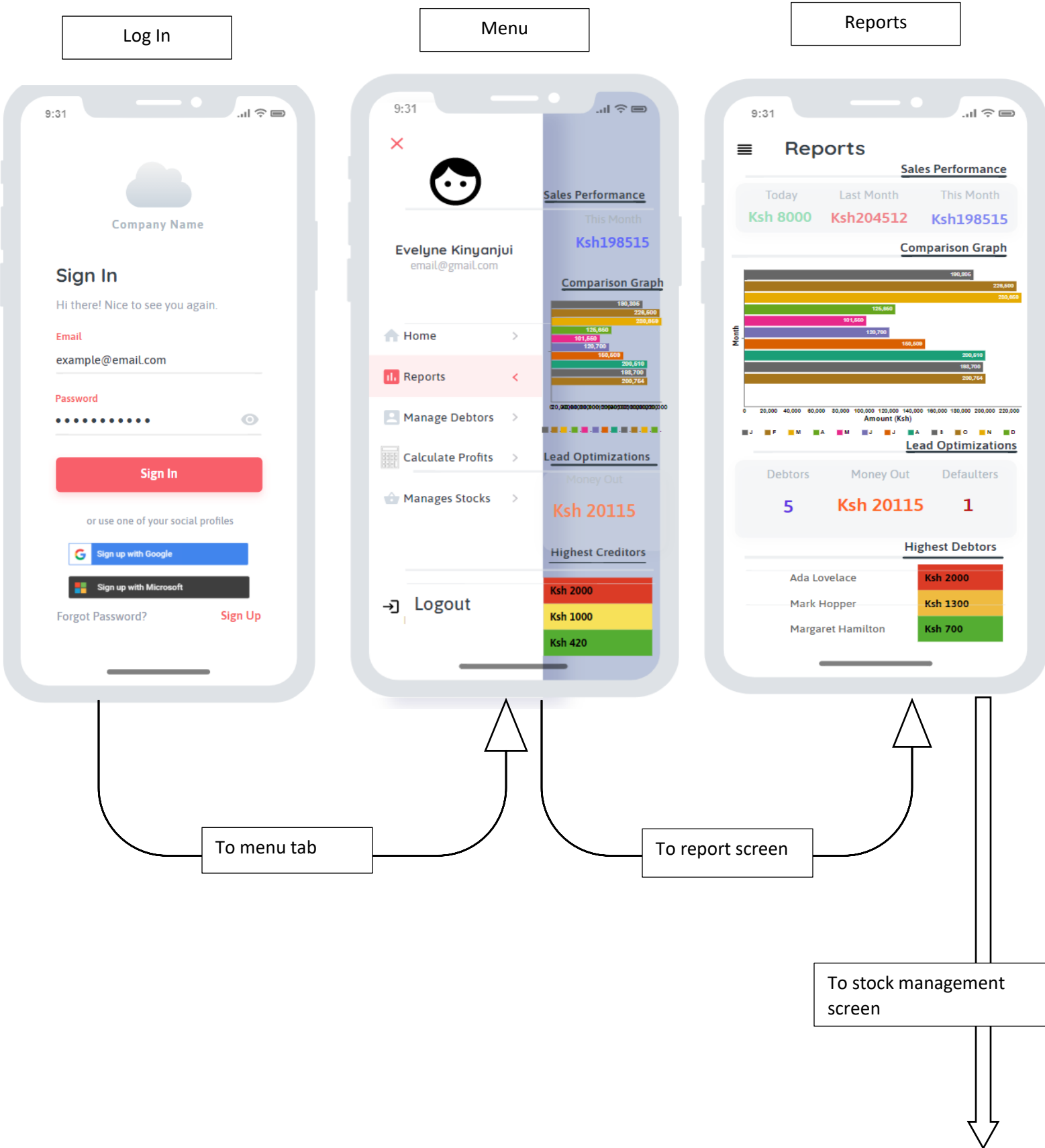- ✓ The defaulter section should show the due days exceeded without any payment.
- ✓ Allow editing of product selling prices and error made when updating the stock.
- ✓ Add a log out button at the bottom of the menu.

3)High Fidelity Prototype.

Log In

Menu

Reports

Company Name

Sign In

Hi there! Nice to see you again.

Email

example@email.com

Password

●●●●●●●●●●●● 👁

Sign In

or use one of your social profiles

G Sign up with Google

⊞ Sign up with Microsoft

Forgot Password?   Sign Up

✕

Evelyne Kinyanjui
email@gmail.com

🏠 Home   ›

📊 Reports   ‹

👤 Manage Debtors   ›

🧮 Calculate Profits   ›

🛒 Manages Stocks   ›

→] **Logout**

Sales Performance
This Month
Ksh198515

Comparison Graph

Lead Optimizations
Money Out
Ksh 20115

Highest Creditors
Ksh 2000
Ksh 1000
Ksh 420

☰ **Reports**

Sales Performance

Today	Last Month	This Month
Ksh 8000	Ksh204512	Ksh198515

Comparison Graph

Lead Optimizations

Debtors	Money Out	Defaulters
5	Ksh 20115	1

Highest Debtors

Ada Lovelace   Ksh 2000
Mark Hopper   Ksh 1300
Margaret Hamilton   Ksh 700

To menu tab

To report screen

To stock management screen

Stock Management

9:31

☰ Manage Stocks ✛

🔍 Search Item

Item	Select ▼
Brand	Select ▼
Weight/Volume	Select ▼
Quantity	0
Selling Price	Ksh 0

Update

Brand	Weight	QTY	Selling Price(Ksh)	Action
Daima Milk	500ml	48	50	Edit
Festive Bread	500gms	10	50	Edit
Rina oil	250ml	5	60	Edit
BlueBand	1kg	9	270	Edit
Toilex	10pack	60	20	Edit
Sunshine Soap	175g	25	40	Edit

Calculate Profits

9:31

☰ Calculate Profits ✛

🔍 Search Item

Date	11/16/2020 📅
Item	Select ▼
Brand	Select ▼
Weight/Volume	Select ▼
Qty left : 10	Qty sold: enter qty sold

Calculate

Amount Made		Ksh 450
ITEM ▼	QTY Sold ▼	Profit Made ▼
Daima Milk 500ml	20	Ksh 200
FestiveBread 500mgs	8	Ksh 160

Total Revenue	11/16/2020	Ksh 3000

Debtor's Management

9:31

☰ Manage Debtors ✛

🔍 Search Customers

Name	Placeholder
Amount	Placeholder
Due Date	11/16/2020 📅

Submit

Order By ▼

Ada Lovelace	Ksh 2000	11/16/2020
Howard, Carr	Ksh 1000	11/21/2020
Jacqueline, Barnes	Ksh 200	11/30/2020

Defaulter	Amount	Due Date	Days Past
Jane, Fowler	Ksh 150	10/16/2020	21

To Profit calculator

To Debtor Management

Evaluation.

The evaluation method adopted was a natural setting involving the user.

When evaluating the low fidelity prototype with the user, the user at first was unable to relate with screens three and four up until I clarified that this was the skeleton and I explained more on the design of the system. To make the design more meaningful to her while evaluating it, I went ahead labeling items that were important to make her understand what the sketches meant. Overall, the low fidelity prototype had her confused about whether that was the final design but I explained that this was the first stage of building a system to see whether what was agreed upon in the requirements fit.

In the high-fidelity program, the shopkeeper was very immersed in the prototype that she could easily identify what each screen was doing based on the heading given. Also, she echoed that the menu logos put to match the actions made her easily understand the function of every page. Even though that was the case, we identified that the phone screen as suggested earlier as a requirement was small for her to work around. It was agreed in future design for the system she would prefer running it on her tablet to make it easy for her to even see the graph better.
Within the manage stock tab, the table in the future was requested to have its view screen since due to the clustering of so many functions the sorting requirement could not be met.
In managing debtors, a colour scheme of red, amber, and green was used to provide olfactory feedback on the range of amounts owed by the debtor and the due date. A feature that was not requested but based on her previous loss of money from debtors, a defaulter's section was created. This made her very happy since several times she tends to forget to either record it down with so many to be carried out.

In the reports tab, we both noticed that the reports were not exhaustive but it covered information from all screens highlighting only the important one would need to view. In light of this, rectification and update were to be done in the future to have the screen present yesterday's profit and annual profit.

Overall, her body language while interacting with the prototype was happy. When finalizing the evaluation her final remark was "Some areas are tightly fitted due to the screen size but it is very simple to record "

Challenges faced.
During the design, I expounded the requirement and it took three sketches to finally get the most important requirements to fit. However, when applying the information to my high-fidelity prototype factors such as size, font was a major factor I overlooked on how to present in the final prototype.

This being my first time prototyping a high-fidelity prototype there was some learning to do understanding how to conceptualize the low fidelity into something meaningful and understandable to the user.

With a tight schedule and the main user not available, this resulted in holding the design until she was back to be able to discuss the low fidelity prototype before proceeding into developing the high-fidelity prototype.