

# OuRSpace

**An Online Rental Space Management System for small or family owned rental spaces.**

It is a conceptual project proposed to help owners maintain, manage, and automate the workflow when it comes to managing rental spaces without costing small and/or family owned business a fortune. It is fine-tuned to mainly focus on the needs of small and/or family owned businesses, having a design that most users can understand and operate without the need to have a dedicated IT crew, lessening their expenses, and the need to have a corporate-type system that cost a fortune but only needing a few features in it and is overly complicated to manage.

OuRSpace is my most recent proposed project aimed to help owners throughout their business careers managing their rental spaces.

## **My Role**

In this project, I was responsible for the idea for the project proposal, as well as the designing of the UI, and if the project was moved forward, I will also be a part of the team responsible for the implementation of its backbone, i.e. database and such. We are a team of 4, having distinct roles depending on our expertise, to be able to complete the paperwork of the proposed conceptual project. We only have a set of instructions as to how our workflow should be, but other than that, we were unsupervised when creating the project deliverables.

## **Project Summary**

OuRSpace is a proposed project aimed to help small and/or family owned rental space business to manage, maintain, and automate the workflow when it comes to managing a rental space business. It is aimed to be a cheaper alternative management system that caters mainly to small and/or family owned rental space business that is easier to use than corporate-type management systems that needs a dedicated IT department to run, costing small businesses to spend more but only needing a fraction of the features included for their businesses. I proposed this idea to the group as a project because we used to rent a space for our business on a family owned rental space, and throughout the time we were there, I observed that they use pen and paper for most transactions, and manually inputting their records on an excel sheet, which in my opinion takes a lot of time, and when problems arises that needs the owners to backlog, some data might already be lost or inconsistencies may rise. Thus with this, managing a rental space business can become easier, and data queries to be faster.

## **Problem Statement**

I have observed, over the past time when we used to rent space for business that most small rental space owners tend to use pen and paper when doing records of their business transactions, then manually entering each entry to an excel sheet. There are couple of problems that may come up when using such methods, such as data loss, data inaccuracy and inconsistency, and data input and query takes too much time and effort to complete. Through personal observation, the lack of modernization in small business, not just in the rental space business, but in general tend to have these common problems, thus finding ways to modernize them along with the whole world can help ease managing their business and lessen their overall expenses.

## **User Interviews**

The method we used to gather information is face-to-face interviews with the people we used to rent to, and to our “neighbors” in that rental space. During the survey process, we interviewed the owner about their method of managing the entirety of the rental space and have discussed with us that they indeed use the traditional way in recording their business transactions, which is via record books and paper, and re-inputting them in an excel sheet for accounting records and calculations. They also informed us the work that is needed to be done when recording takes about 2-3 hours backlogging, inventory, and balancing their income and expenses per day. We asked if we implement a program that could help manage and automate those work for them, how willing are they to avail and use the said program, and the owners said that it would be of great help for their business, lessening their manual labor and they could go home earlier, thus are very willing to avail and implement the said program.

We also asked other tenants about their experience about the traditional way of running a business, although not all share the same sentiments, there are some that have an irk about it. Like when it comes to lost records due to the deterioration of the records via poor storage or accident, and the time it takes to resolve when there are some queries asked about old records. They have stated that if such program were to be implemented to the business, most management problems in the business could be alleviated, and thus is inclined for the business to have such program.

## **Pain Points**

### **Productivity**

- Traditional way is an unnecessarily long process
- There may be inconsistencies to the data maybe due to user error
- Record queries takes a lot of manual labor to complete

### **Finances**

- Expenses are high due to needing a lot of manpower
- Fines/losses due to inaccuracy of financial data

### **Process**

- Lack of data accuracy and exchange
- Lack of management strategies

## Support

- Slow tenant support due to methods being manual

## Personas



### DEMOGRAPHIC

**Date of Birth**  
24th December, 1994

**Nationality**  
Filipino

**Marital Status**  
Married

**Address**  
123 Anywhere St., Any  
City, ST 12345

## MARCELINE ANDERSON

Marceline is an owner of a family owned commercial rental space. She and her husband manages the rental space business. Marceline is not very computer literate and still uses physical record books to record business transactions. But with the increasing number of transactions, she wants to find another way to make it easier to manage their business.

### MOTIVATION

For the business to be successful

More time with her family

Lesser manual work

Easier to manage the business

### FRUSTRATIONS

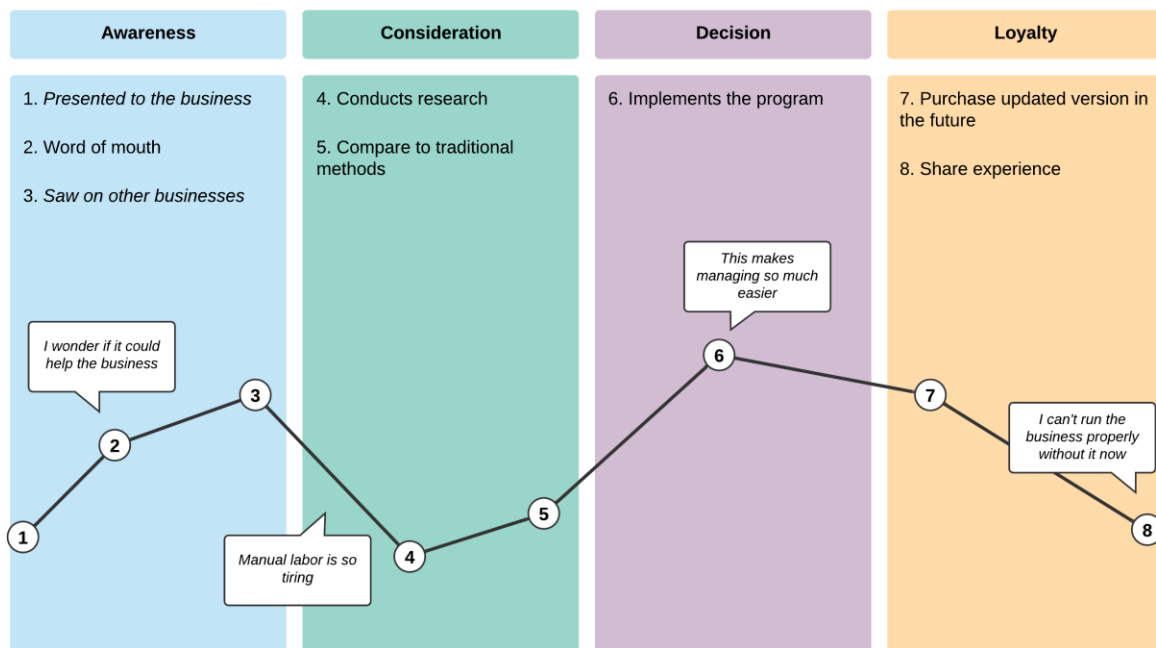
High overhead cost due to manual labor

Data loss/inconsistencies

Records takes too much time and effort

Backup pretty much non existent

## Customer Journey Mapping



We need the customers to be informed first, so we present the project to the target demographic, thus spreading to other owners by word of mouth, and when a number of businesses implements the program, other businesses will be curious about the program. Potential users will conduct research of their own if it is profitable to use the program, and compare whether it is indeed better than the traditional methods of book keeping. And after a positive outcome on their research, they might consider purchasing the program and implementing then on their own businesses. And lastly, when it is already established that the program works as intended and eases the workload of managing their businesses, they are more inclined to purchase the newer versions/models of the program, and also sharing their own experience to other business owners, increasing the profitability of the project.

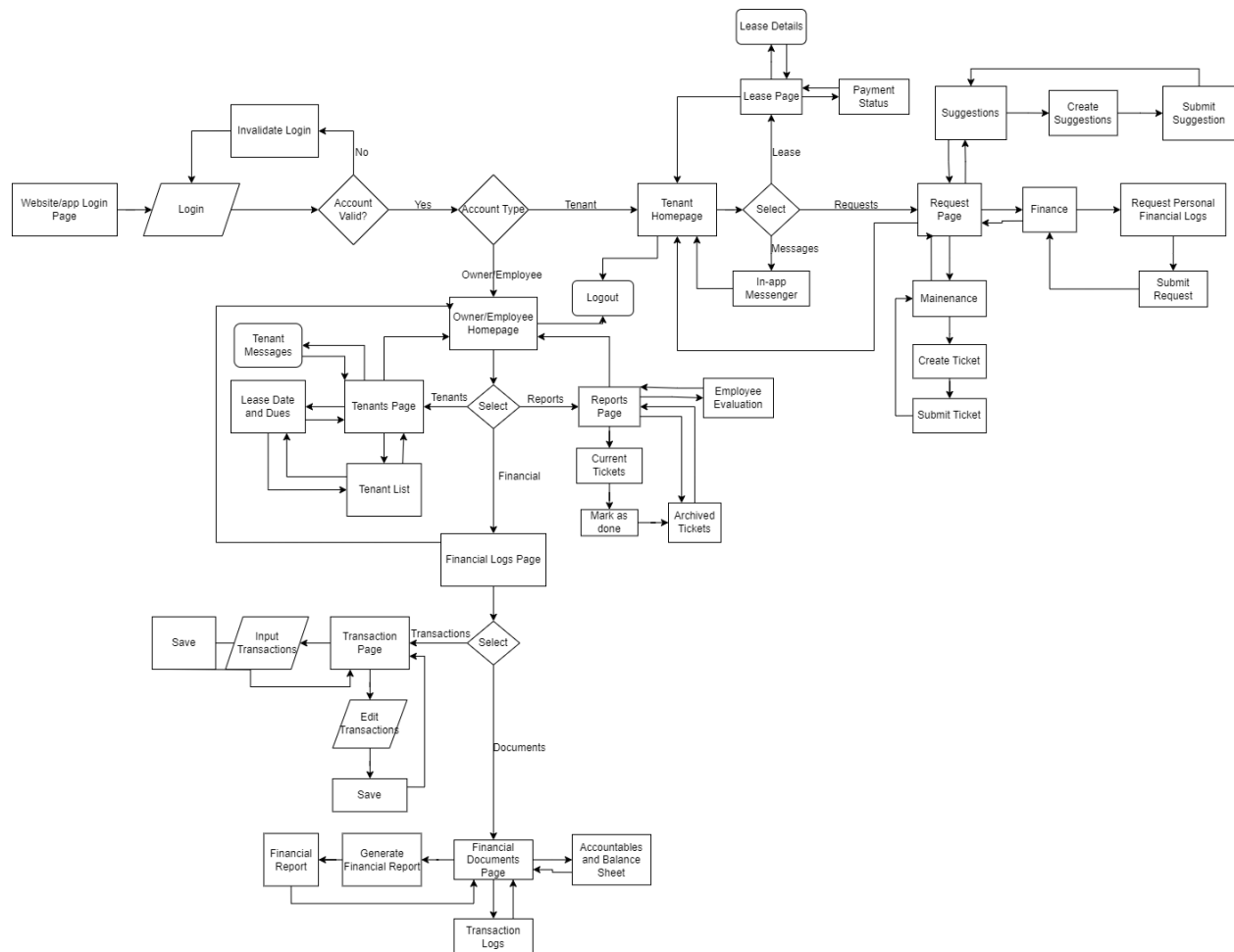
## Solution

### Design Solutions

As discussed earlier, most of the problem owners have was the intensive manual task involved when running their rental space business, often needing a lot of manpower to achieve their daily needs and targets to keep the business running. We have proposed these solutions in response to the problems that we have identified in managing a rental space business.

1. **Online database system:** Many of our target users doesn't have the budget to build a centralized data room to host the proposed solution, so our solution to this specific problem is to make the system online, outsourcing the need to have their own equipment to data centers or to our own data center. This eliminates the need for small and/or family-owned business to spend a hefty sum of money for them to run the system.
2. **Simplified UI and usage flow:** We have also determined that most of our target users doesn't have a broad knowledge of the technicality of using and managing these technological products, and rather than them needing to form a dedicated IT team to run and manage the system, we simplified the UI of the system, making it easier for even the older generation to use and understand how the system works. Including a detailed but easy to understand instructions on how to use the system.
3. **In-app Messaging system:** For the owner, employees, and tenants to contact each other conveniently without the need for external messaging apps for a much more secure and direct way of communication.
4. **Ticketing system:** In the case where tenants and employees need to request a maintenance or repair for a specific part of the rental space, they can use the app to submit a ticket to the system, informing the owners the problems the business have. It will also show the progress of the submitted tickets through the app.
5. **Automated Bookkeeping and Backlogging:** We also proposed for the system to have a bookkeeping feature where users just need to input/scan financial documents. It automates the creation of financial logs and reports so owners have a convenient time managing their finances. The system also logs all transactions and inputs made to the system, so when there is a need, users can easily navigate through all the created logs, getting the needed documents easier to do so.

## User flow

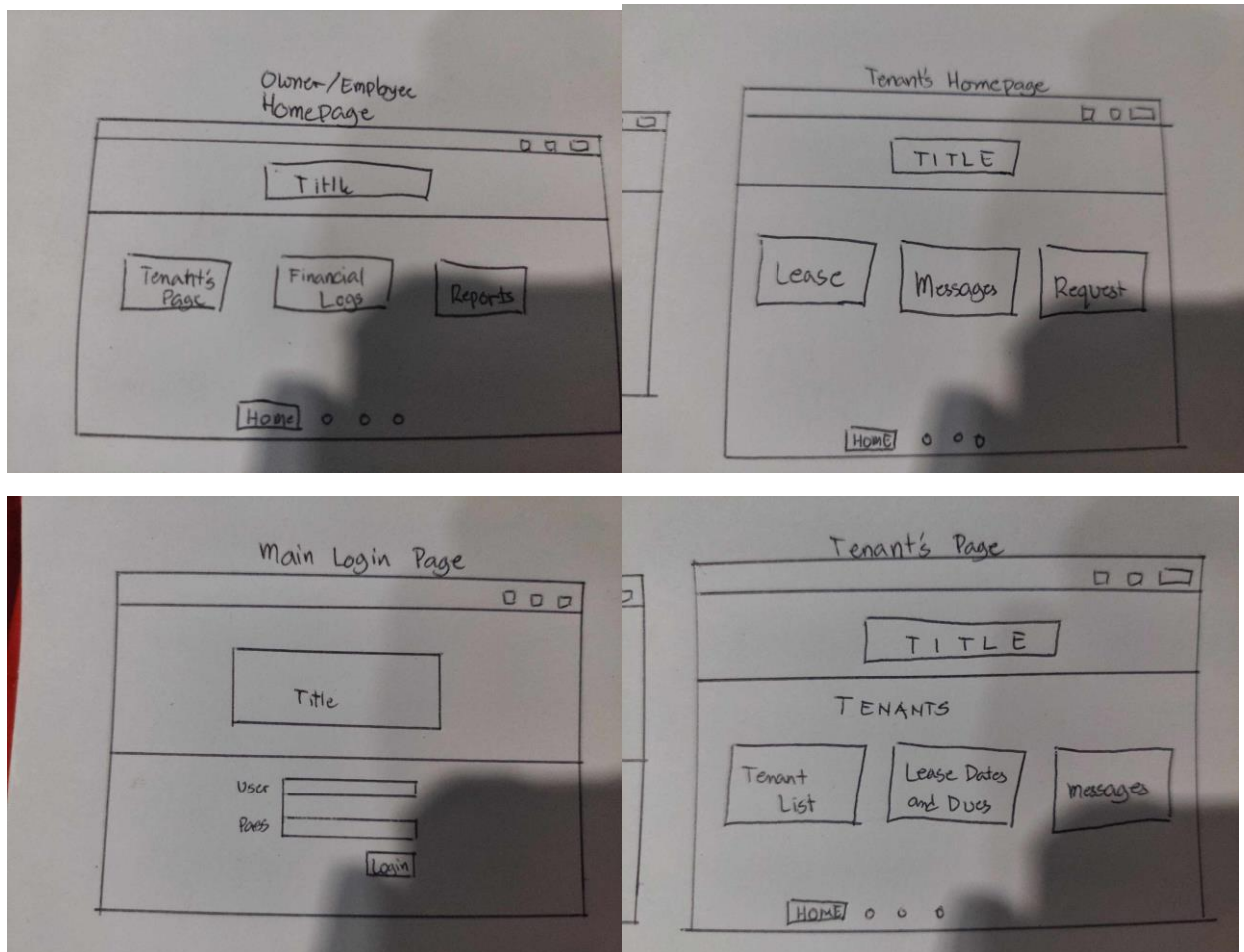


In the user flow diagram, we illustrated how the user will navigate through the system. The user will start with the login page, and with the login details, it will determine the account type that is being logged in. If the account is determined to be the owner or employee, it will go to the owner/employee interface, where the user can go to the tenant's page. In this page, the user can go to the tenant messenger to communicate with the employees and the tenants, tenant list where the owner/employee can get the details of the current tenants of the business, and the lease dates and dues page where the owner/employee can get details specifically about the date of lease, end date and current dues of the tenants. The owner/employees can also go to the financial page, in this page, the users can input new and edit old transactions the business had. In this page, users can also view financial backlogs and balance sheets regarding the business, as well as generating a financial report to get a better grasp of the business's financial situation. And lastly the users can view report logs in the reports page. Users can view tickets the employees and tenants submits, enabling them to act on these tickets and mark them as done.

If the account type is tenant, users will be directed to the tenant's homepage. In this part of the system, users can go to the lease page where they can get their lease details, their lease dates, lease end, and dues. Users can also see their payment status in here. Users will also have an access to the in-app

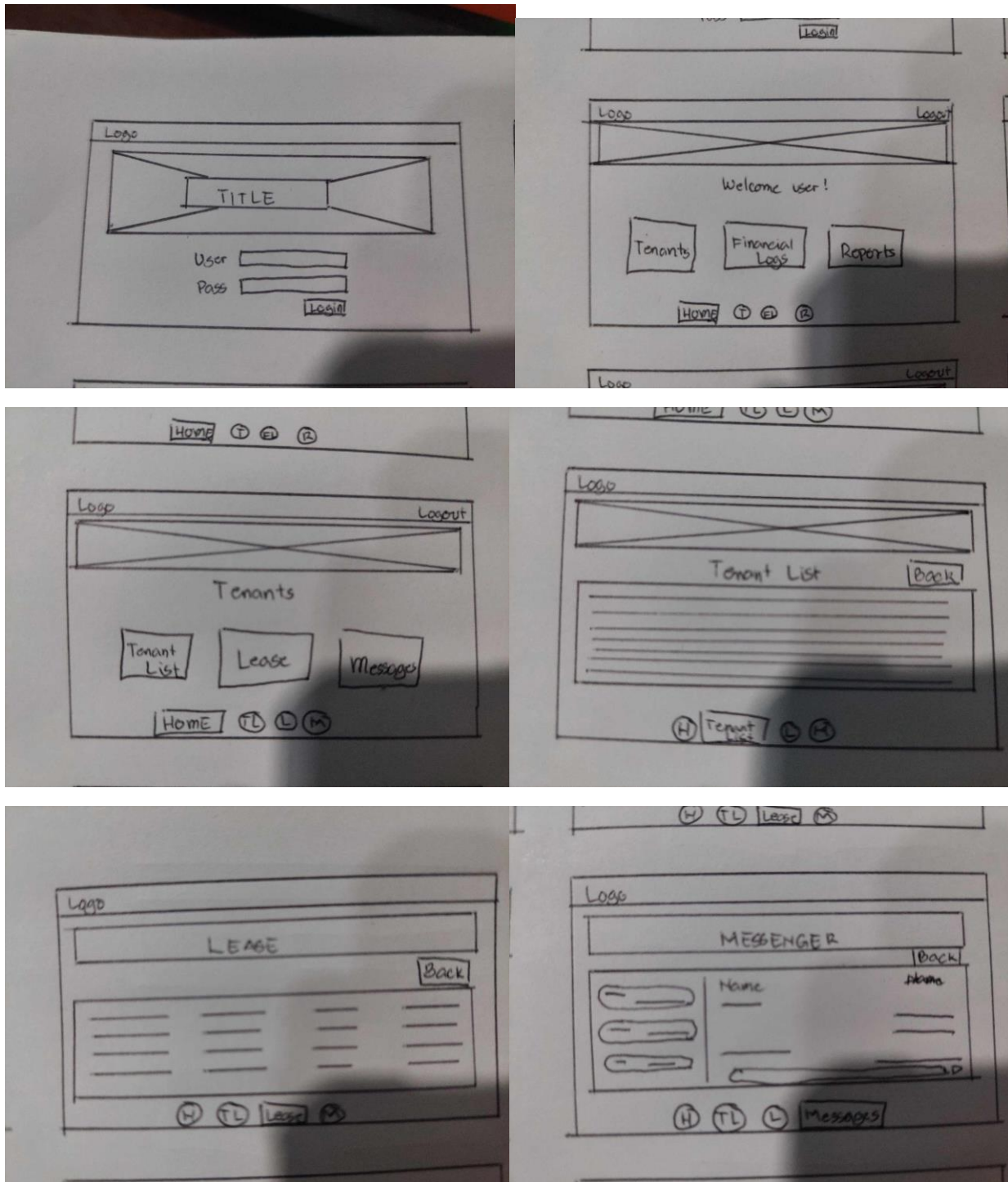
messenger app, enabling them to communicate with the owner/employee directly with regards to issues the users encounters while leasing a space in the business. Then lastly, they can go to the reports page where users can submit maintenance/repair tickets where the owners can look at and repair immediately. Users can also submit suggestions here to give the owners insight on how they could improve their business and the overall ambiance of the rental space. Also, users can request tenant's financial logs here whenever there are disparities to the local logs and the tenant's logs.

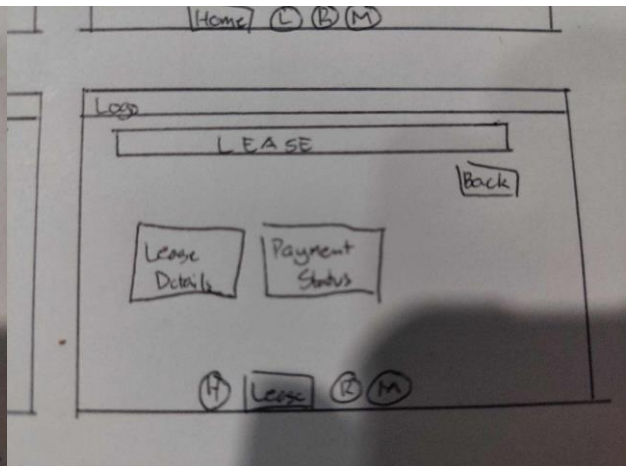
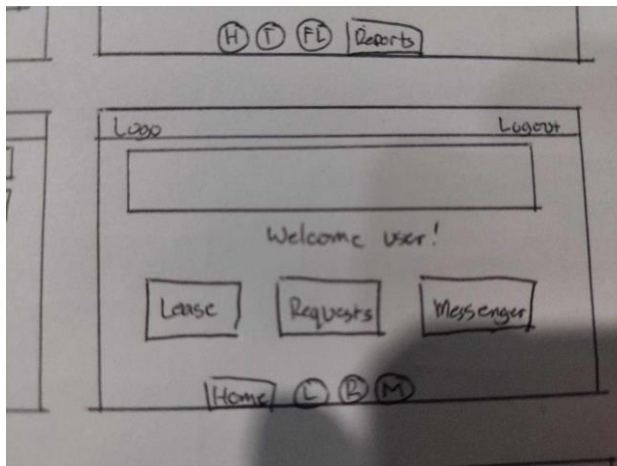
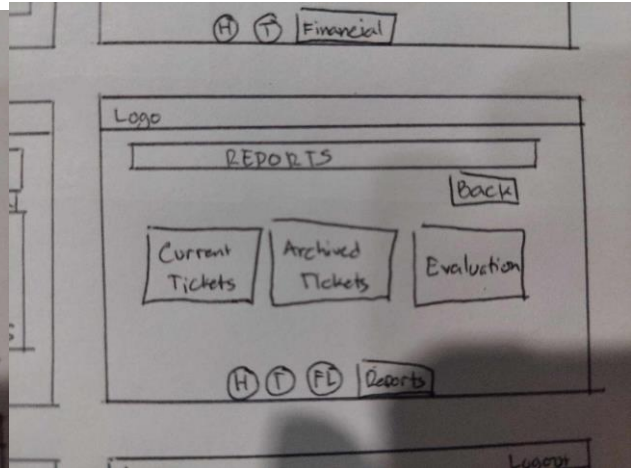
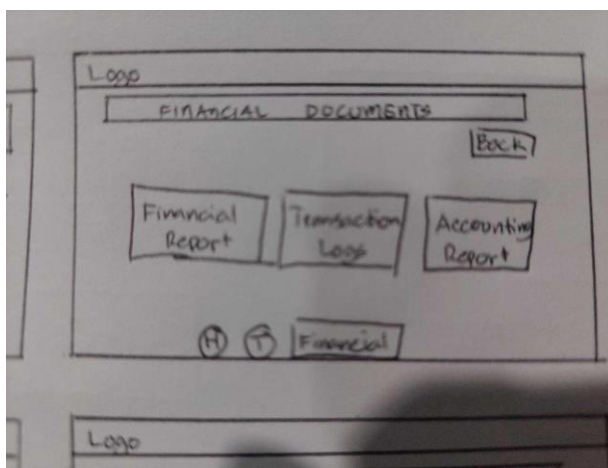
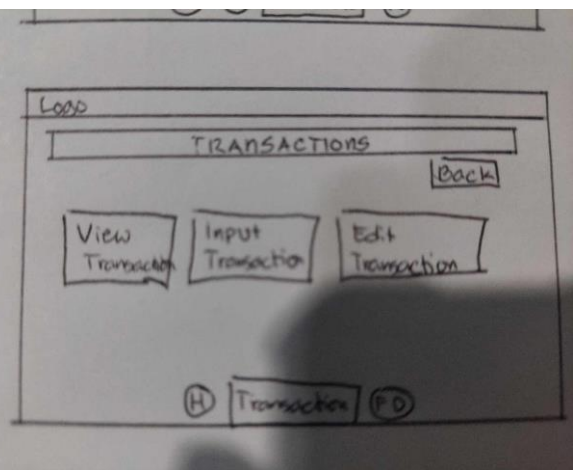
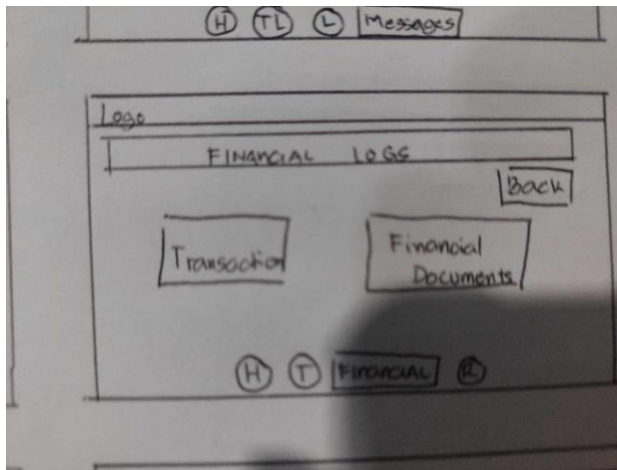
## Sketches





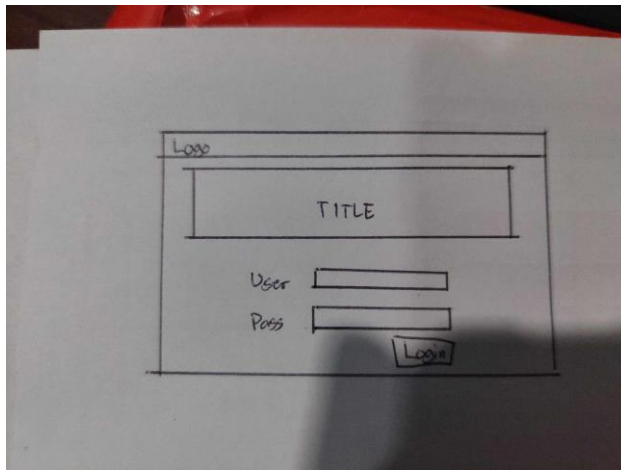
## Wireframes



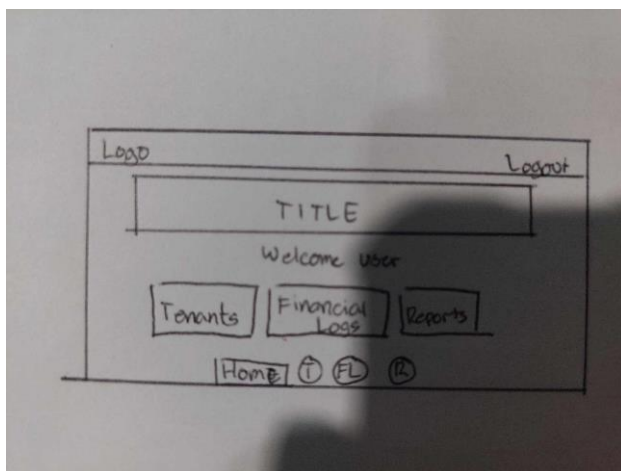


## Visual UI Design

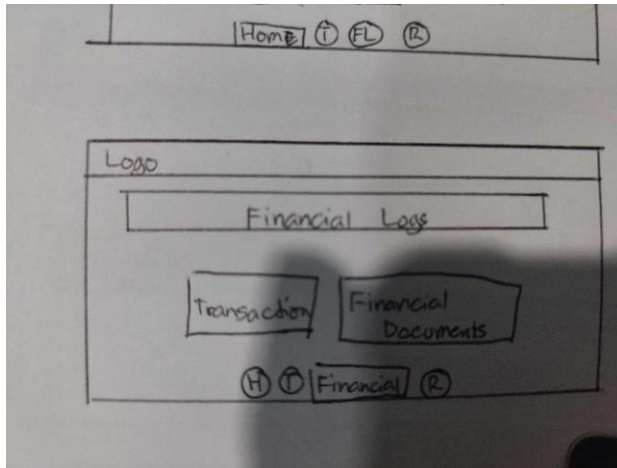
In making up the design for the system, we have observed that most of our target users are of the older generation or computer illiterate, so for the system to not confuse the intended users, we opted for a more minimalistic UI approach, only using few much needed UI elements per page as to not over clutter the screen, making it more readable and understandable as to what needs to be done per page interface. We also went for bigger button prompts and font size to make it more readable to those who are visually impaired. Here presented is a flow of how the user will navigate through the system to manage one of the pain points presented earlier, which is the manual labor it takes to run the business. By using the system, it can help automate the logging of transactional documents, making it easier for the business to make a catalog of those documents.



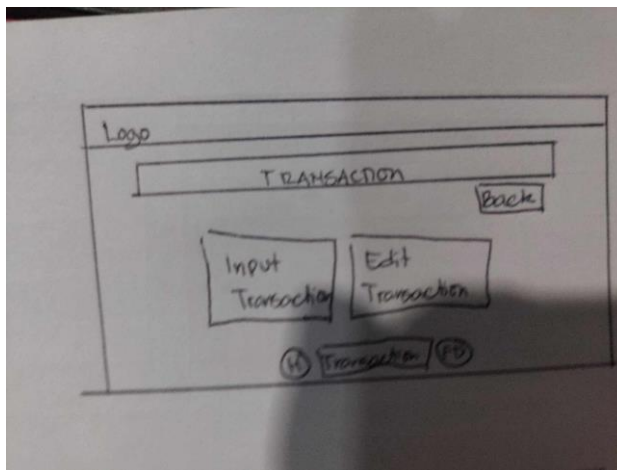
In this first image, it prompts the user to login their company/tenant account, and depending on the account type, will either land them on the owner/employee homepage or the tenant's homepage.



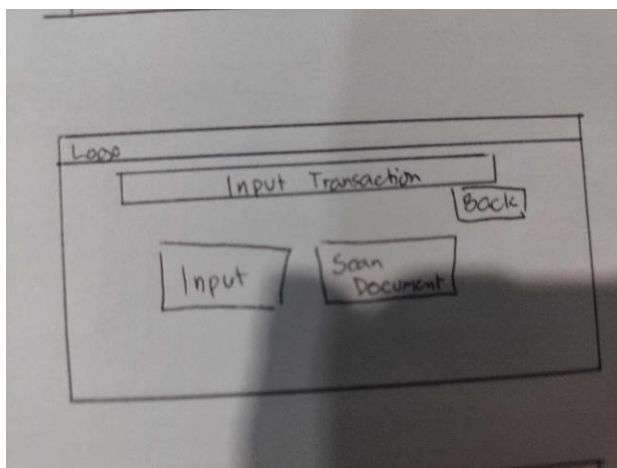
Here we can see that the user have successfully logged in with a business account, giving them access to the tenant's details, financial logs, and reports page.



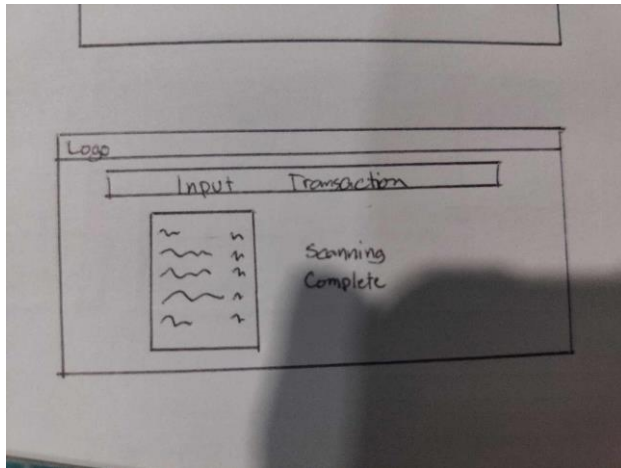
For the intended feature to be used, the user goes to the financial logs page, giving them access to the transaction and financial documents page.



Since the user intends to enter a new transaction, he goes to the transactions page, then clicking the input transaction prompt.



The system offers different ways to enter data to the system, and for an easier time for the user, the option to directly scan the financial document is presented.



And finally after scanning the document, it is automatically inputted and logged to database, where the user can get to easily whenever it is needed. Thus presenting a proposed solution to some of the pain points tackled in this case study, which are the automation of cataloging data and ease of backloging data whenever there is a need to. With this system, running a rental space business should theoretically be a lot easier for the small and/or family owned businesses.