Software Requirements Specification

for

POINT OF SALES MANAGEMENT SYSTEM FOR ASIAN DISTRIBUTORS

Proposal, Technical Project

BLITZ Code Group 23

Client Mr. MZM . Shahlan

Version 1.0

Prepared by BLITZ Code

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1. INTRODUCTION

1.1. Purpose

This document contains the software requirement specification of The Asian Distributors. This is managed by Mr. Sahlan as software requirement specification report is more detailed version of the proposed Software. The main purpose of this system is to keep track of information of inquiry, sales and salary and also the client can generate and analyze detail report on the current and past transaction, payments, sales and etc. This document covers the all the aspects of this project as our strategic plan to create a successful company (The Asian Distributors).

Through this system the client can get an idea about how the business of performing and step by step necessary taken to improve the business and client to maintain the company effectively. through this object of our project this system develops and stock handling and payroll and profit calculation for Asian Distributors.

This software requirements specification report helps to get guidness of the developing project this contains an Overall description about the project t including functional requirement, non-functional requirements and the diagram to represent the proposed system.

1.2. Intended Audience and Reading Suggestions

This relevant document can get an idea about who is interested on the project can get a good understanding about the system specification of the proposed system. The path of the documentation contains the project overview while the contains of the details version of the system including the major function, various user classes, the operator environment, documentation, limitation, assumptions effect the project, user interfaces. This report contains the UML diagrams that describes the system functions and the system activities done by the user or the client. This also contains functional and non-functional requirements of the project with the database system functions are discussed under the functional requirements, the ER diagram with database functionalities on the project specification such as security, quality of the software is addressed under non-functional requirements.

- ❖ The dynamic operations of the system user should have a clear idea about the system functionalities.
- ❖ The standard procedure of the objectives associated with developments should be further analyze with application user, hardware, software and communication interfaces.
- ❖ The designer should get an idea about the functionalities and develop the interface.
- ❖ The system testers should test the system in each criteria.

1.3. Product Scope

This process is going with a manual system to get more error prone and a very tedious. the documentation managed manually as the main objective of our project to develop a system for stock handling and balance-income report, database to connect and store data of the system, secure access with rolls such as administrator, user, maintain system payrolls. This system maintains the client to view the system details anytime.

2. OVERALL DESCRIPTION

2.1. Product Perspective

The current system of our company The Asian Distributors that monitors the salaries and stock that is been recorded in a book needs to maintain frequently. Therefore, this method and this method is error prone, and time based. And this method has to have proper calculation profit as well therefore all the documentation managed manually so that it is error prone and time base. This system is needed to organize the data as a risk to keep data without any security measures and it can be stolen or destroyed. This system is the goal of this project to create the system that calculates profit, inventory management and salary along with a secure and user-friendly application.

The Asian Distributors will be a system that develops and monitor current and past transactions, payments, sales, salary and profit. This diminish to the current major drawback of recording the data manually. And uncertainly brings the business to a position to the new system in future.

The following new architecture diagram shows the components of the to be system.

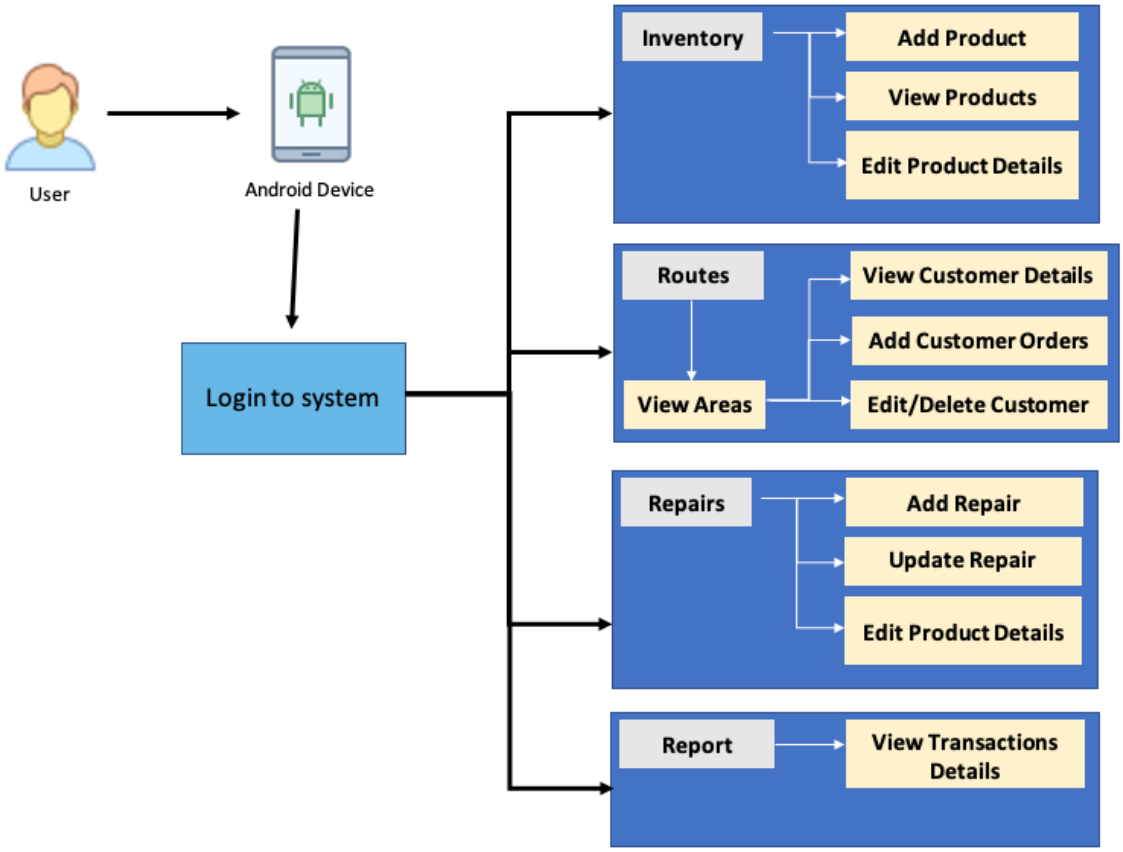

Figure 2.1: Architecture Diagram of the to be system

2.2. Product Functions

➢ Following functions are going to be implemented in the system a way to generate, view and manage reports.

- A system to generate balance-income reports
- Control database to connect and store data of the System.
- Control database to connect and store data of the stocks
- Secure access roles only as administrator.
- A system to maintain payrolls.

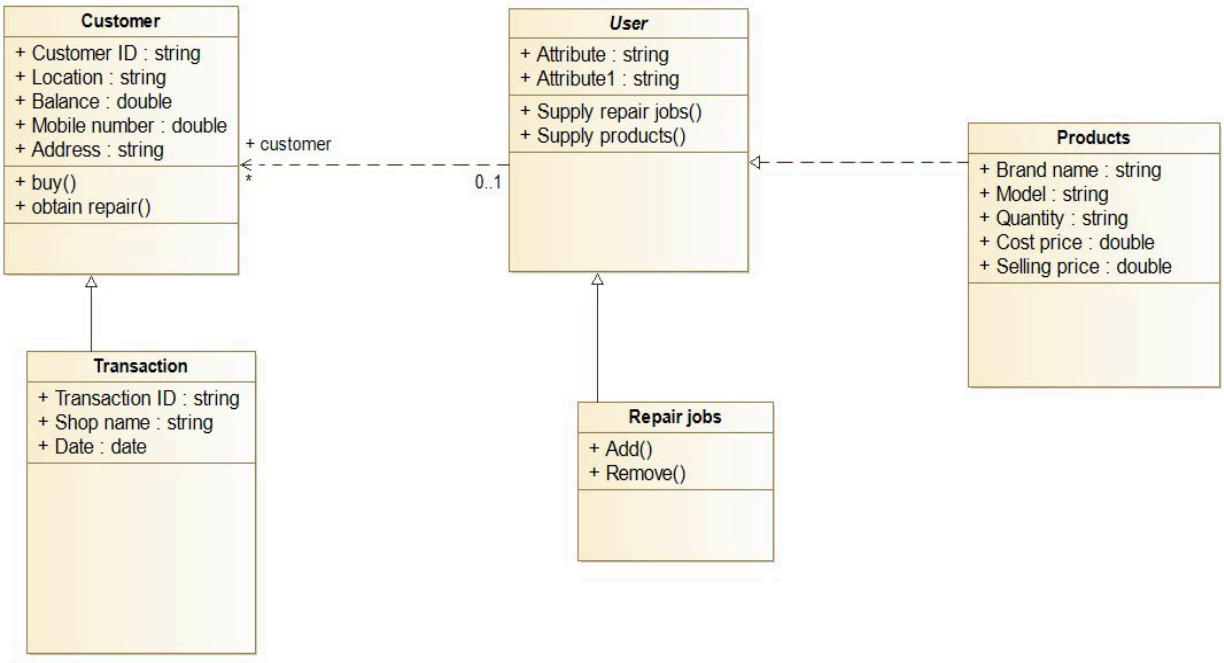

Figure 2.2: Class diagram

2.3. User Classes and Characteristics

- User: Firstly, user must sign into the system. The user can access to the accounts to be produced and maintain by the admin and then the use can connect to the system after login to the system. Admin can privilege expected access to several components. This system can be handled by administrator and will be managed by a user, view reports, display user behavior and etc.

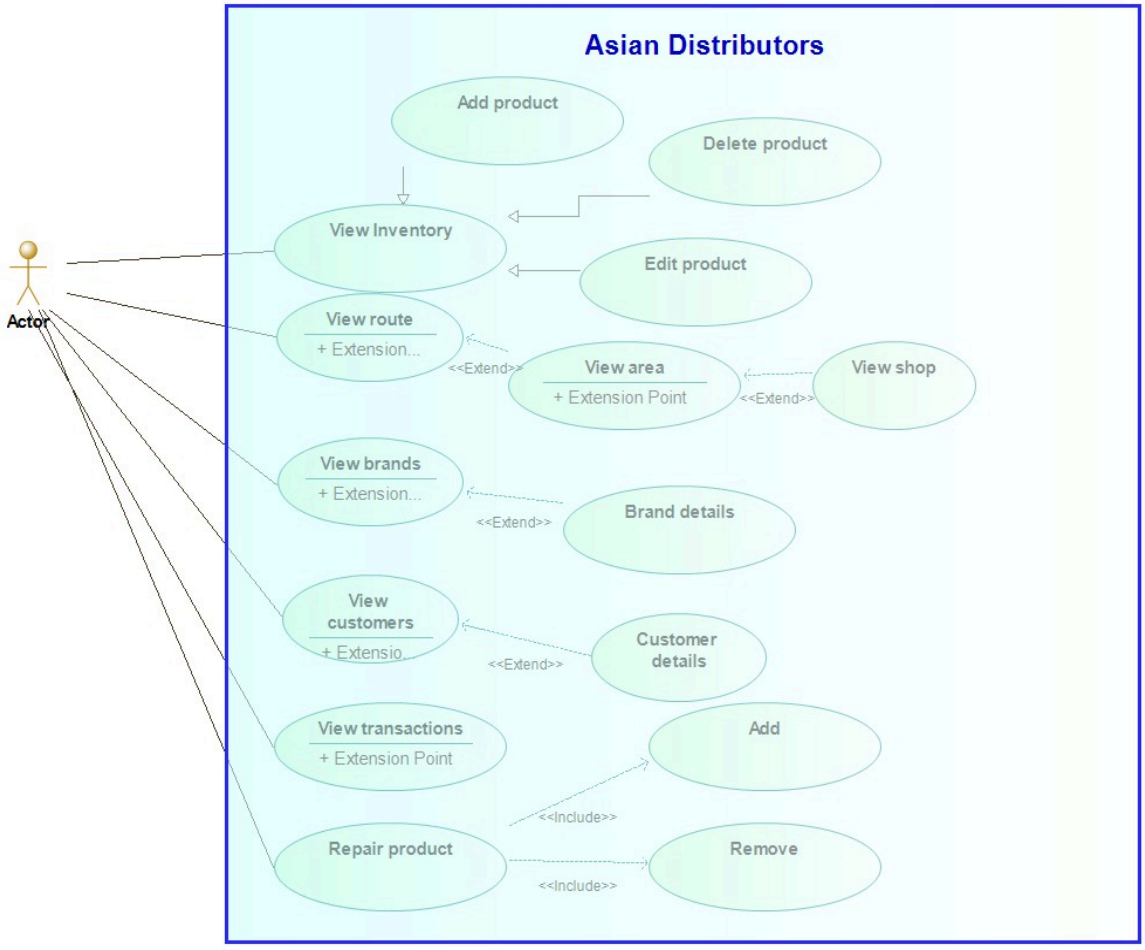

Figure 2.3- Use Case Diagram

2.4. Operating Environment

Developer software and hardware requirements:

- Integrated Development Environment (IDE) – Android Studio
- Operating System – Windows Operating System/Mac OS
- RAM - 4GB or above
- Interface Design – Adobe Photoshop

Requirements for consumers,

- OS: Android 5.0 or higher
- RAM : 2GB or higher

2.5. Design and Implementation Constraints

This system will be an online ongoing platform which will be stored by the database so that there can be tracked on the stored database to maintain the records of the company as an online concept.

2.6. User Documentation

In this system there will be a manual user so that the client can get a good idea about the system. Therefore, if any issues take place in completing a task of the client that can be referred manually. Also this can be hotline availability of the client needs any clarification.

2.7. Assumptions and Dependencies

This system is a proposed system to use only the intend purpose. Therefore, There can be a programming difficulties and technical difficulties as this is a project that can be done in short terms.

3. User Interfaces

3.1. Login Interface

This interface is a login panel that user can access to the system by login panel.

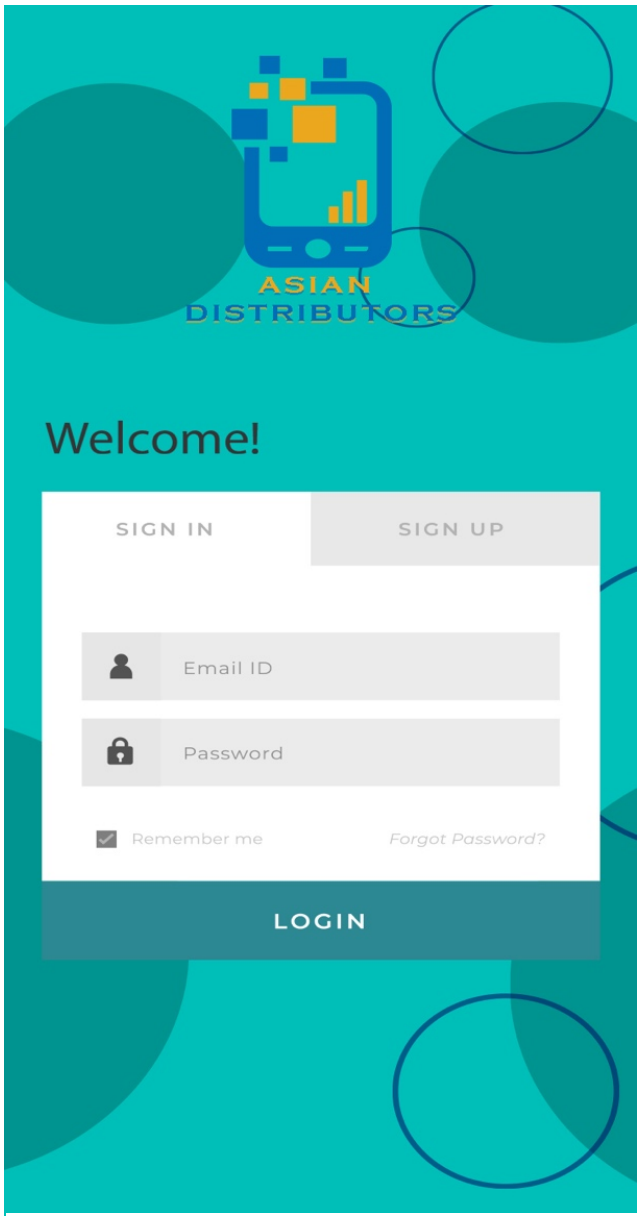

Figure 3.1- Login page

3.2. Home page

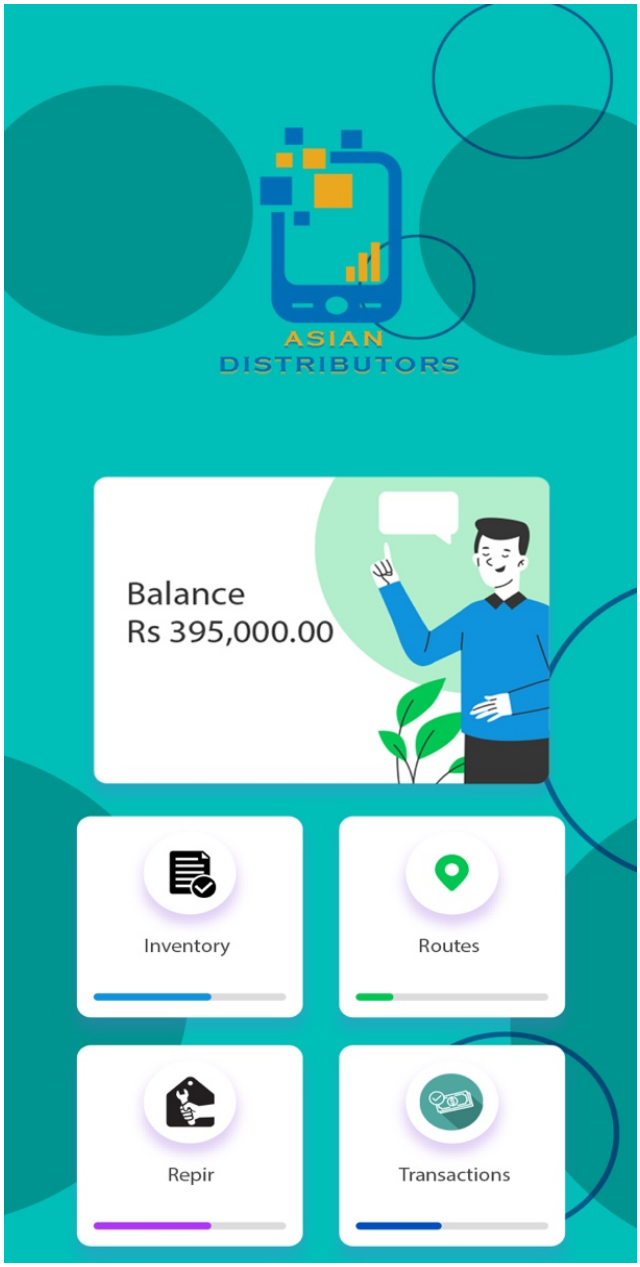

Figure 3.2- Home page

3.3. Add Product Interface

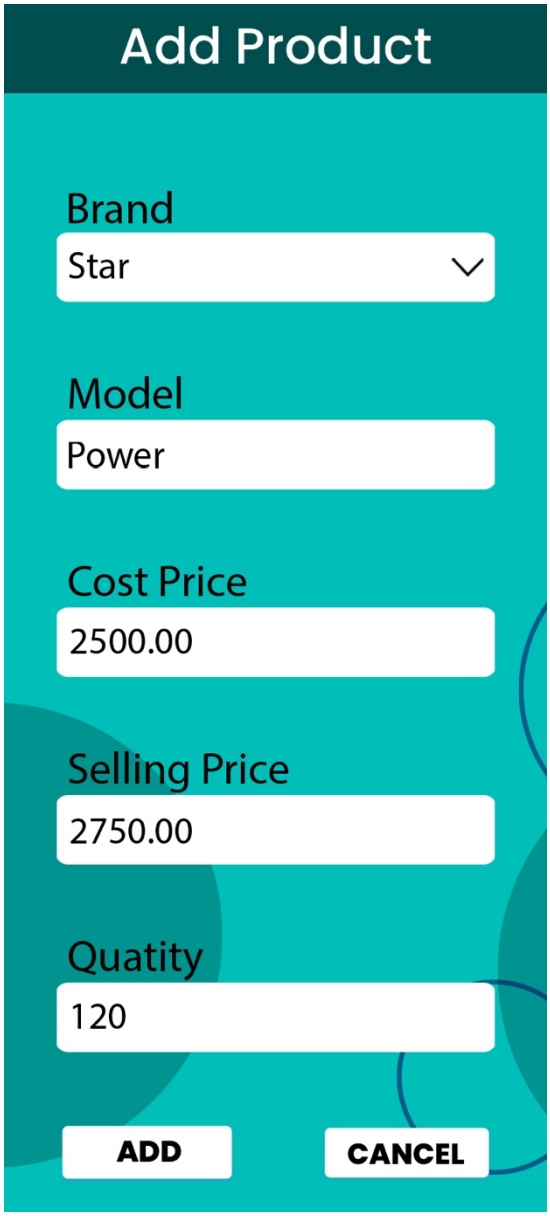

Figure 3.3- Product adding page

3.4. View Product Details Interface

Figure 3.4- Product details page

3.5. Add Customer Interface

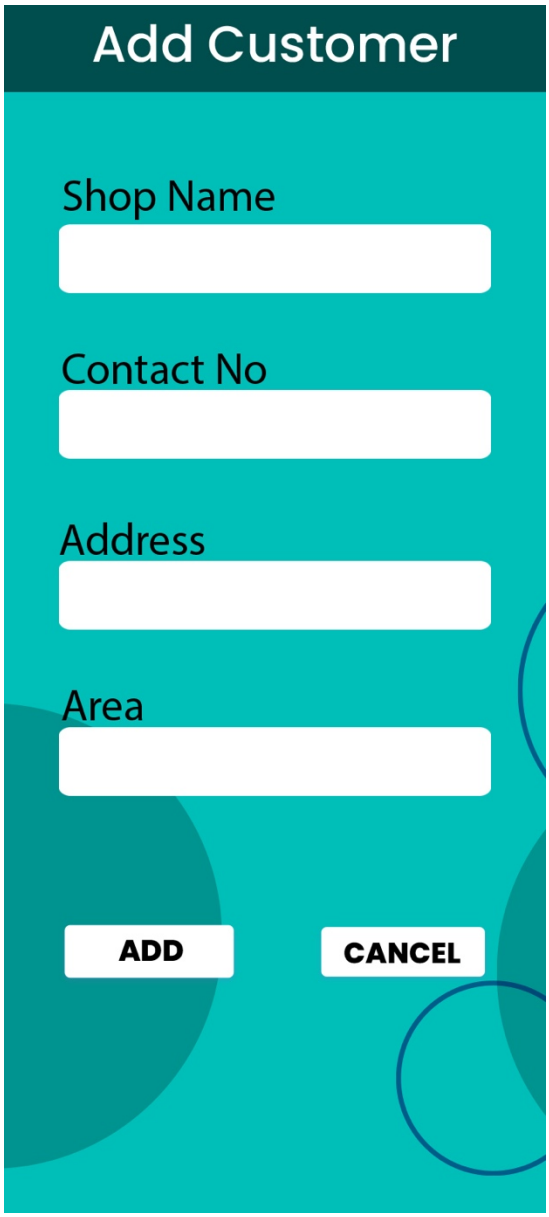

Figure 3.5- Customer adding page

3.6. Hardware Interfaces

Developer software and hardware requirements:

- Integrated Development Environment (IDE) – Android Studio
- Operating System – Windows Operating System/Mac OS
- RAM - 4GB or above
- Interface Design – Adobe Photoshop

Requirements for consumers,

- OS: Android 5.0 or higher
- RAM : 2GB or higher

3.7. Software Interface

In this project we dedicate to initialize our project by designing the graphic user interface for the System.so that we can work on backend and then managed the database and SQLite database system. We will include all the functionalities of our system and make sure that everything is functional through testing methods. This system will be based on java language. And will be used SQLite database. Android Studio IDE will be used to code and create all GUIs and Adobe Photoshop is used create the design interface of our Software.

4. System Functional Features

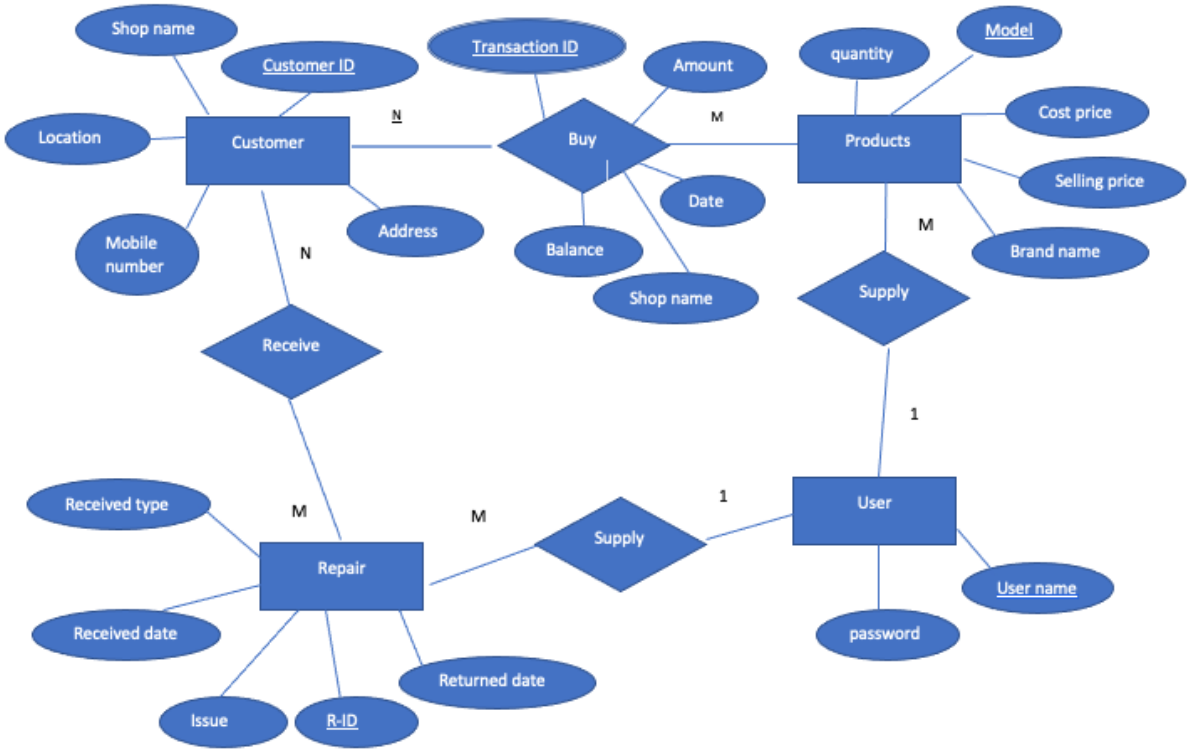

Figure 4.1- ER Diagram

4.1. login

Table 4.1- User Login

Use case ID	1	
Use case Name:	Login	
Actors:	Admin	
Pre- Conditions	Should have a user account	
Post Condition	User can access the system	
	Action	System Response
Success Path	1. Initiates when user opens the application	
		2. Display login form
	3. Enter login details	
		4. Validate details
		5. Display main dashboard
Alternate Path		
Exception Path	1. If the user validation failed, User can enter details again.	

4.2. Add Items

Table 4.2- Add Items

Use case ID	2	
Use case Name:	Add Items	
Actors:	Admin	
Pre-Conditions	Should be logged in	
Post Condition		
	Action	System Response
Success Path	Click on the Inventory and Supplier tab	
		Display add items form
	Enter item details	
		Validate details
		Add item to system database
		Display Item successfully added message
Alternate Path		
Exception Path	If details are not validated, should notify and let the user add the item again.	
Special Requirements	Item details should be in compliance with the system structure	

4.3. Delete Items

Table 4.3- Delete Items

Use case ID	3	
Use case Name:	Delete Items	
Actors:	Admin	
Pre-Conditions	Should be logged in	
Post Condition		
	Action	System Response
Success Path	User enters the item ID and Quantity	
	Clicks the remove item button	
		Validate the input
		Display confirmation message
	Click confirmation button	
		Delete item from the database
		Show item deleted message
Alternate Path		
Exception Path	In step no 4, if user click on cancel button, delete process will be stopped.	
Special Requirements	Item should be already in the system database.	

4.4. Add Repair Records

Table 4.4- Add Repair Records

Use case ID	4	
Use case Name:	Add Repairs records	
Actors:	Admin	
Pre-Conditions	Should be logged in	
Post Condition		
	Action	System Response
Success Path	Click on the Repair Management tab	
		Display repair details page.
	Click add repair button	
	Enter repair details	
		Add repair to the system database
		Display repair successfully added toast message
Alternate Path	User can cancel the process	
Special Requirements	Repair details should be in compliance with the system structure	

4.5. Add sales Records

Table 4.5- Add sales records

Use case ID	5	
Use case Name:	Add sales records	
Actors:	User or admin	
Pre- Conditions	Should be logged in	
Post Condition		
	Action	System Response
Success Path	Select inventory management button	
		Display interface
	Select inventory and supplier button	
		Display interface
	Enter details	
		Display details
	Select add item button	
		Display successfully added message
Alternate Path		
Exception Path	In step 5 if user add different details system shows error message	
Special Requirements	Sales record details should be in compliance with the system structure	

4.6. Delete sales Records

Table 4.6- Delete sales records

Use case ID	6	
Use case Name:	Delete sales records	
Actors:	User or admin	
Pre- Conditions		
Post Condition	Should be logged in	
	Action	System Response
Success Path	Select inventory management button	
		Display interface
	Select inventory and supplier button	
		Display interface
	Enter details	
		Display details
	Select remove button	
		Display successfully removed message
Alternate Path		
Exception Path	In step 5 if user add different details system shows error message	
Special Requirements	Sales record should be already in the system database.	

4.7. View balances

Table 4.7- View balances

Use case ID	7	
Use case Name:	View balances	
Actors:	Admin	
Pre- Conditions	Should be logged in as administrator	
Post Condition		
	Action	System Response
Success Path	Click on balance button in the dashboard	
		Display balances customers should pay
Alternate Path		
Exception Path		
Special Requirements	There should be at least one record in the system.	

5. NON-FUNCTIONAL REQUIREMENTS

5.1. Performance Requirements

This is an ordinary computer system which runs sufficiently in the software. As this system is an online system the interfaces are designed in a user-friendly manner so that it is easy to navigate through the system without any difficulties. Therefore, delays will be less than 2seconds which will not affect overall performs of this system.

5.2. Activity Diagrams

These activity diagrams shows how user access the system and how system respond for the user requests.

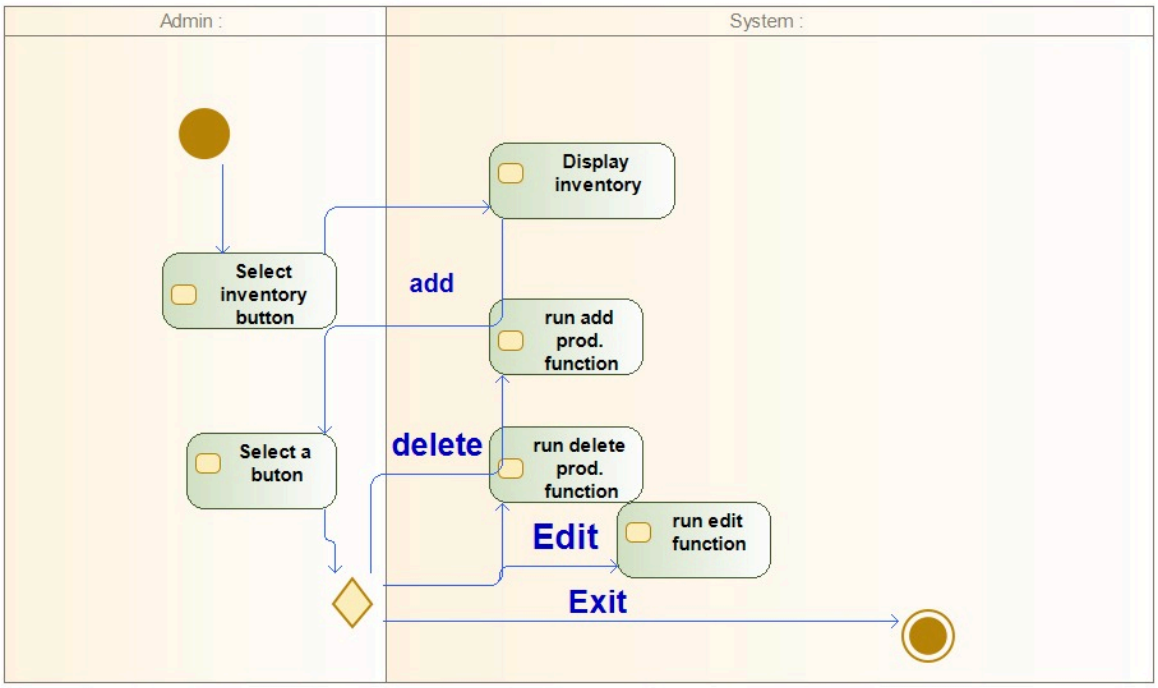

Figure 5.1- Inventory activity diagram

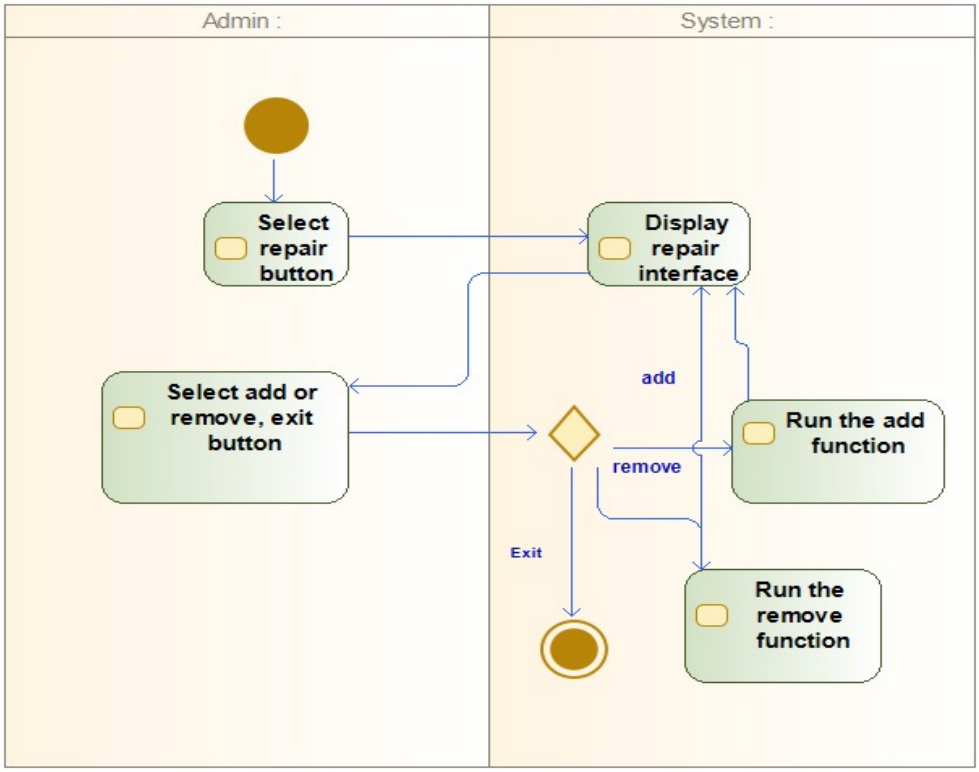

Figure 5.3- Repair activity diagram

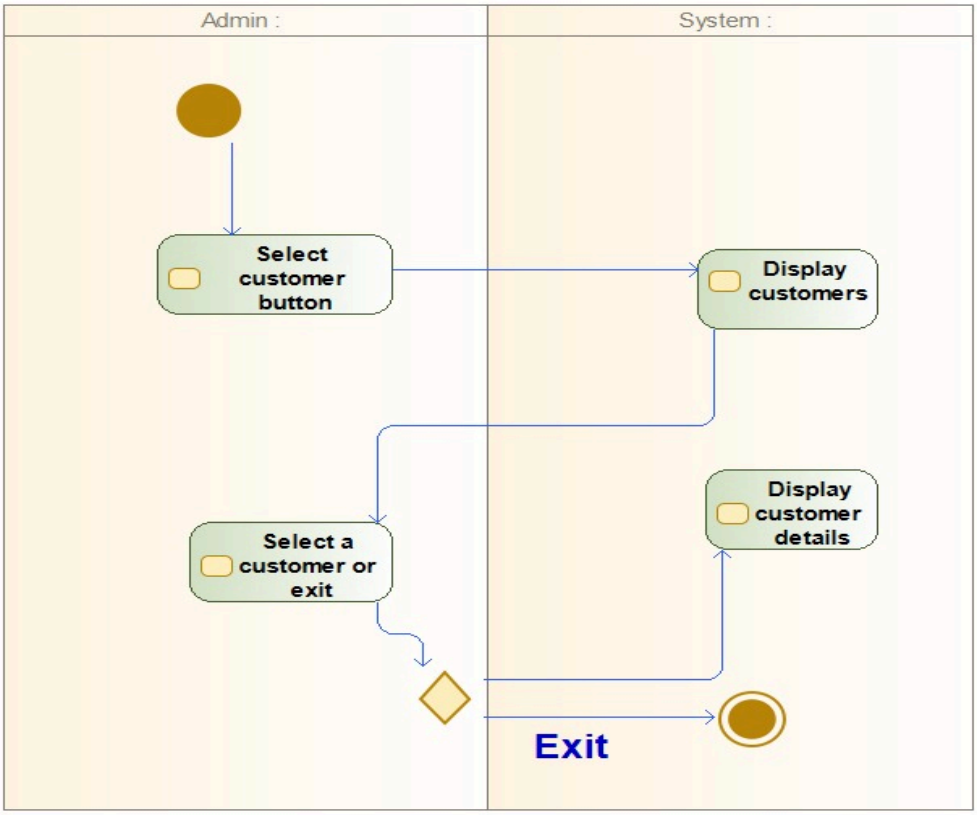

Figure 5.2- Customer activity diagram

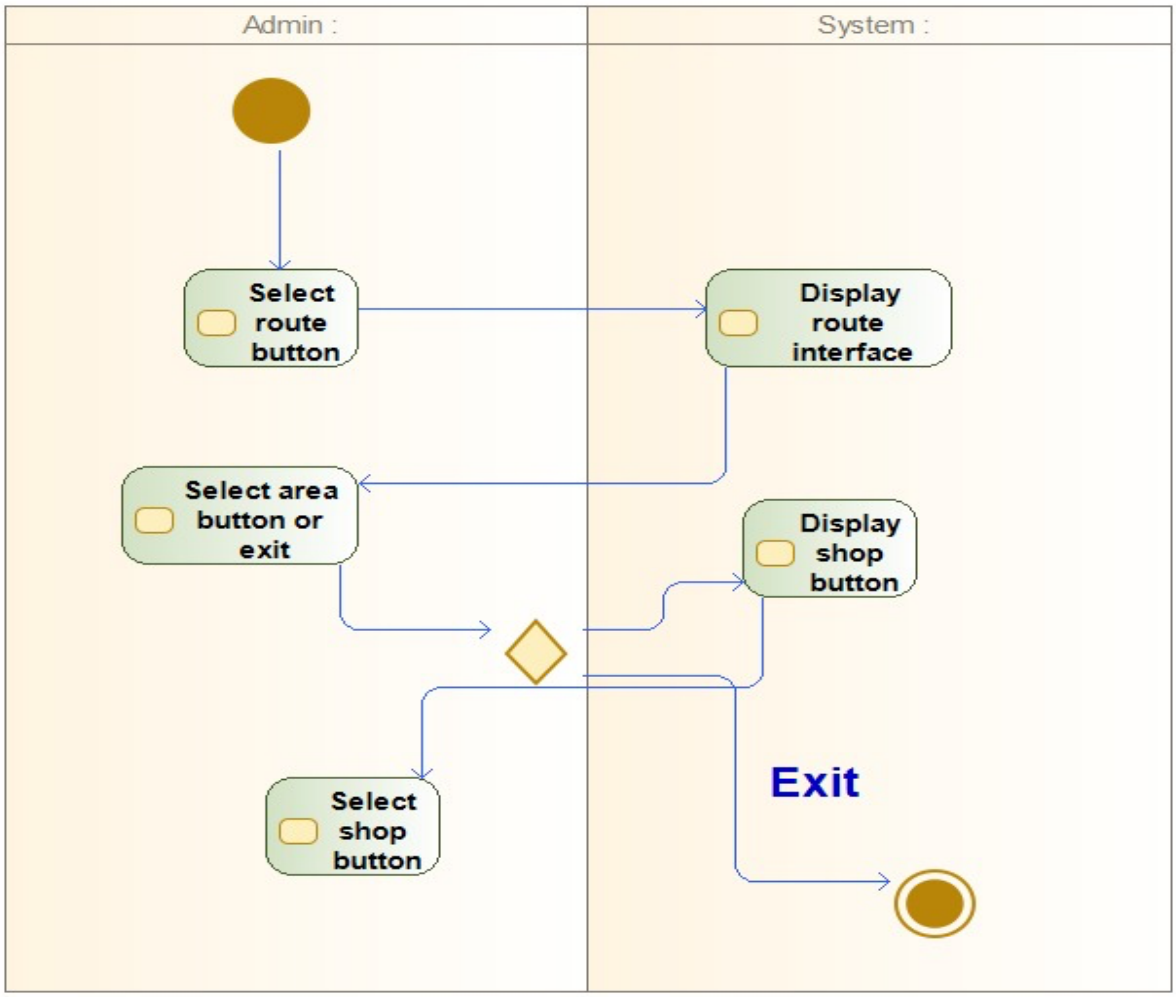

Figure 5.4- Routes activity diagram

5.3. Safety Requirements

- In this system if data crash the information, it will not be lost because there will be an system lock up.
- The login page that the data is secured in the system will strongly entered with the password that can be a less valuable and vulnerable attacks and authorized users.

5.4. Security Requirements

- To operate the system all users should be logged in the system.
- Admin can authorize users who can access the system.
- Users will only have the authority to enter data give reports of the users will be prohibited to change the system data.

5.5. Software Quality Attributes

- Availability

  As this system is a online e system we control and maintain all the performance online.
- Usability

  this system is mainly used by the administrator. So that the system can be performed in all actions. While the administrator enters and maintain the system it is simple and easy to manage.
- Maintainability

  This system is designed and implemented in a easy manner to maintain the system.

5.6. Business Rules

- The administrator maintenance the whole system.
- Only the administrator can access the system.
- There no any other users.

6. References

1. “How to write a good SRS for your project,” *GeeksforGeeks*, 2021. [Online]. Available: https://www.geeksforgeeks.org/how-to-write-a-good-srs-for-your-project. [Accessed: 26-Aug-2021].

7. OTHER REQUIREMENTS

7.1. Appendix D: Personal Contribution

IT no: IT20766450

Name: M.Z.A. Rahman

Group no: 23

Group Name: BLITZ Code

Main Contribution: Architecture diagram, Operating environment

I'm M.Z.A. Rahman. 2nd year 2nd semester student who follows Bachelor of Science in Information Technology in SLIIT Academy. Since this degree program includes a module called PPA (Project and Professional Aspects) in the 2nd year 2nd semester, we will carry out a community project to develop a software system that can be required in the requirements of real-world organization. I have come up with a system as the group leader to develop a point of sales management system. Then we proposed a system to set up all inquiries with an upcoming inventory and sales management system. we also agree on the idea of our supervisor to approve and suggest on this system. Then we took the next step and started gathering details about the project to identify the strength and the weaknesses working out and get solutions on the problem based. Therefore we developed a project which would be easy for the Administrator to handle the overall system. As our supervisor suggested our project in our proper to carry on the system perfectly. Our main aim of this project is to develop more functions on mobile application of Asian Distributors to solve their issues successfully.

IT No:IT20044640

Name: Ozeer F.A

Group No:23

Group Name: BLITZ Code

Main Contribution: Overall description

I'm Ozeer F.A and 2nd year 2nd semester student who follows Bachelor of Science in Information Technology in SLIIT Academy. Since this degree program includes a module called PPA (Project and Professional Aspects) in the 2nd year 2nd semester, we will carry out a community project to develop a software system that can be required in the requirements of real-world organization. Our group leader called for the design of an Inventory and sales management system. Then we proposed a system to set up all inquiries with an upcoming salary management system. We hereby on this project with the idea of the supervisor and other members with a proper interface of this system so that al can carry on while distributing to separate parts to the members and bring out a successful system. This also identifies the strength and weakness and come out with an solutions of our systems. Has suggested by our lecturer we managed to bring out our project in a meaningful manner. Our main aim of the project is to develop functional mobile application of The Asian Distributors to solve their issues of the system.

IT No: IT20764548

Name: H.K. Najumudeen

Group no: 23

Group Name: BLTZ Codes

Main Contribution: Non-Functional Requirements, Introduction

I'm H.K. Najumudeen 2nd year 2nd semester student who follows Bachelor of Science in Information Technology in SLIIT Academy. As this degree program covers a module called PPA (Project and Professional Aspects) in 2nd year 2nd semester we must conduct a group project to develop a software system that can be expected in the real-world organization requirements. Our group leader decided to develop a point of Sales and Inventory management system. This gives a brief of the whole system in an introduction which speaks about the whole system on how it works straightly and weakly and also brigs out difference function to maintain the system. This is an ordinary computer system which runs sufficiently in the software. As this system is an online system the interfaces are designed in a user-friendly manner so that it is easy to navigate through the system without any difficulties. Our main aim of the project is to develop functional mobile application of The Asian Distributors to solve their issues of the system.

IT No: IT20764616

Name: H.N. Ahamed

Group no: 23

Group Name: BLITZ Code

Main Contribution: UI designing

I'm H.N. Ahamed 2nd year 2nd semester student who follows Bachelor of Science in Information Technology in SLIIT Academy. As this degree program covers a module called PPA (Project and Professional Aspects) in 2nd year 2nd semester we must conduct a group project to develop a software system that can be expected in the real-world organization requirements. Our group leader decided to develop a point of sales and inventory management system. In this project we firstly come on a solution on how the system interface shows on the system. Then I have used Adobe Photoshop to designed the user interface in to proper sections. And then we come out with the proper user interface using many diagrams. Our main aim of the project is to develop functional mobile application of The Asian Distributors to solve their issues of the system.

IT No:IT20761264

Name: M.N. Salamanul Faris

Group ID :23

Group Name: BLITZ codes

Main Contribution: class diagram, Use case, ER diagram, Activity diagram

I'm M.N. Salamanul Faris I'm a second year second semester student at SLIIT Academy. As this degree program covers a module called PPA (Project Professional Aspects) in second year second semester we must conduct a group project to develop a software system that can be expected in the real-world organization requirements. This project we here by all the parts of the different section and we bring into a class diagram and use case which shows the full outcome of the project. In help of the outcome we maintain all the attributes coming to one full interface. Our main aim of the project is to develop functional mobile application of The Asian Distributors to solve their issues of the system.