Software Requirements Specification
For
Delivery Management System (DMS)

Version 0.3

Prepared by:

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- Noura Medhat Shawky

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Itemized List

Merna Ashraf:

- Derived Use Case Diagram.
- Created the Cart page.
- Created the Account page.
- Linked the data base of the project.

Noura Medhat:

- Derived the Class Diagram.
- Derived the sequence Diagram.
- Created the Sign Up page.
- Created the Home page.

Haidy Gamal:

- Derived the ERD Diagram.
- Derived the DFD Diagram.
- Created the Log In page.
- Created the Details page.

Table of Contents

List of Figures

1. Preface

1.1 Document Purpose

The purpose of this document is to provide a detailed and complete specification of Delivery Management System (DMS) for the FOEHU.
The document will provide an overview of the system in the first section; then each part will be explained in detail in the second and third sections.

1.2 Target Users

This document is composed by system engineers based on the requirements gathered from students. This document is intended to be approved by places like Ram, etc..

1.3 Revision History

Version	Author	Description	Date
0.1	Merna	Initial	20-11-2021
0.2	Noura	Updated	26-11-2021
0.3	Haidy	Updated	7-1-2022

2. Introduction

2.1 Purpose

DMS aims to help students at the FOEHU achieve the following:

- Quick and easy access to what the student needs
- Follow up the status of requests.
- Keep track of the payments of all students.
- Quickly generate all requests that the student needs

2.2 Scope

DMS is FOEHU's Student Requirements Management Program. Essentially, it meets all student needs of electrical components, or food. The program will be part of a larger system that manages student needs, student surveys, suggestions, and complaints.

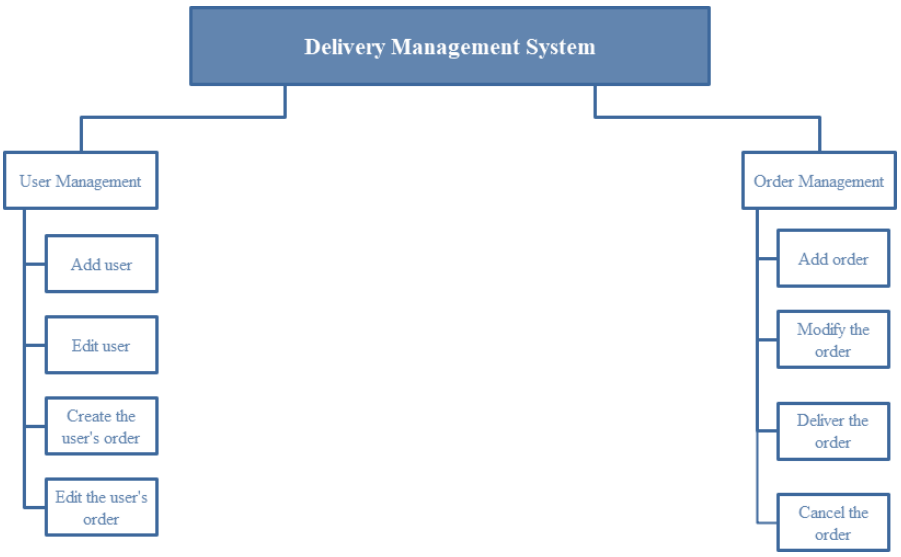

Figure 1 System function hierarchy

2.3 Overview

This document is organized as follows: first, an Overview description of the Delivery Management System (DMS) and its high-level functions are presented (section 2.1 and 2.2). Section 2.3 states types of users who can use DMS. Then a list of general constraints that should be followed, assumptions and dependencies are presented in sections 2.4 and 2.5. Section 2.6 shows future work that should be done. Section 3 in the document provides a detailed description of the system functions and requirements. Finally, section 4 presents some helping information and diagrams that will facilitate the understanding of this document.

3. Glossary

3.1 Acronyms, definitions, and abbreviations.

- **FOEHU**: Faculty of Engineering, Helwan University
- **DMS:** Delivery Management System

4. System Users

4.1 System stakeholders

- System Engineer :
  - Responsible for requirements gathering.
  - Responsible for development.
  - Responsible for deployment and support.

4.2 Users objectives

- User:
  - The most frequent user
  - Add a new order.
  - Edit the order.
  - Create new account.
  - Edit his account or delete it.

5. User Requirements definitions

5.1 System Functions

1. Generate account for any user
2. Log in to the system
3. Modify the account of any user.
4. Fill the items
5. Select items
6. Add selected items to the cart
7. Modify the cart items
8. Add a new order
9. Calculate the number of available components.
10. Calculate the total price for any order
11. Generate date and time to receive the order
12. Generate confirmation report for any order

5.2 Constraints

- Cultural Constraints
  - All Code must follow Team standards
- Technologies Limitations
  - No support for credit card
- Hardware limitations
  - For PC only

6. System Architecture

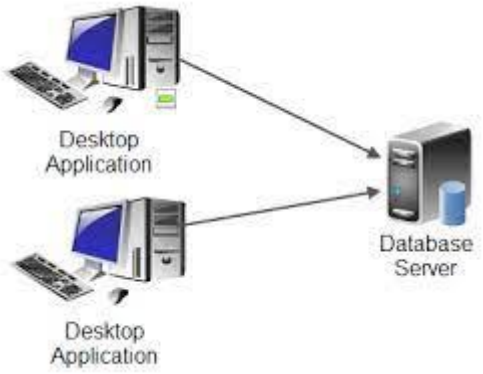

Figure 2 System Architecture

7. System Functional requirements

7.1 Generate account for any user:

The user can generate account by adding the following information:

- User Name
- Email
- Password
- Confirmed password

7.2 Log in to the system

The user must sign in to the account to be able to make an order.

7.3 Modify the account of any user

Any user can edit his account by pressing edit account button then begin to modify his details but it is needed to be logged in first.

7.4 Select items

The user can select the items he/she wants to select buy clicking on them and select the number of items he/she needs.

7.5 Add selected items to the cart:

Any user can fill his cart by selecting the items that he wants to order, even it was food or components, then press add to cart button.

7.6 Modify the cart items:

Any user can add or remove items from his cart.

7.7 Fill the items:

The fill process is used to display all the available components and food from which the user can select which to buy

7.8 Add a new order:

Any user can create an order by pressing the order button to order the items that have been selected in his cart. Once he made an order, he wouldn't be able to edit or cancel the order.

7.9 Calculate the number of available components

System calculates the no. of available components that remained in the store by subtracting the no. of the components that was selected in each order from the last available no. of it.

7.10 Calculate the total price for any order:

After confirming the order, the system makes addition operation that adds the price of each piece in the order to each other to view the total price.

7.11 Generate date and time to receive the order:

After confirming the order, the system generate new date and time that haven't been selected before during the office hours.

7.12 Generate confirmation report for any order:

If the user confirmed his order, he would receive a receipt that includes the product name, place, quantity and price for each item in the cart, the total price, date and hour.

8. Interface requirements

8.1 User interfaces:

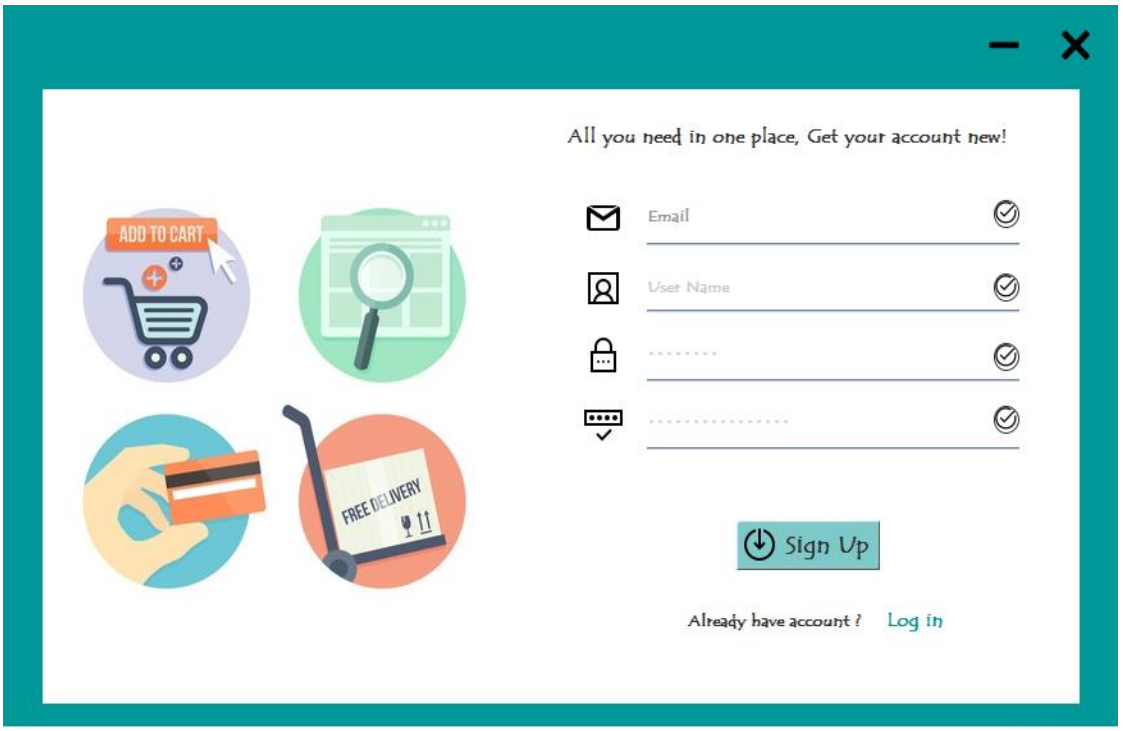

Figure 3 Registration Page

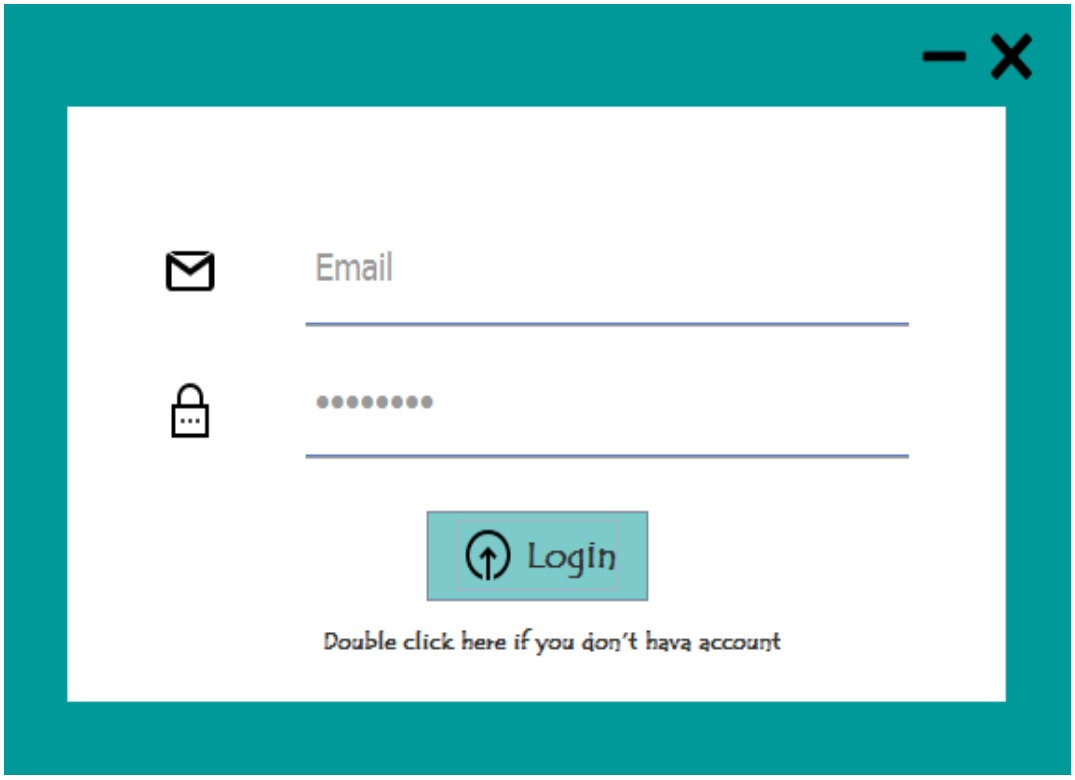

Figure 4 Login Page

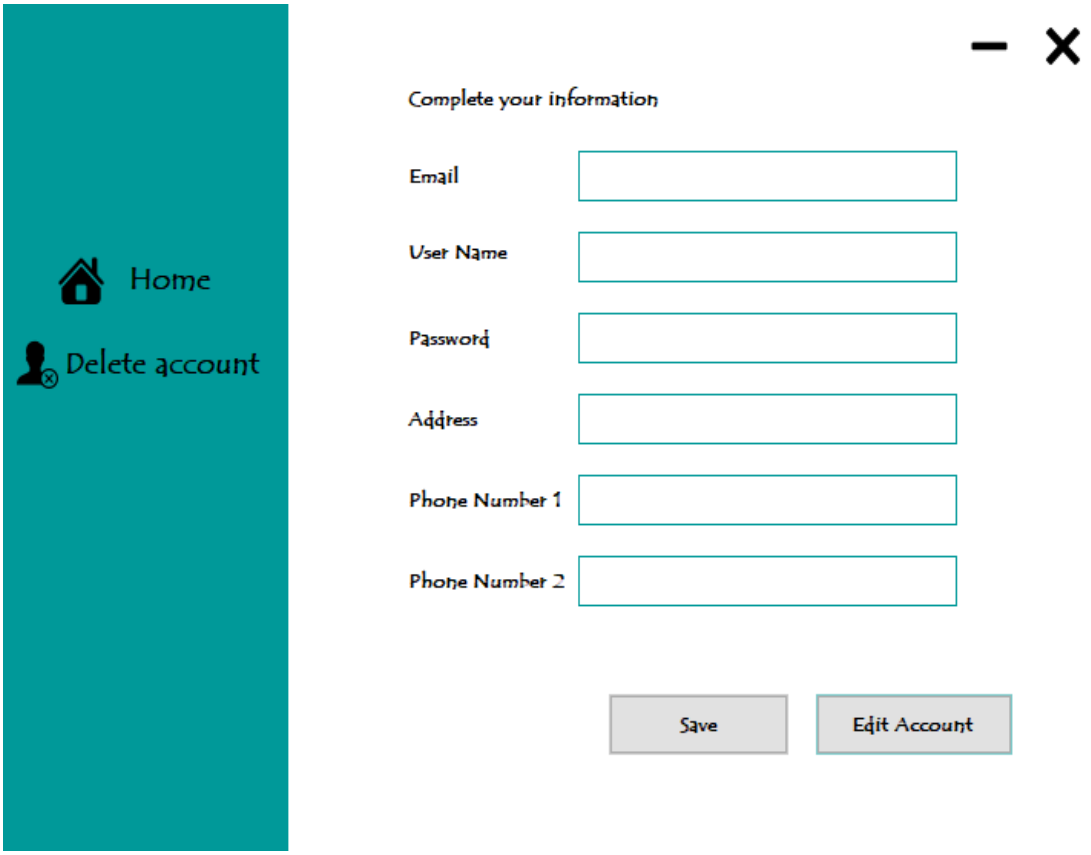

Figure 5 Account Page

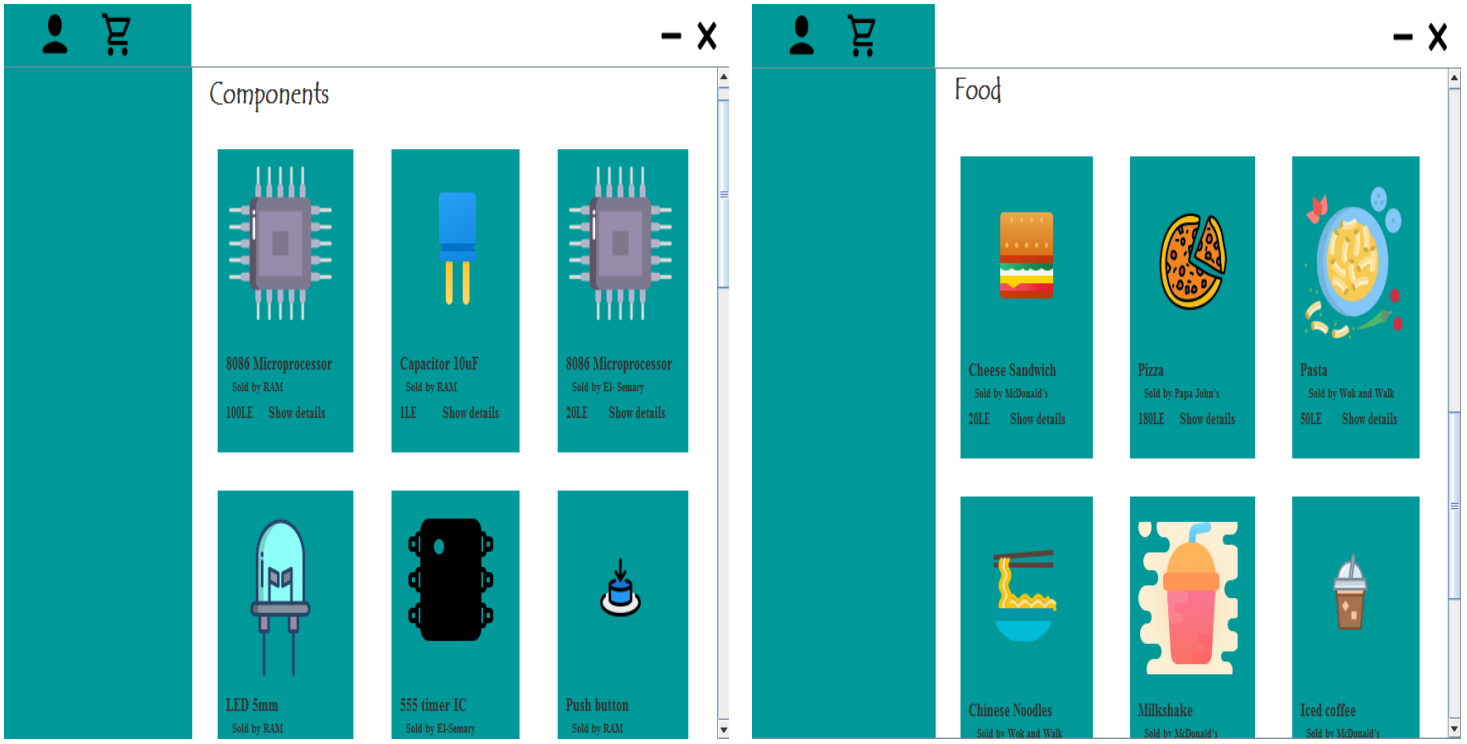

Figure 6 Home Page

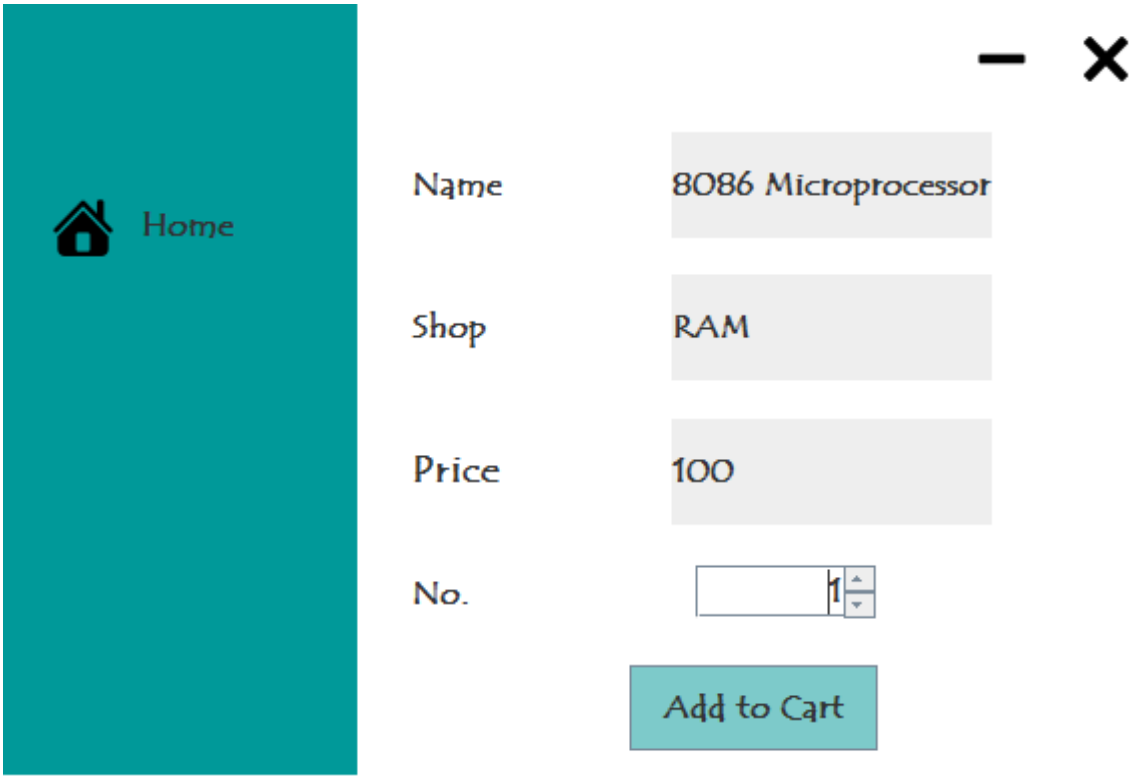

Figure 7 Selecting Items Page

Figure 8 Cart Page

9. Non-functional requirements

9.1 View order's data

- Opening the receipt.

9.2 Receive the payment:

- Cash payment.

9.3 Availability:

- The system should be available during working hours.

9.4 Security:

- No one can access the system from outside the company

10. System Models and Diagrams

10.1 ERD Diagram

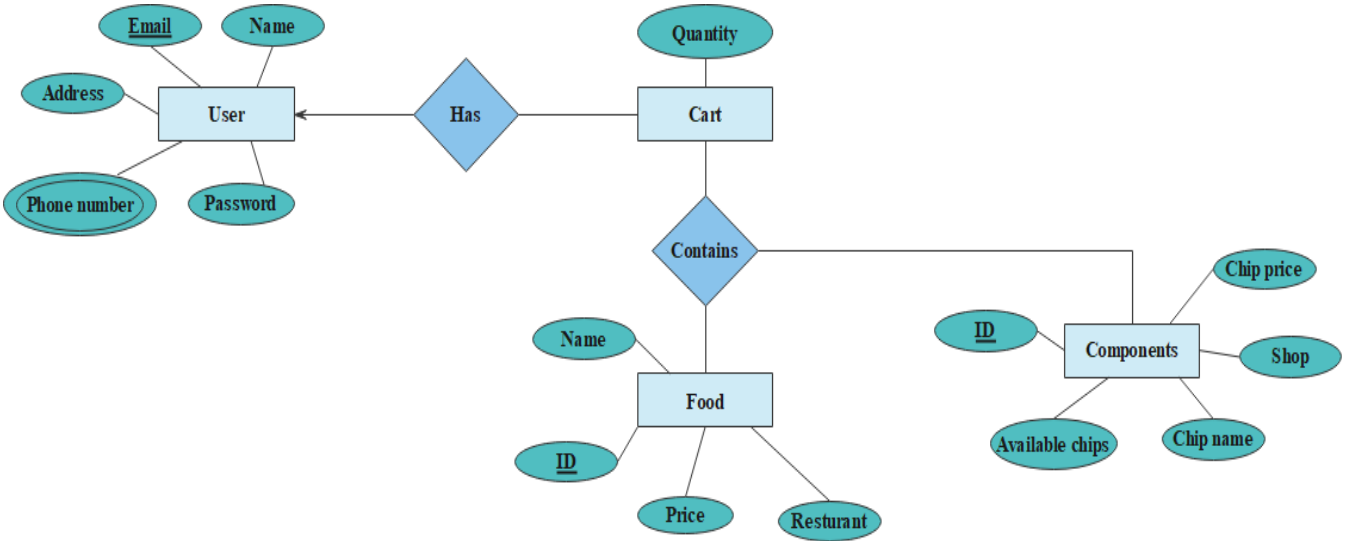

Figure 9 ERD Diagram

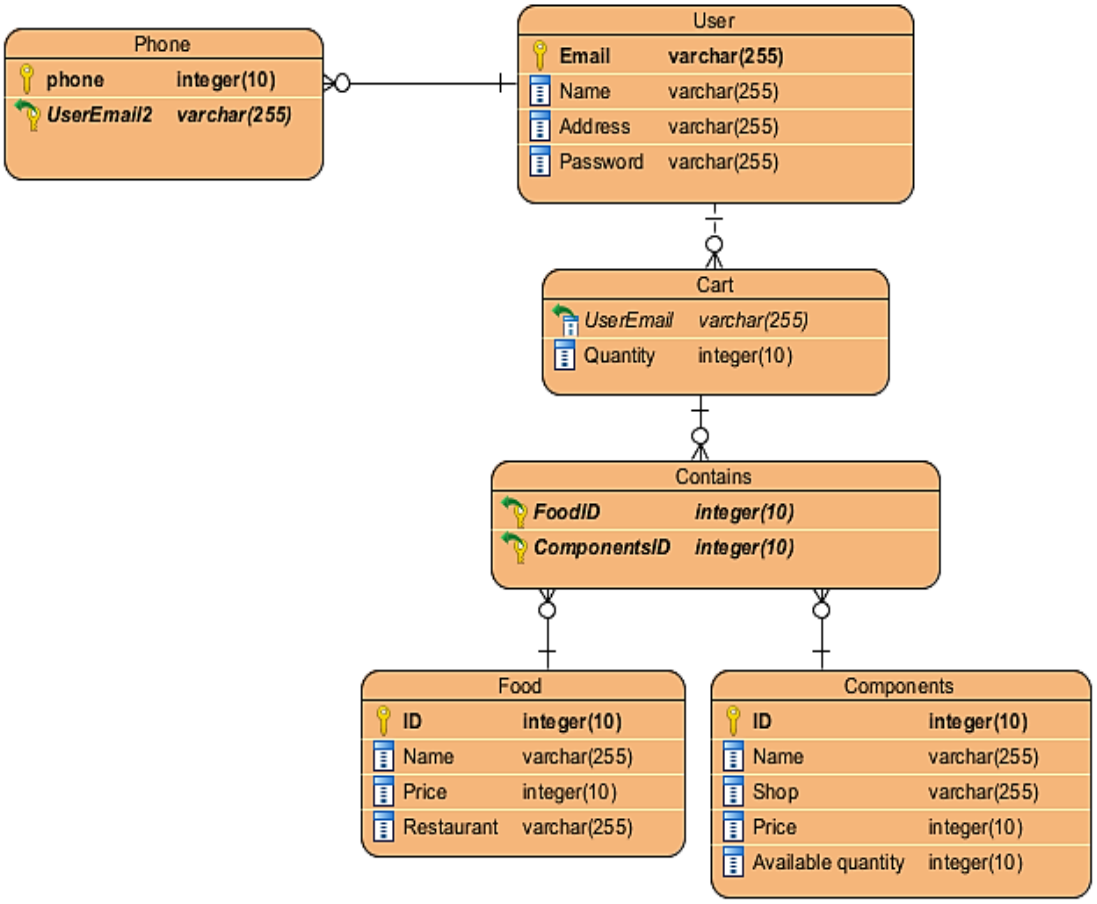

Figure 10 ERD Tables

10.2 DFD Diagram

Context Level

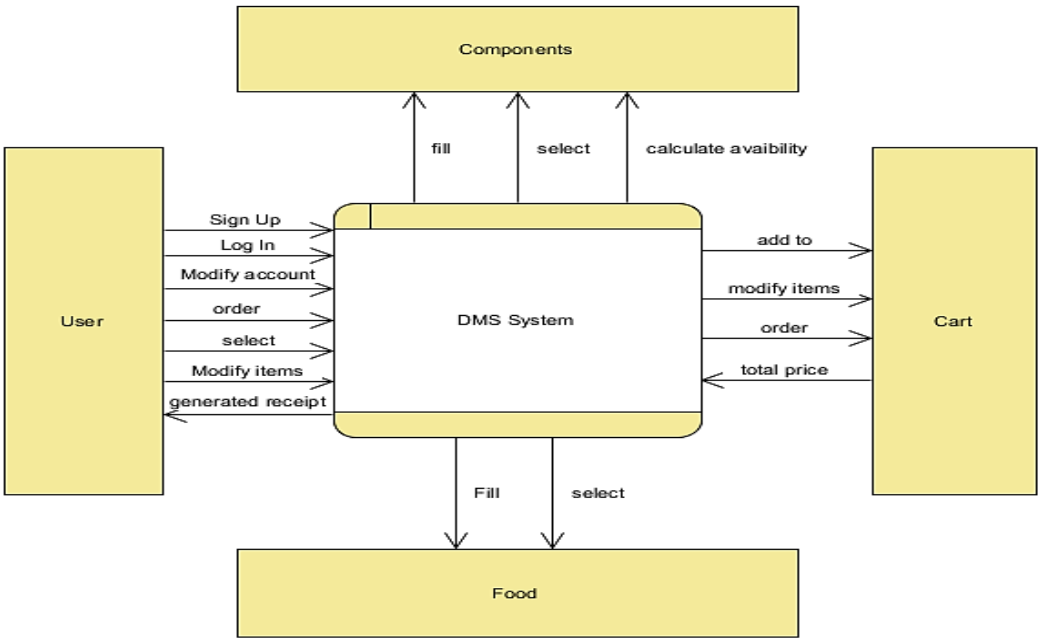

Figure 11 Context level DFD

Level 1

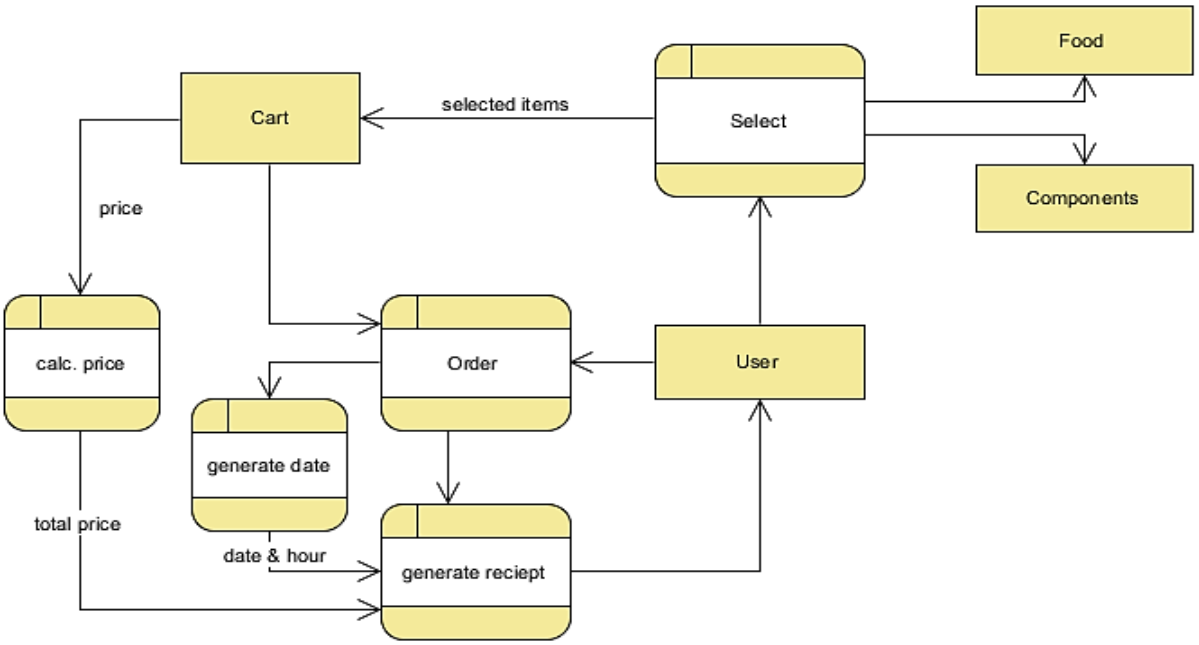

Figure 12 Level 1 DFD

Level 2

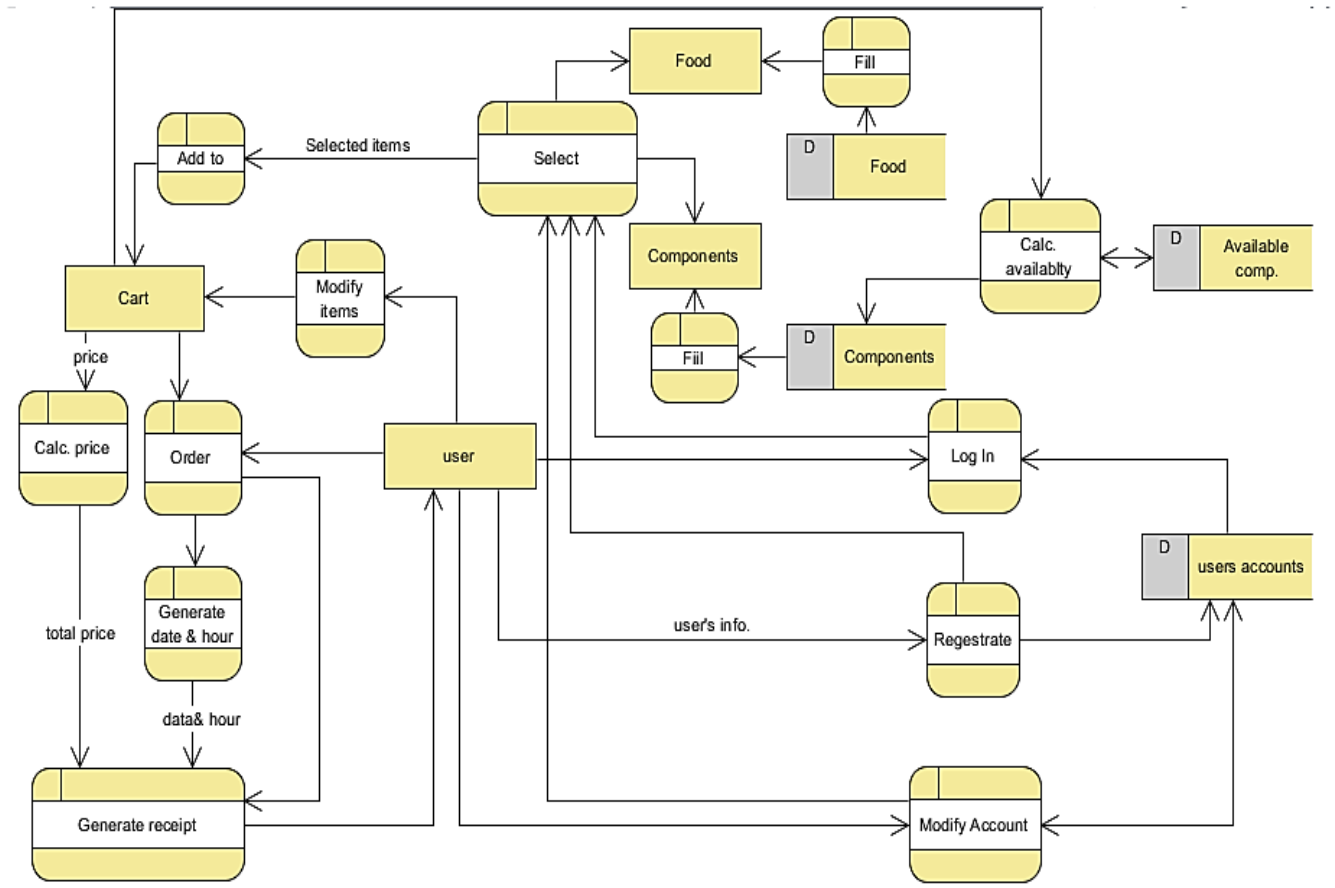

Figure 13 Level 2 DFD

Data Dictionary

1. Selected Items:

Name	Selected Items
Alise	The products that has been ordered by the user
How /Where	User select the item(input) Save selected items in database Fills the order(output)
Description	Name+ Shop +Price + Quantity
Format	Object String

2. User's info:

Name	User's info
Alise	Information for new users
How /Where	User enter information(input) Save information in database Log in to the System (output)
Description	Email +User name +Password+ Confirmed Password
Format	Object String

3. Price:

Name	Price
Alise	Price of each item that was selected
How /Where	The price of each item in the order (input) Calculate the price of User's order The total price(output)
Description	Number
Format	Object Integer

4. Date & hr:

Name	Date & hr
Alise	Date and time that the order will arrive to client
How /Where	The generated Date & hour (input) Save Date & hour items in database Send it back to the client(output)
Description	(day/month/year)+ Hour
Format	Object Integer

10.3 Use Case Diagram

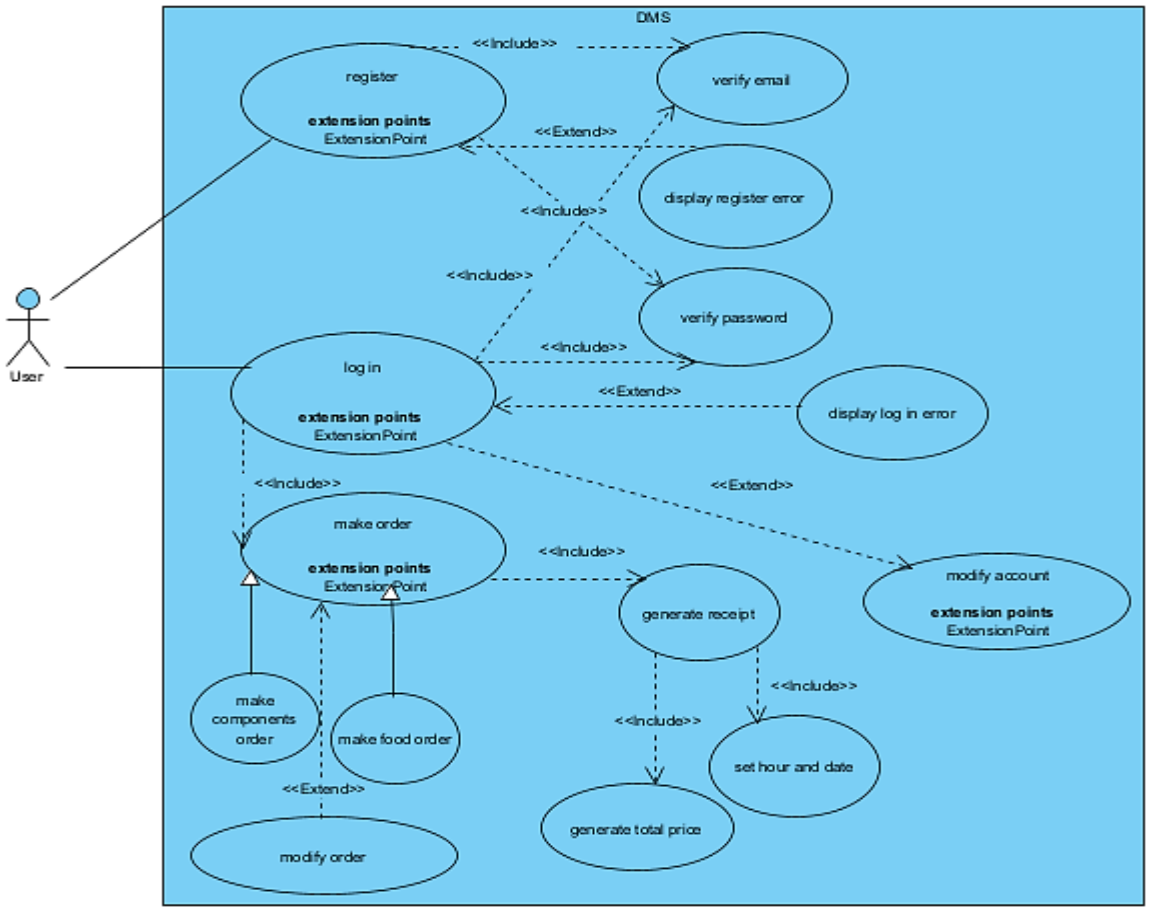

Figure 14 Use case Diagram

10.4 Class Diagram

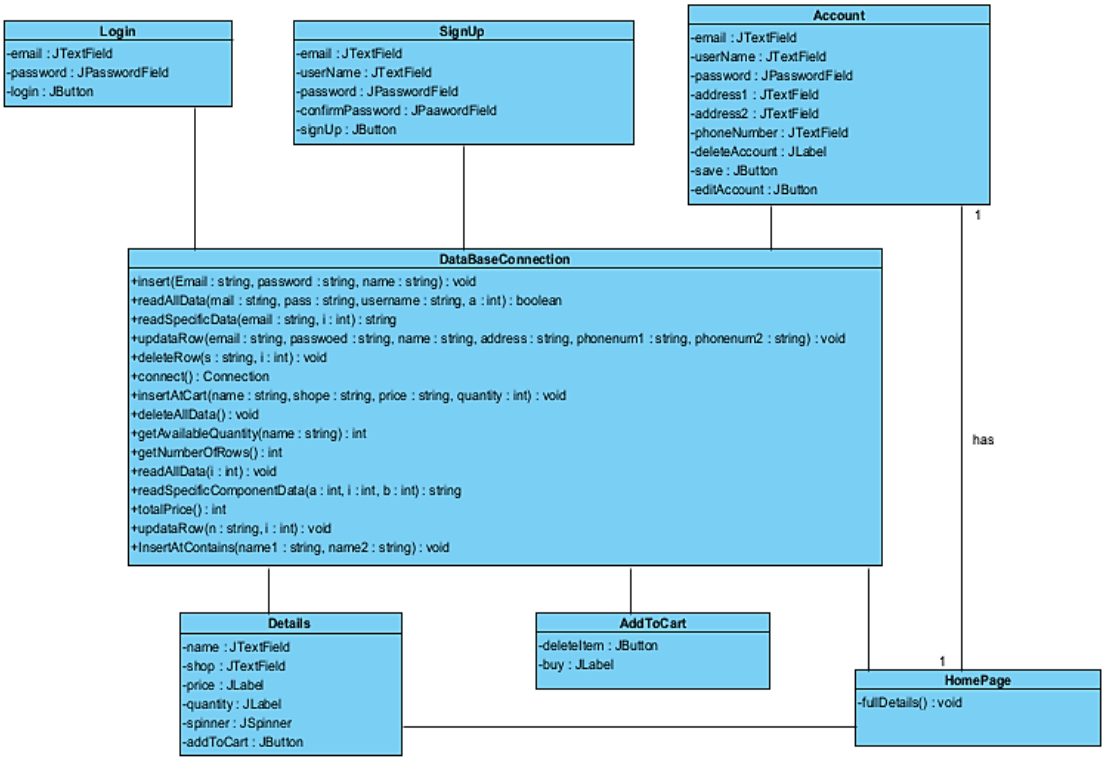

Figure 15 Class Diagram

10.5 Sequence Diagram

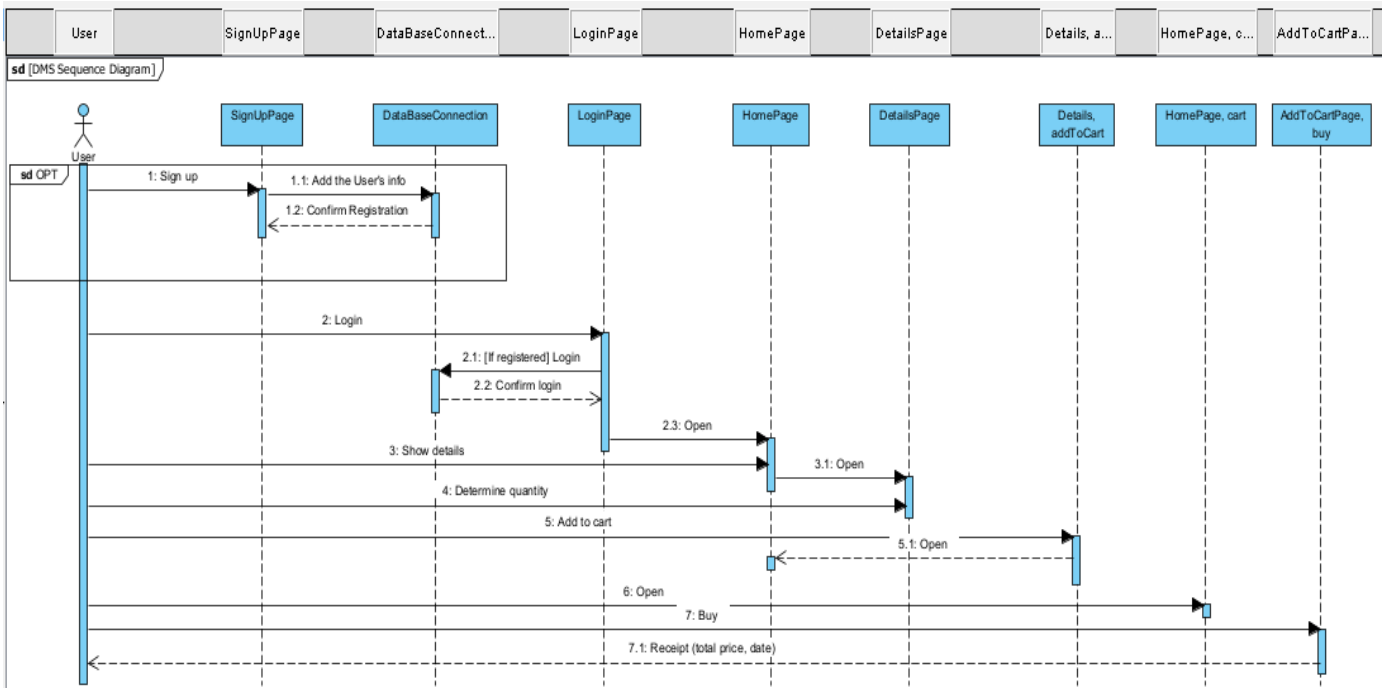

Figure 16 Sequence Diagram

11. System Evolution

- The system should be able to work on different operating systems.
- It should work properly on devices with low specifications. Only the server on which it's installed will be powerful.
- The outline of the generated certificates and reports may be subjected to changes.

12. Time Plan

Milestone	Description	Release Date
M1	**ERD Diagram**	**November 18, 2021**
M2	**1st version of SRS**	**November 20, 2021**
M3	**DFD Diagram**	**November 24, 2021**
M4	**2nd version of SRS**	**November 26, 2021**
M5	**Log in &Registration pages**	**December 3, 2021**
M6	**Use Case Diagram**	**December 24, 2021**
M7	**Class Diagram**	**January 1, 2022**
M8	**Sequence Diagram**	**January 5, 2022**
M9	**3rd version of SRS**	**January 7, 2022**