THE STATE UNIVERSITY OF ZANZIBAR SCHOOL OF NATURAL AND SOCIAL SCIENCE DEPARTMENT OF COMPUTER SCIENCE AND IT

TUNGUU CAMPUS

COURSE CODE:	***INF 2215***
COURSETITLE:	***WEB DEVELOPMENT***
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ASSIGNMENT TYPE:	***INDIVIDUALS***
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INTRODUCTION

1.1 INTRODUCTION AND BACKGROUND

- For a long period of time agriculture sector has been considered as the backbone of the country economy. But it has been faced with different challenges including Perishable

of agricultural products either on their way to the market or before they reaching the market.

- That has made me to come up with the solution for the aim of minimizing the problem or to eliminate it once and for all.

1.2 PROBLEM STATEMENT

- Loss of perishable of agricultural products such as vegetables, potatoes as well as fruits has been the challenge that has been faced Agriculture sector, thus been caused by various reasons such as absence of the reliable markets which it can also lead to spoilage of the goods and Business people as buyers of those products from farmers.

1.3 SIGNIFICANCE OF THE PROJECT

- The project aims at reducing if not totally eliminating the problem of spoilage of agricultural products either after reaching the market or before reaching the market, that will lead to the following significances;

  It will lead to low risk of perishing of agricultural products either to the farmer or the buyer.

  It will lead to an increase in farmer's financial status.

  It will encourage agricultural activities especially farming.

  It will help to reduce cost (cost of transportation to both farmers and buyers will be reduced since the product will be directed to the market as the buyer will always request the luggage direct from the farmers and not from the middle men).

  It will help to increase government revenues.

  It will help to reduce cost(cost of transportation to both farmers and buyers will be reduced since the buyers will be received the luggage from the farmers direct, but also the buyer will always request the luggage/products according to his/her demands related to the market.).

PROJECT OBJECTIVES

MAIN OBJECTIVES

- To solve the problem by creating a system that will make easier for the Agricultural products to reach the market at the right time, at the right place(market) and to the right people(buyers) even with a less cost aside from Transport cost.

SPECIFIC OBJECTIVES

- To create a web-based system that will enable farmers and buyers to contact each other and make easier for them to make an agreement on purchasing of agricultural products

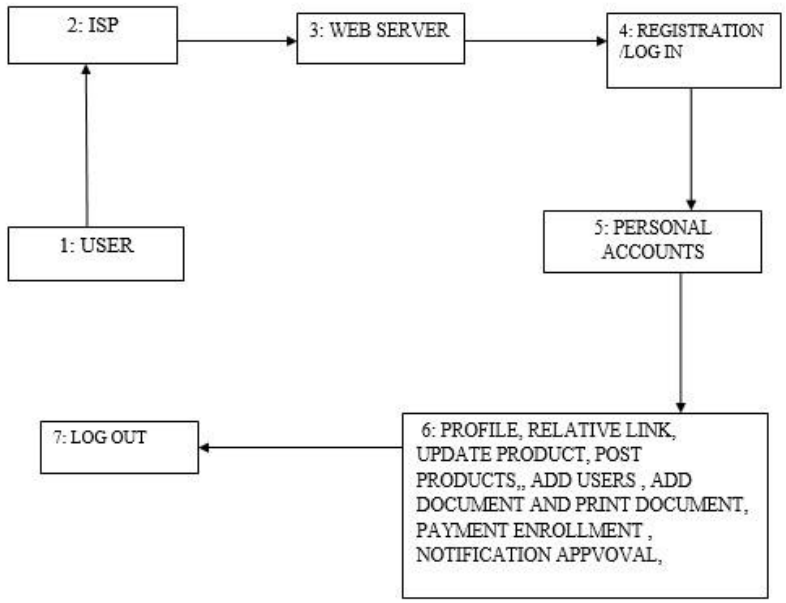
LITERATURE REVIEW

2.1 EXISTING SYSTEMS

- The idea for perishable goods marketing system is not something new. There are available websites that allow farmers and buyers to interact each other. But in the case of direct purchasing of perishable agricultural goods between farmers and buyers this system is what deals with. There is no system which can perform as this system does.

2.2 PROPOSED SYSTEM

- To overcome the drawbacks of the existing system, the proposed system has been evolved. This project aims to facilitate quick access to relevant content found in the Internet



SYSTEM DEVELOPMENT METHODOLOGY

3.1. SYSTEM DEVELOPMENT METHOD.

- The methodology to be used on the proposed system is **Prototyping model**.

Why prototyping model?

In prototyping, the customer is presented at a very early stage with a working version of the system. (It may not be a complete system, but it is at least part of the system and it works.)

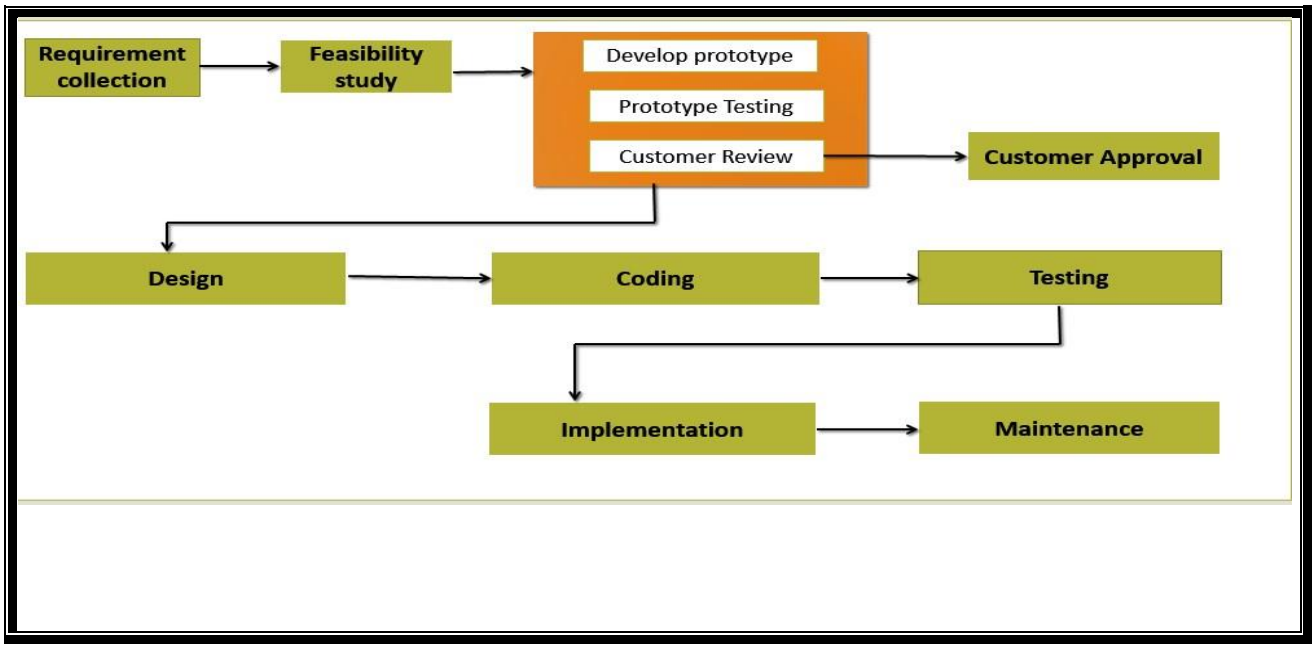
They can check that it does what they want, or specify modifications. The developer amends the system and demonstrates it again and again until the system end. In this Prototype Model before designing phase, a prototype is developed, tested, reviewed and approved by the supervisor, after that design will be ready for coding, testing, installation and maintenance will takes place

Thus the main purpose of prototyping is ensuring that the user's needs are satisfied

The advantages of the Prototyping Model are as follows

- Increased user involvement in the product even before its implementation.
- Since a working model of the system is displayed, the users get a better understanding of the system being developed.
- Reduces time and cost as the defects can be detected much earlier.
- Quicker user feedback is available leading to better solutions.
- Missing functionality can be identified easily.
- Confusing or difficult functions can be identified.

BLOCK DIAGRAM FOR PROTOTYPE MODEL SDLC



FUNCTIONAL AND NON-FUNCTIONAL REQUIREMENTS FOR THE PROPOSED SYSTEM.

FUNCTIONAL REQUIREMENTS

i. The customer must **Register** for crating the own account and login by using Username and **Password** and **User group**. ii. The farmer can view buyers and make a contract with a buyer whom he/she get satisfied by the offer that buyer offered.

iii. The buyer can view farmers and make a contract with a farmer whom he/she get satisfied by the products that farmer reviewed.

iv. The system will be show updated news concerned products and prices on the system farmer homepage.

4.1.2 NON-FUNCTIONAL REQUIREMENTS

The non-functional requirements are constraints upon the system behavior or quality attributes of a system.

Consequently, the non-functional requirement of PGMS are that the system;

i. Should be developed to be simple and efficient for the end users and also should be easy to understand

ii. Shall be able minimize the rate of errors generated by users iii. Should perform calculations and provide feedback quickly iv. Shall be compatible to any hardware

v. Should be able to upgrade without disturbance to the service

Nonfunctional requirements deal with the characteristics of the system such as maintainability of the system, portability of the system, usability of the system, etc. Non-functional requirements of management system include:

- **Usability**

The system user interface will be appropriate to user since there will be information on each task explaining its functions.

- **Appearance**

The system will have attractive appearance such as less complicated colors. The system will have the appearance that aren't hard to comprehend.

- **Availability**

The system will available for service when requested by end-users of the system.

- **Performance**

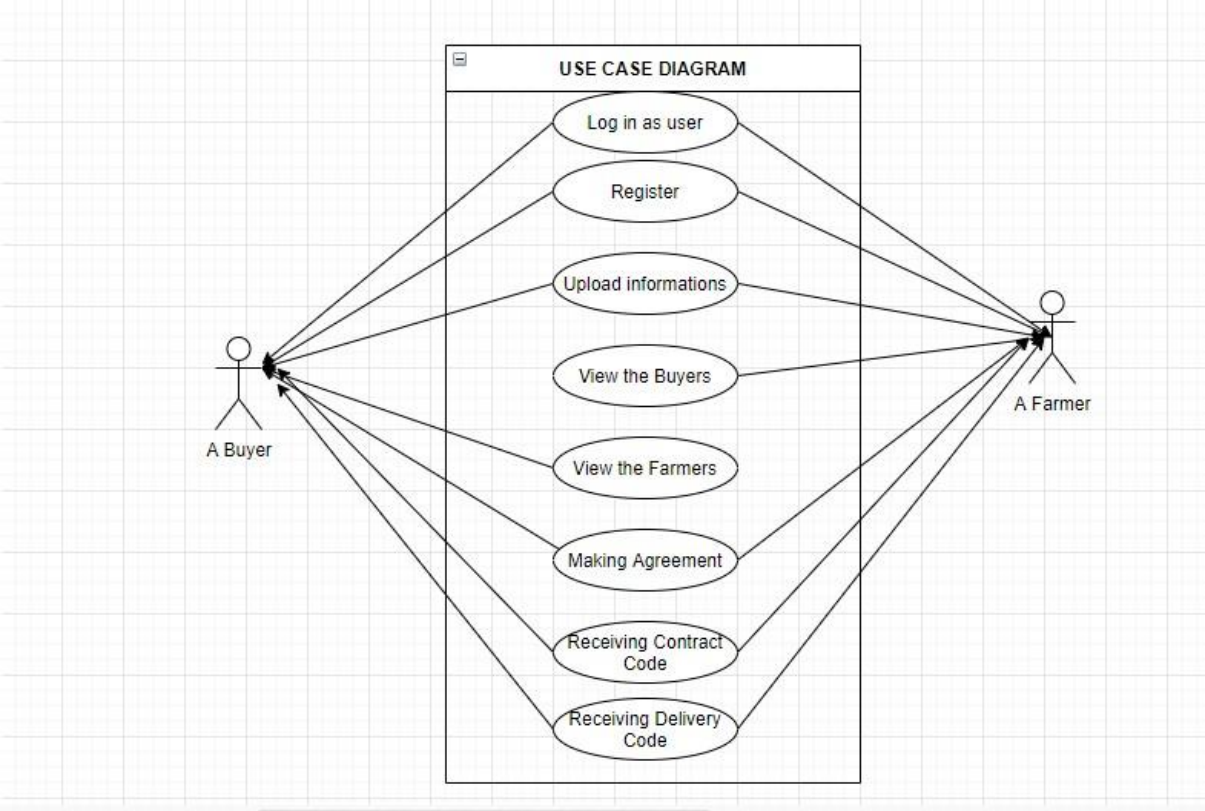
The system will not consume much time when loading pages.

- **Maintainability**

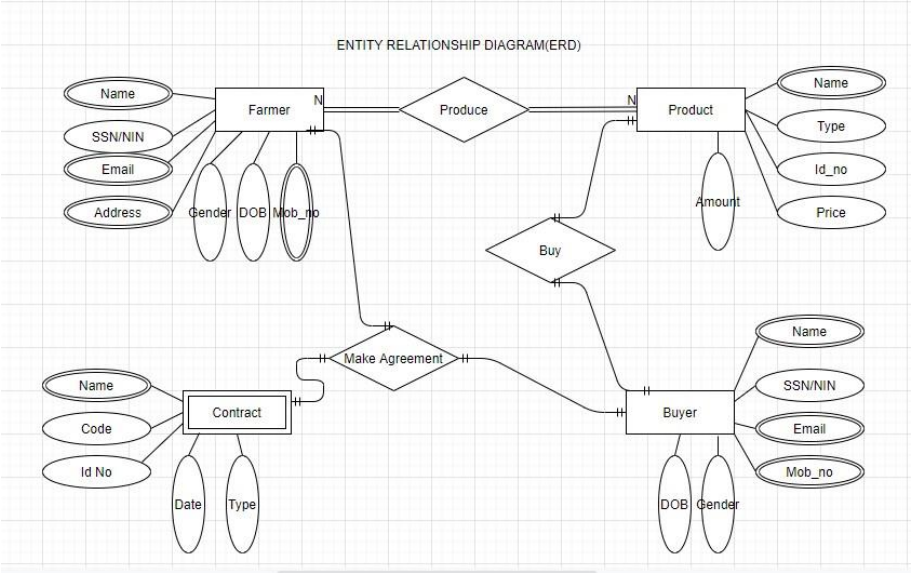
The functionalities of the system will be easily modified. The system will be easily corrected.

CHAPTER 5 SYSTEM DESIGNING

5.1 USES CASE DIAGRAM



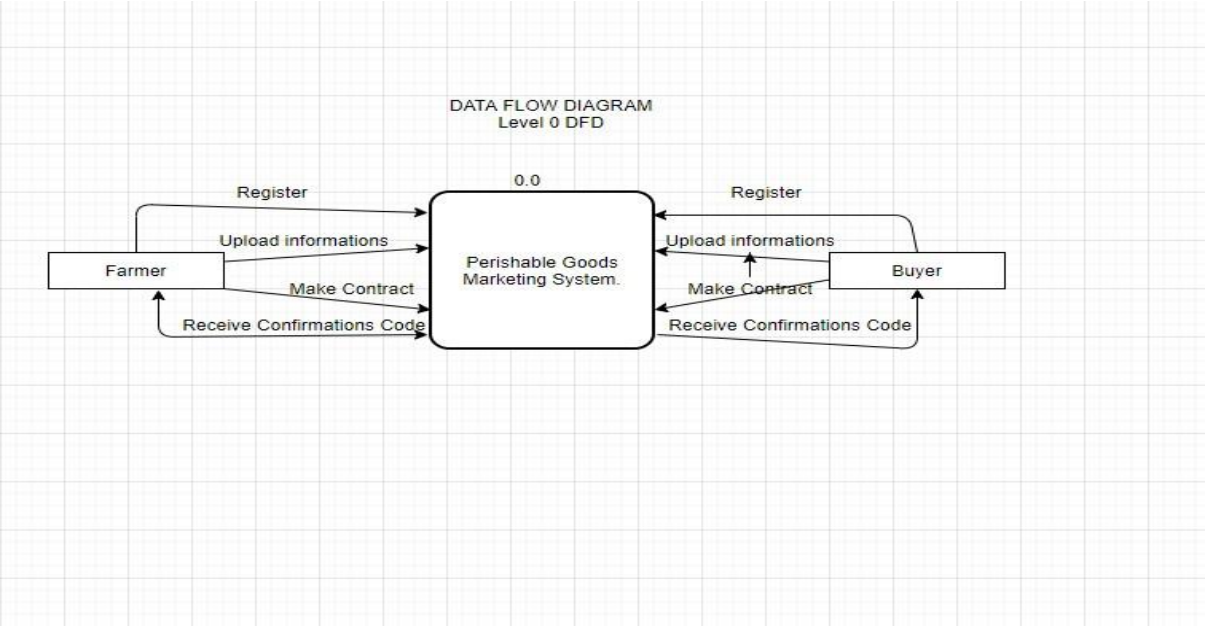
ERD DIAGRAM



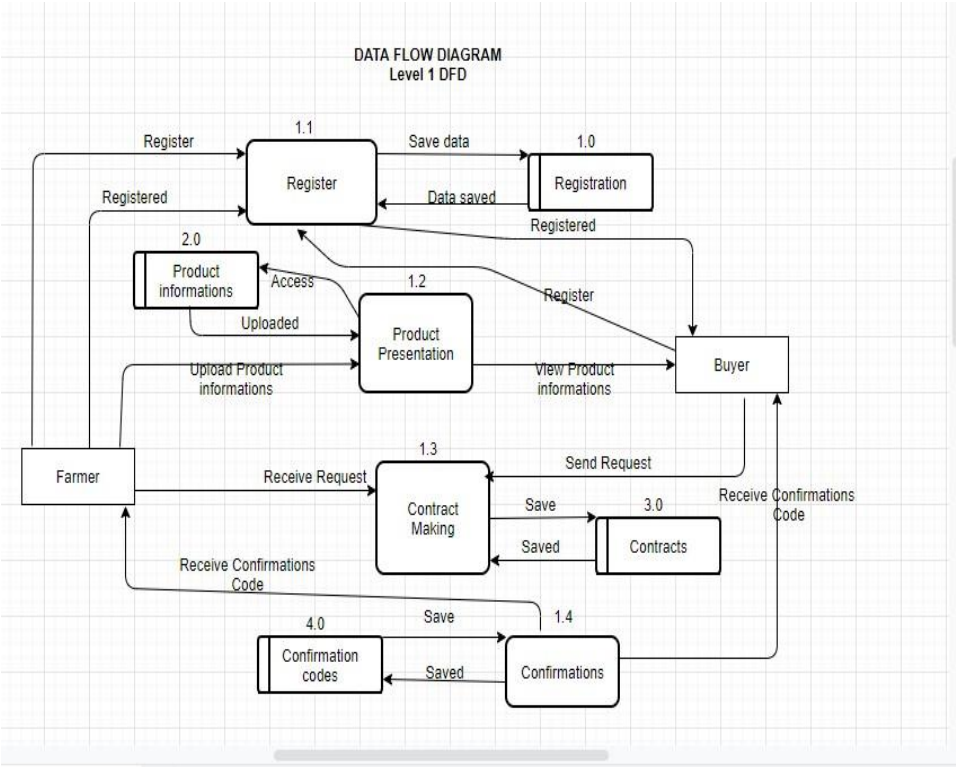
DATA FLOW DIAGRAM

5.3.1 DATAFLOW DIAGRAM (LEVEL 0).

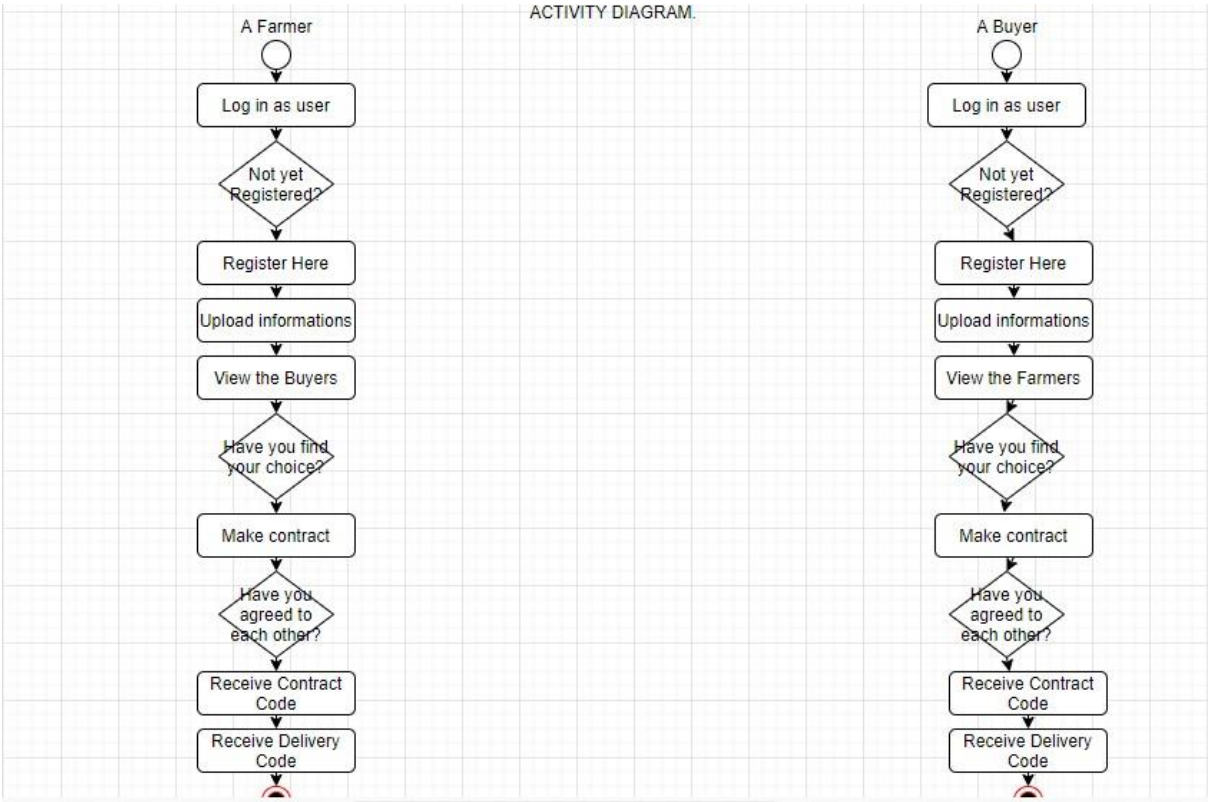
Figure. 1



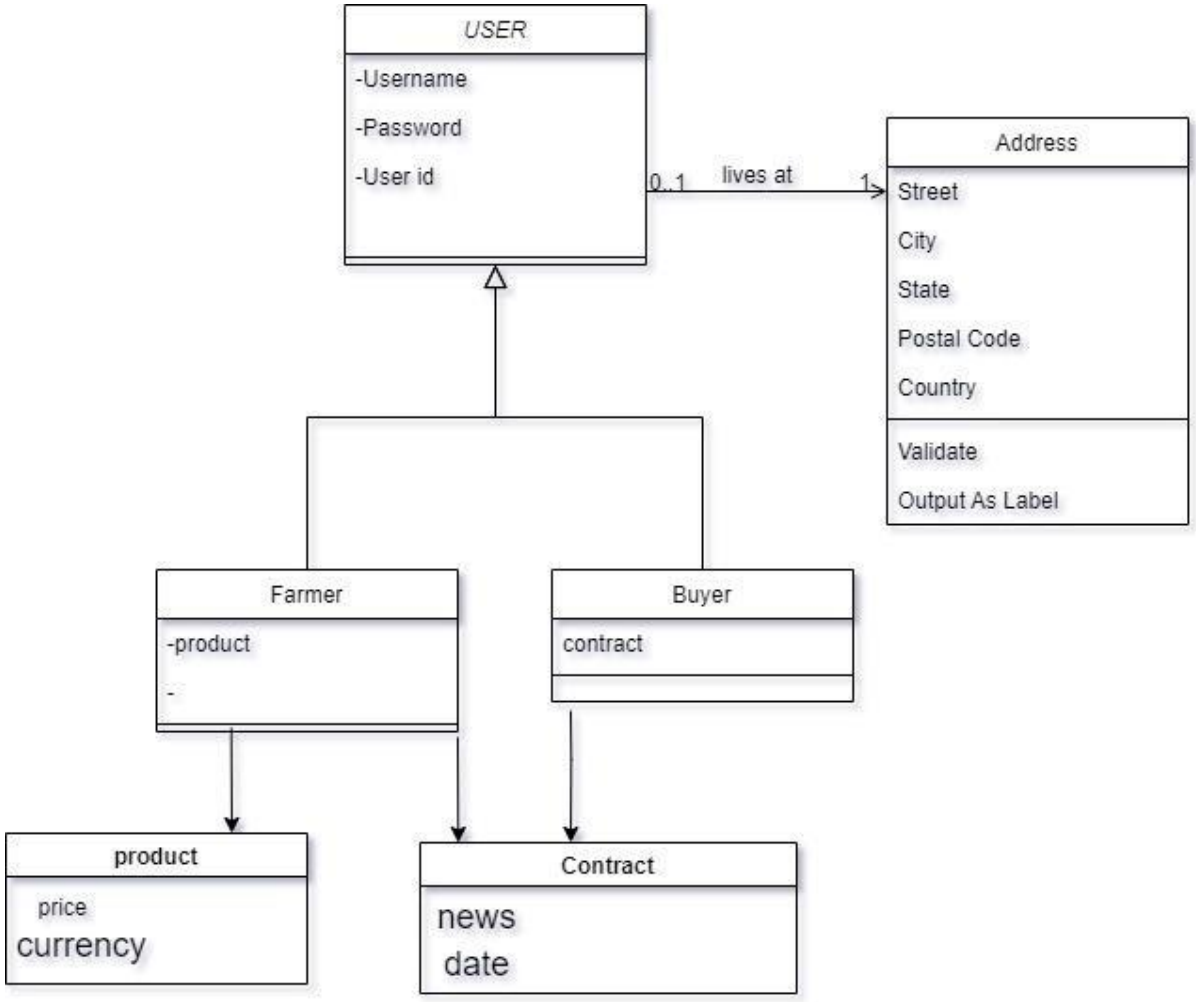
DATAFLOW DIAGRAM (LEVEL 1).



5.4 ACTIVITY DIAGRAM

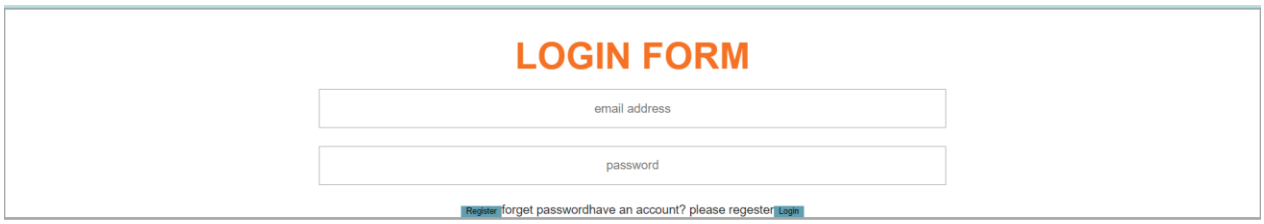


CLASS DIAGRAM



5.5 INTERFACE DESIGNS

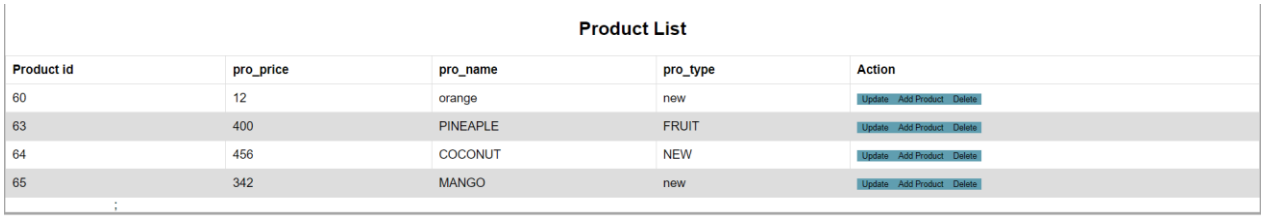
Login form: This is the interface which used/ enable user to login to the system.



Dashboard/Buyer Home Page: After login to the system display the dashboard that can help to make decision or to deal with the specific page one after another.

Dashboard/Farmer Home Page: After login to the system display the dashboard that can help to make decision or to deal with the specific page one after another.

2



Product List

Product id	pro_price	pro_name	pro_type	Action
60	12	orange	new	Update Add Product Delete
63	400	PINEAPLE	FRUIT	Update Add Product Delete
64	456	COCONUT	NEW	Update Add Product Delete
65	342	MANGO	new	Update Add Product Delete

Farmer list

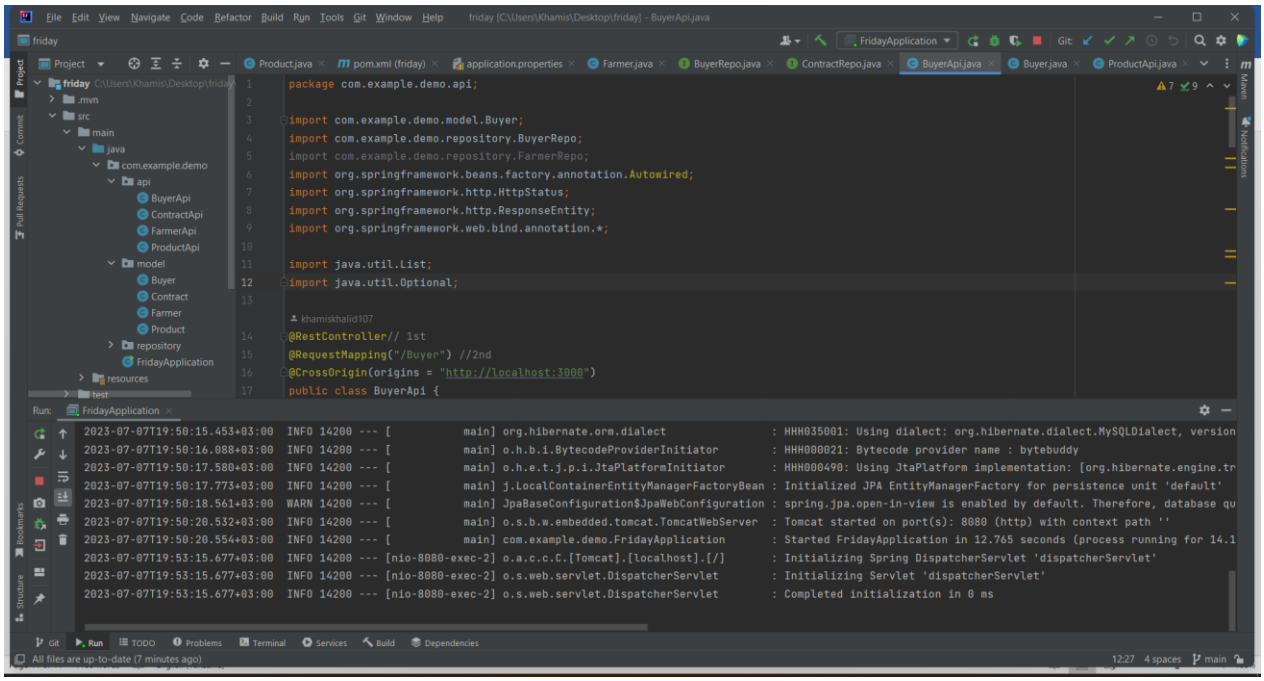
Farmer List

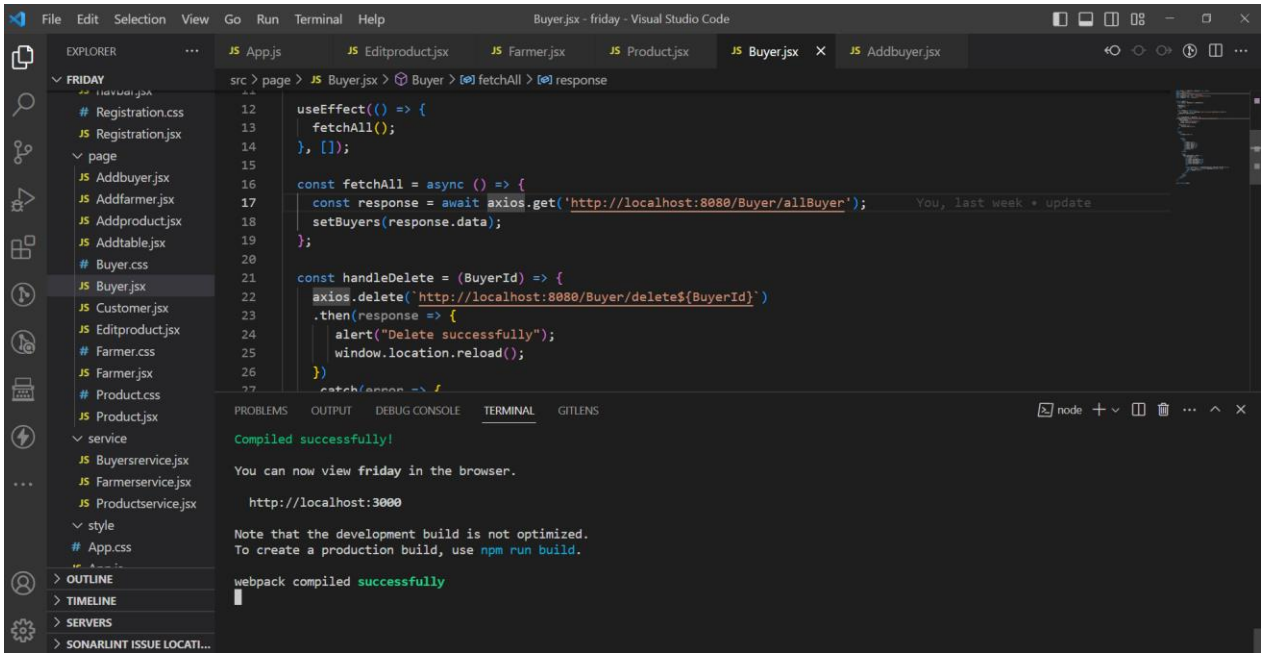
Farmer id	F_Name	F_Address	F_Gender	F_Email	Action
1	daifat	mel tano	male	daifat@gmail.com	Delete Add Farmer Update
2	is hak	fuoni	male	is hak @gmail.com	Delete Add Farmer Update

User can change its profile anytime or update his details;

Buyer List

Buyer id	Buyer Mobile	Buyer Email	Buyer Gender	Buyer Name	Action
1	717818728	kamis@gmail.com	male	lee	Delete Add Buyer Update
2	7178187	abuu@gmail.com		said	Delete Add Buyer Update





SYSTEM IMPLEMENTATION

TECHNOLOGY USED TO IMPLEMENTATION Implementation

Technology used to implement

- JAVA SCRIPT
- HTML
- CSS
- SPRING-BOOT(BACK-END)
- ANGULAR(FRONT-END)