CHAPTER – 1 INTRODUCTION

1.1 Project Overview:

- To buy and sell the fruits online with no brokerage.
- Encouraging organic farming by supporting the organic fruits growing farmers.
- By providing competitive amount for the fruits in the market and selling with competitive price to the buyers the healthy fruits.
- In between storing the fruits in cold storage and quality check in all phases.

1.2 Objective:

- The farmers are registering into our portal and if the farmer is growing the fruits in **organic way** (Organic farming certified) **only be allowed to register** into our portal.
- We are going to buy their fruits by doing the quality check and it will be stored in cold storage and once again the quality check will be done and shipping should be done by Seller.
- The money will be collected from the **seller** based on the quantity of items sold.
- To encourage organic farming, healthy life, to give good price to our farmers efforts and to learn the complete web application development life cycle is the main objective

CHAPTER – 2 REQUIREMENT ANALYSIS

2.1 Existing and proposed system

2.1.1 Existing system

The brokerage become the biggest problem for the farmers to sell their product considering this in mind and to encourage organic farming we are providing this software.

2.1.2 Proposed system

Our Platform provides services like buying and selling fresh organic fruit directly from the organic farms to the customers doorstep by paying the amount mentioned by the farmers.

In our platform the farmers should get a membership in order to sell their products.

The membership cost is of low price (Farmer's friendly) depending on the quantity of the product and they get access to our sell section

When it comes to buyer section, they can buy the fruits listed by multiple farmers by seeing the description and cost of the fruit and it will be delivered to the customers.

Advantage:

- No brokerage
- Fresh fruits (Organic certified by the Government)
- Easy access to platform for all the farmers and clients
- Direct fetching from the farms -> delivery to customers.

2.2 Tools and Technologies used

2.2.1 Tools

• Visual Studio Code:

Easy to write the codes because of the intelligence which makes the coding easier And also, it provides multi language support and support multiple-platforms

• XAMPP:

A cross platform web-server, which helps us to test our application on a local server before deploying it, this feature reduces the future risk of our application

2.2.2 Technology

- For Backend PHP is used to write server-side script using php easily and effectively
- **AngularJS**: Used in validations

2.3 Hardware and Software requirements

2.3.1 Software requirements

• IDE: Visual Studio Code

XAMPP

2.3.2 Hardware requirements

• Processor: Dual Core or higher

• RAM: Minimum1GB

• Hard disk space: Minimum 1 GB

• Operating System: all operating systems

2.4 Programming Languages:

• Front-end: HTML, CSS, JS.

Database: mySql.Back-end: PHP

Web – Server: ApacheFramework: AngularJS.

CHAPTER – 3 SOFTWARE REQUIREMENTS SPECIFICATION

3.1 Introduction:

This Document provides guidelines regarding the components used to build our software and also it helps to study the software when new developer wants to modify this software and by looking at this document, we get the clear-cut idea of the clients' needs and whether our software is going to fulfil all those needs or not

It will be used by the designing team to design the client's requirements in a easier way So that it can be implemented easily without any dilemma.

It can be further used when we want to change the tech-stack and want to build using that stack it will be easier because we have this document. We can easily adopt the changes without chaos

3.2 Functional Requirements

• ADMIN:

- Admin has complete power to handle the database. He/she can view the Farmers (Sellers) and Buyers complete information's.
- They have all the access to the software

• FARMER(SELLER):

The farmer is the seller. He can sell the fruits he has grown. The farmer must be an organic farmer. Once he gets in to our platform to sell his fruits, he/she has to register himself for further process.

• Registration:

- 1. User Name
- 2. Address
- 3. Phone number
- 4. Create Password
- 5. Confirm Password

• Login:

- 1. User Name
- 2. Password

Once the Registration and login process is done, the sell section will be activated for the sellers.

• Sell:

- 1. Fruit Name
- 2. Fruit Description
- 3. Fruit Image
- 4. Price
- 5. All their selling's will be listed

• Buyer:

Buyer is person who buys the fruits from our platform. He/she can view the fruits in the platform but he/she cannot buy the products before registration. Once he/she clicks the buy now or add to cart button that located below the fruits image, it will open the registration/login from if they are not registered/logged in.

• Registration:

- 1. User Name
- 2. Address
- 3. Phone number
- 4. Create Password
- 5. Confirm Password

- Buy:

- 1. Select Quantity
- 2. Place Order
- **3.** Cash on Delivery Only

Login

- 1. User Name
- 2. Password

After that he/she can buy the fruits that he/she wish.

3.3 Non- Functional Requirements

Portability:

- Our software is portable in all the platforms
- So that we can reach maximum clients

Usability:

- User friendly given with instructions (How to use)
- So that it will be easier for the farmers to know our platform better

Reliability:

- Our Software is reliable that we not share our user information's
- We will provide additional security for user information's

Scalability:

• We are going to develop this software which is scalable to any number

Maintainability:

- We are going to maintain our website regularly for the smooth experience of our clients
- We maintain all the information's regularly, so that there is no threat and cyber theft
- By maintaining the website, we can maximize the life cycle of software and new changes in our application

Natural Interface:

• If there are any updating then there will be drastic updating, the users are not affected and their experience will be smoother.

CHAPTER – 4 ANALYSIS AND DESIGN

4.1 ER – Diagram

- The relationship between the entity and the attributes are clearly described here
- Using this we will normalize our relation



Figure-1: ER - Diagram

4.2 SCHEMA Diagram

- Description of the database is given
- We have six tables named ADMIN, SELLER, BUYER, BUYSELL, MANAGES, FEEDBACK.
- All relations are normalized

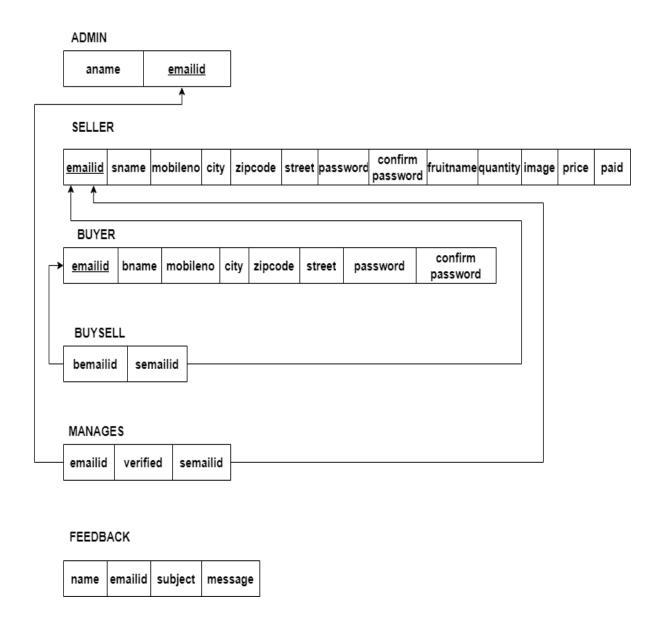


Figure-2: SCHEMA Diagram

4.3 Data Flow Diagram (DFD)

- To graphically document boundaries of a system.
- To provide hierarchy breakdown of the system.
- To show movement of information between a system and its environment.

4.3.1 Context Flow Diagram (CFD)

Context flow diagram is the Top-level data flow diagram.it only contains the one process node that generalizes the functions of the entire system in relationship to external entities.so with the help of below the CFD diagram shows how the process of our project contains.

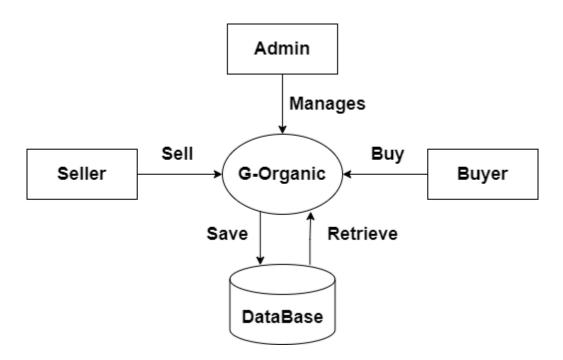


Figure-3: Context Flow Diagram (CFD)

4.3.2 DFD Level 1

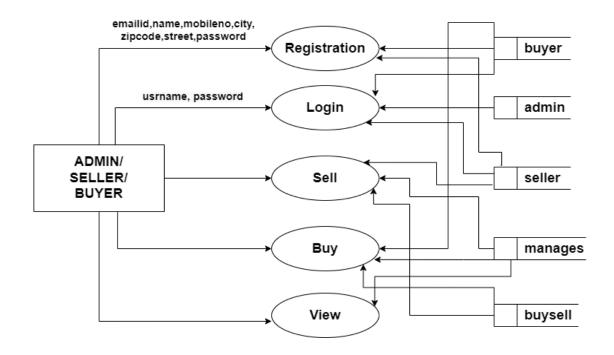


Figure-4: DFD Level 1

4.3.3 DFD Level 2 (Admin)

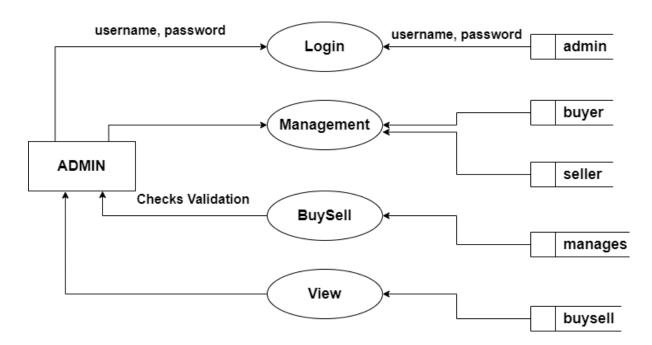


Figure-5: DFD Level 2 (Admin)

4.3.4 Level 2 (Seller)

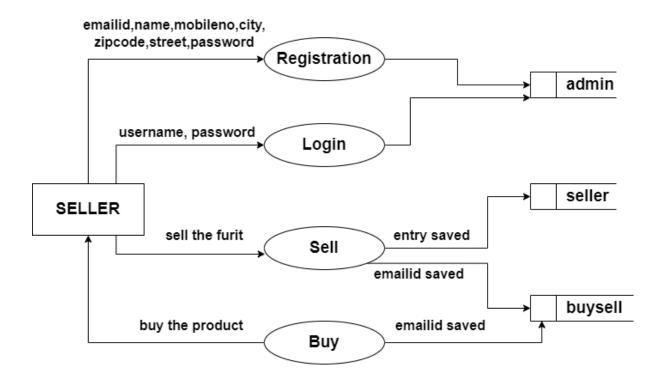


Figure-6: DFD Level 2 (Seller)

4.3.5 DFD Level 2 (Buyer)

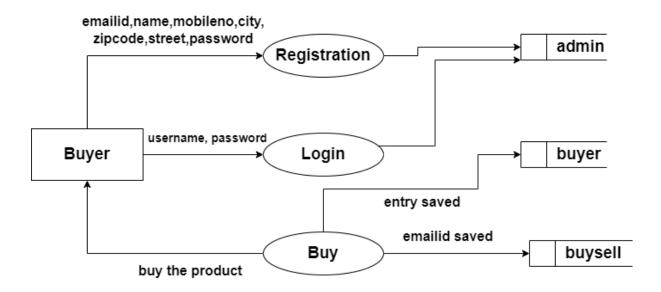


Figure-7: DFD Level 2 (Buyer)

4.4 Flow Diagrams

4.4.1 Seller

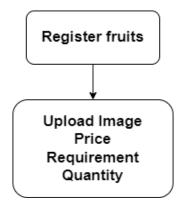


Figure-8: Flow Diagram (Seller)

4.4.2 Admin

Payment

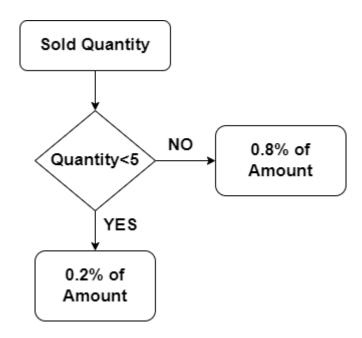


Figure-9: Flow Diagram (Payment)

Verify

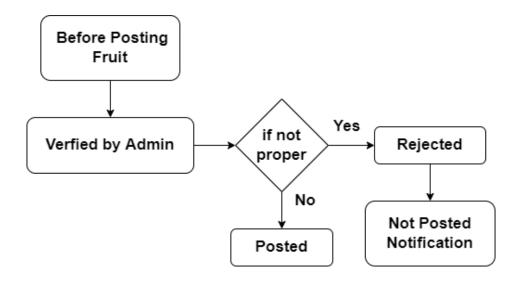


Figure-10: Flow Diagram (Verify)

Account Settings

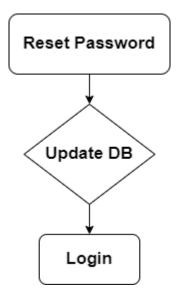


Figure-11: Flow Diagram (Account Settings)

Buyer

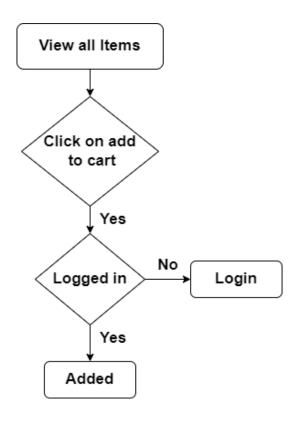


Figure-12: Flow Diagram (Buyer1)

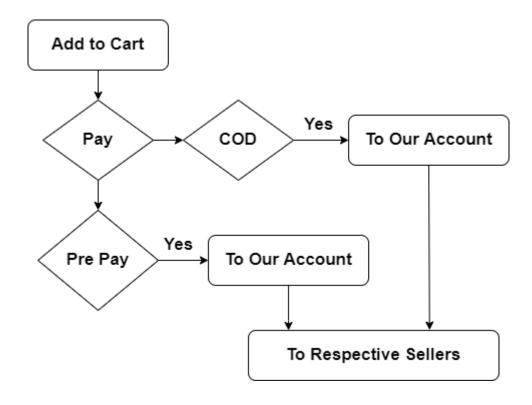


Figure-13: Flow Diagram (Buyer2)

4.4.3 Registration

Buyer

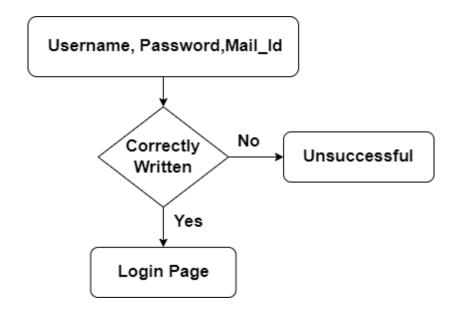


Figure-14: Flow Diagram (Buyer Registration)

Login

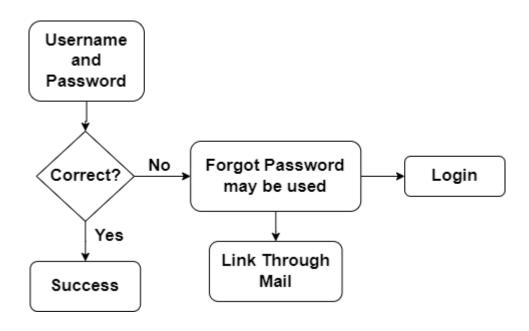


Figure-15: Flow Diagram (Login)

CHAPTER – 5 IMPLEMENTATION

5.1 Form Validation:

- By matching it with the patterns and validating it whether the actual input is also, same or not
- While Registering checking whether the user already exists or not
- We have used **preg_match(pattern, input)** for most of the fields validation
- Some of the directories of **AngularJS** are used

5.2 Layout Design:

- Used **Bootstrap** framework and built the responsive pages
- To make it attractive some of the additional **CSS** are used
- Body contents are done with **HTML**

5.3 Seller Inputs Validation:

- Admin will validate the products uploaded by the seller.
- Only after that the products were posted in our website

5.4 Cart:

- When the buyer shops in our site for his smooth experience we have provided the user-friendly UI's
- When they click on the add to cart a message will pop up saying "ITEM ADDED TO CART SUCCESSFULLY"
- If he tries to add that item once again then they will get a pop up saying "ITEM AREADY IN THE CART"
- By using PHP and JS it is achieved
- All the added items of the users will be displayed there they can increase the quantity and also, they can remove the product
- Then they get total amount to be paid and they can proceed further
- Where they have to fill all the details and once, they click on "I have agreed to terms and condition" then the place order will be enabled
- It is achieved using **AngularJS**.
- They can change their fruits in the cart any time.

5.5 Database Connection:

- Connecting with the database using **mysqliconnect(server, username, password, database)**;
- When all these parameters are properly given a secure connection will be established
- After performing all the tasks
- The connection will be closed using **close()**;
- Any problems in the connection related to database will be handled here

5.6 Shipping:

- We will send the required details of the buyer to the seller through mail
- After the buyer completes the order, we will get the commission based on the quantity of the products sold
- The seller will deliver the products and gets the payment

CHAPTER – 6 TESTING

We have followed the **manual testing approach** in which we are testing each module by providing all possible inputs to a field and we check whether our inputs are matching the expected results or not and it is recorded accordingly.

6.1 Registration form:

- If the user clicks on the register button without entering the required fields then it will be validated
- If there is a password mismatch then it also handled
- If we have the user entered email id already with us, it shows user already registered with us, it also handled
- We have some other checks to validate the inputted data from the user.

| Sl | Test Condition | Input | Expected | Actual | Test Result |
|----|----------------------|------------------|------------------|------------|-------------|
| No | | | Output | Output | |
| 1 | If user clicks on | No input | Please Fill out | Please | Pass |
| | Register button | | the Field. | Fill out | |
| | without entering all | | | the Field. | |
| | the required fields | | | | |
| 2 | If the password | Poor password | Please enter | Please | Pass |
| | doesn't met the | | Strong password | enter | |
| | conditions | | | Strong | |
| | | | | password | |
| 3 | If password | Password | Please enter | Please | Pass |
| | doesn't match with | | correct password | enter | |
| | repeated password | | | correct | |
| | | | | password | |
| 4 | If email id already | Existing emailid | User Already | User | Pass |
| | exists | | Exists | Already | |
| | | | | Exists | |

6.2 Login form:

- If the user clicks on the login button without entering the required fields then it will be validated
- All the fields are required in this, If the user avoids this then it will be validated.

| Sl | Test Condition | Input | Expected | Actual | Test |
|----|----------------------------|----------|-----------------|-------------|--------|
| No | | | Output | Output | Result |
| 1 | If user clicks on login | No input | Please Fill out | Please Fill | Pass |
| | button without entering | | the Field. | out the | |
| | username and password. | | | Field. | |
| 2 | If username is blank but | Only | Please Fill out | Please Fill | Pass |
| | password is entered. | Password | the Field. | out the | |
| | | Entered | | Field. | |
| 3 | If password is blank but | Only | Please Fill out | Please Fill | Pass |
| | username is entered. | Username | the Field. | out the | |
| | | Entered | | Field. | |
| 4 | If the username or | Password | Wrong user | Wrong | Pass |
| | password is incorrect. | | Name or | user Name | |
| | | | password. | or | |
| | | | | password. | |
| 5 | If all the required fields | No input | Please Fill out | Please Fill | Pass |
| | are not filled | | the Fields. | out the | |
| | | | | Fields. | |

6.3 Shipping Details:

- All the fields are required here if they omit some fields it will be validated and Further actions will be taken.
- Soon after clicking place order this will be triggered

| Sl | Test Condition | Input | Expected | Actual | Test |
|----|----------------------------|------------|-----------------|-------------|--------|
| No | | | Output | Output | Result |
| 1 | If all the required fields | No input | Please Fill out | Please Fill | Pass |
| | are not filled | | all Fields. | out all | |
| | | | | Fields. | |
| 2 | After filling all required | All fields | Show Place | Show | Pass |
| | fields when the terms | filled | Order | Place | |
| | and conditions are | | | Order | |
| | clicked | | | | |

6.4 Feedback:

- This is the tab which matters a lot where we can improve our site.
- The basic validations will be done.

| Sl | Test Condition | Input | Expected | Actual | Test |
|----|----------------------------|----------|-----------------|-------------|--------|
| No | | | Output | Output | Result |
| 1 | If all the required fields | No input | Please fill out | Please fill | Pass |
| | are not entered | | the fields | out the | |
| | | | | fields | |
| 2 | If the entered inputs are | Invalid | Please provide | Please | Pass |
| | wrong | input | valid answer | provide | |
| | | | | valid | |
| | | | | answer | |

6.5 Logout:

| Sl No | Test Condition | Expected Output | Actual | Test Result |
|-------|-----------------------|---------------------------|--------------|-------------|
| | | | Output | |
| 1. | Clicks on | Client should be logged | Successfully | Pass |
| | "logout" button | out, should be redirected | Logout | |
| | | to main page of the | | |
| | | website | | |

CHAPTER – 7 CONCLUSION

Buying and selling organic fruit has become a tedious task nowadays, because of lack of suitable platform. Nowadays most of the people pay attention to their health, our platform is the suitable one for them. But our Web Application made it simple, now any one can order the products and sell by sitting at their home itself. No need to find the buyer and no need to wait for money in the societies, list their product if the buyer shows interest, then by shipping the product, they will get money. No need to wait for and pay for the middle man, everything happens with just one click. We have provided smooth experience to the user so that they can easily buy or sell products. Currently we are working locally, we are planning to increase our workspace.

Eat healthy be Wealthy – we are here

- G-ORGANIC

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