#### **AGROFARM**

Submitted in the Partial Fulfillment of the Requirements

for the Award of the Degree of

BACHELOR OF TECHNOLOGY

IN

#### INFORMATION TECHONOLOGY

#### **Submitted**

 $\mathbf{B}\mathbf{y}$ 

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An autonomous institute affiliated to JNTUH 2020- 21

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#### **CERTIFICATE**

This is to certify that the short technical report work entitled "Agrofarm" carried out by Mr.P.SURAJKUMAR, Roll Number 18881A12A1, Mr.N.SAI DEEKSHITH, Roll Number 18881A1299, Ms.G.SHIVANI REDDY, Roll Number 18881A1282, Mr.A.PRANAV, Roll Number 18881A1261, Ms.S.RISHITHA, Roll Number 19885A1209 towards A4020 – PR (P) course and submitted to the Department of Electronics and Communication Engineering, in partial fulfillment of the requirements for the award of degree of Bachelor of Technology in Information Technology during the year 2020-21.

Name & Signature of the Instructors

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#### **Abstract**

Agrofarm is a model farmer management website application. The main objective of developing "Agrofarm" application is to help farmers to sell their products through online at a profitable cost directly to the customers so that farmers get maximum profit. "Agrofarm" is farmer management website application which helps farmers to give best-practice farming processes. It helps farmers to improve their productivity and profitability. Customers are the potential users. Everyone prefers to maintain a good health and gives more importance to ORGANIC FOODS, but many of the suppliers are not providing quality products. People do not prefer going to a farmer's market but rather to a supermarket or mall for their vegetables and food. This causes a loss to these farmers moreover these capitalist agencies buy the farmer's produce at lower rates and they go in loss. For this problem we came up with idea "Agrofarm" where we will eliminate mediators and will establish a direct connection between farmer and the customer. This project can also help the customers by providing quality products. Here the customer can order the products they need, or they can even visit the farmers place. Hence the customers can also know the farmers techniques. Hence, providing a wider market and helping them to not restrict themselves to the local market, they can sell their products throughout the world.

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## **ABBREVATIONS**

Abbreviation	Expansion	
PHP	Hypertext Preprocessor	
HTML	hypertext Markup Language	
CSS	Cascading Style Sheets	
JS	Java script	
SQL	Structured Query Language	

## **OUTLINE**

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## CHAPTER 1 INTRODUCTION

#### 1.1 Motivation

The most basic requirement for any human being is good nutrition. Everyone prefers to maintain a good health and gives more importance to organic foods, but many of the suppliers are not providing quality products. People do not prefer going to a farmer's market but rather to a supermarket or mall for their vegetables and food. This causes a loss to these farmers moreover these capitalist agencies buy the farmer's produce at lower rates. Due to low rate on crop, the farmers are unable to get profits and they are unable to pay loans and the farmers are committing suicide. For this problem we came up with idea "Agrofarm" where we will eliminate mediators and will establish a direct connection between farmer and the customer. This project can also help the customers by providing quality products.



Fig: 1 farmer suicide



Fig: 2 low rates on Crop

#### 1.2 Scope

The main scope of our project is to make sure that the people are getting quality fresh goods and the customers can also know the farmers techniques. To provide a wider market and helping them to not restrict themselves to the local market, they can sell their products throughout the world. Increasing number of buyers as individuals will find it easier and more convenient to buy goods.

#### 1.3 Objectives

The main objectives of the project are:

- > Productivity and profitability of farmers.
- > Implementing an online/automated Agrofarm.
- > To eliminate mediators between farmers and customers.
- > The farmers can sell their product through online.
- ➤ To inspire farmer to produce quality goods and supply to the buyers.

#### 1.4 Need for Product Realization

- > To get quality products for customers.
- The farmers will get maximum profit so that they can pay their loans easily.
- Elimination of mediators between farmers and customers.
- To maintain a good relationship between farmers and customers.

#### 1.5 Product Realization Process

- The Actual Concept of Our project is to provide a safe and secure platform for Farmer and customer to sell and buy products.
- Farmers here can sell their products at their own fixed price.
- So, the website is developed such a way that, customer can have a direct communication with the farmer.
- Here products are placed by the farmer and in the store we are going to display the products by farmer names rather than product name.
- This helps to build mutual understanding between farmer and customer.
- The main thing of all is farmer is the king of the website. He is going put the price grab customer and sell.

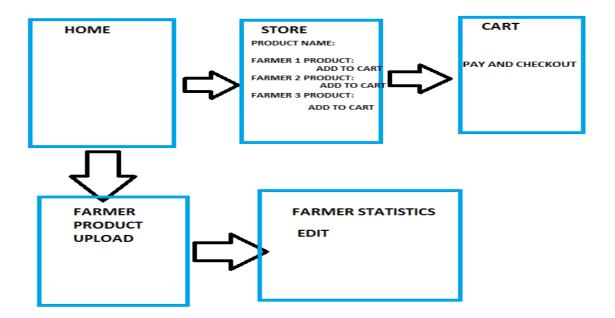


Fig 3: process

# CHAPTER 2 PRODUCT REALIZATION PLANNING

#### 2.1 Flow Chart

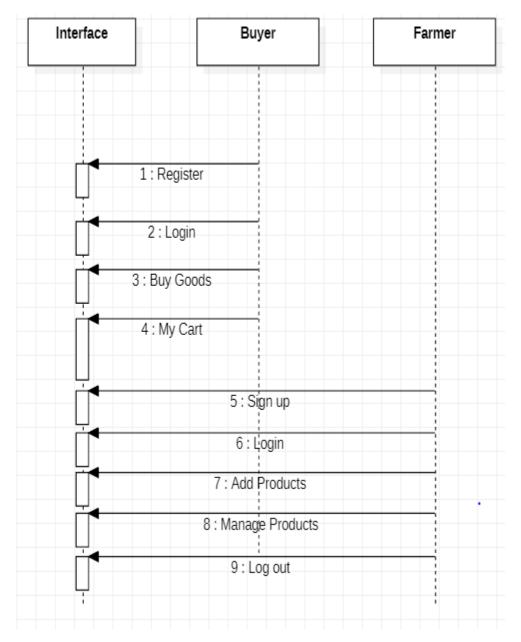


Fig 4: flow chart

Above diagram represents Sequence Diagram of the project which is a type of interaction diagram because it describes how—and in what order—a group of objects works together. A sequence diagram specifically focuses on lifelines, or the processes and objects that live simultaneously, and the messages exchanged between them to perform a function before the lifeline ends.

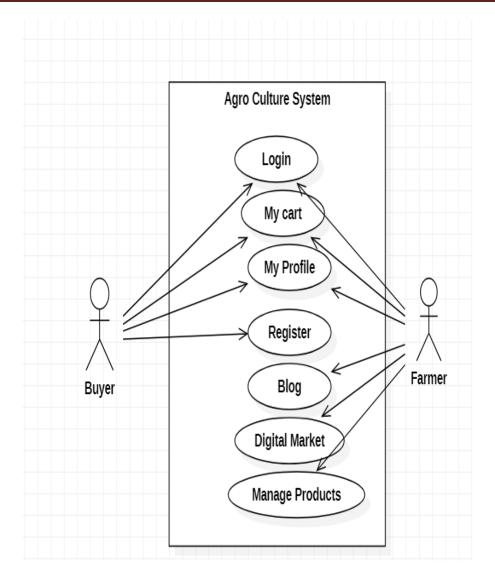


Fig 5: Usecase Diagram

Above figure represents Use Case Diagram of the project and is a useful technique for identifying, clarifying, and organizing system requirements. It describes how a user uses a system to accomplish a particular goal. Use cases help ensure that the correct system is developed by capturing the requirements from the user's point of view.

#### 2.2 Steps involved for Product Realization

- ➤ The Actual Concept of Our project is to provide a safe and secure platform for Farmer and customer to sell and buy products.
- Farmers here can sell their products at their own fixed price.
- > So, the website is developed such a way that, customer can have a direct communication with the farmer.
- ➤ Here products are placed by the farmer and in the store we are going to display the products by farmer names rather than product name.
- ➤ This helps to build mutual understanding between farmer and customer.
- > The main thing of all is farmer is the king of the website. He is going put the price grab customer and sell

#### 2.3 Gantt Chart

Week tasks				
Planning				
Research				
Design				
Coding				
Testing and debugging				
Application development				

## COMMUNITY PARTNER-RELATED PROCESSES

#### 3.1 Details of Community partner

Our project mainly focuses on selling of fruits and vegetables without involving a mediator and deliver fresh items to the citizens directly from the farmer. The community partner here are nothing but the farmers who are able to sell their goods through our website at a reasonable cost.

Here we have contacted one of the farmers naming P.Laxminarayana whos stays in the village suryapet.

#### 3.2 A Field Survey Form

- What do you think will the website help to eliminate mediators between farmers and customers?
- Are customers getting quality products?
- Will this website help the farmers to get more profits?
- Are customers satisfied with the website?
- Would you like to see any features added in the website?
- Will it maintains a good relationship between farmers and customers?
- Did all the features of website work properly?
- Rate our website on an overall experience 1-5?
- What problems did you face while using website?
- Any feedback would you like to give?

#### 3.3 Questioner with Community Partners responses

#### Which features are most valuable to you?

The features we found valuable that is we can upload our products directly in the website and we can sell our products directly to the customers.

#### What are you trying to solve by using our product?

We are trying to expand our business globally and to get more profits as there are no mediators, we can communicate with customers directly

#### • What problems did you face while using website?

As a farmer I don't know how to use the website so first I have to learn the technology or it is managed by my family.

#### How likely are you to recommend this product to others?

I strongly recommend others to use this as it is much useful in the coming future.

#### • How could we improve our product to better meet your needs?

There should be a blog section so that we can give feedback.

#### What do you think will the website help to eliminate mediators between farmers and customers?

Yes, the website will help to eliminate mediators, this is a platform where we can communicate with farmers directly and farmers can communicate directly with customers.

#### • Are customers getting quality products?

Yes, we are getting quality products.

#### • Will this website help the farmers to get more profits?

Yes, we get more profits because the product price is fixed by farmers and there are no mediators.

#### • Are customers satisfied with the website? If no why?

yes, very much satisfied with the website

#### • Did all the features of website work properly?

Yes, all features of website work properly, if it not works also there is blog section, we can raise the complaint.

#### • Rate our website on an overall experience 1-5?

I will give 4.5 on overall experience.

Yes, I would like to continue with the website.

## **3.4 List the Community Partner Specifications**

- The inclusion of the product as backend storage.
- Using better CSS and other styles to make the website look more better of the users who visit the website.
- Using Core PHP more agressively such that there wont be any problem for the user as well as for the farmers.
- 8 GB RAM and a server to maintain the database.

## **DESIGN AND DEVELOPMENT OF PRODUCT**

## 4.1 Design of Product

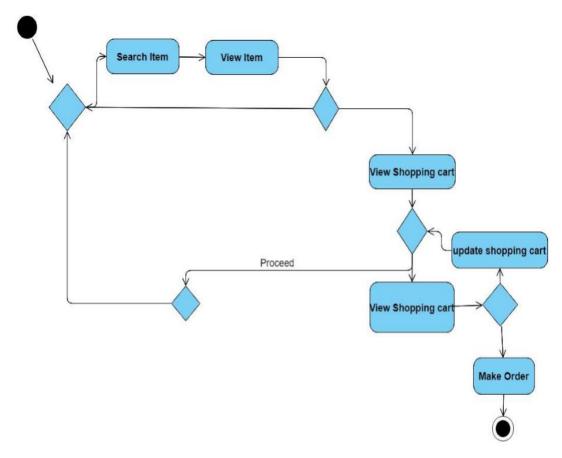


Fig 6: Design

Above diagram describes the flow of control of a system. The flow can be sequential, concurrent or branched showing the overall functions of the system.

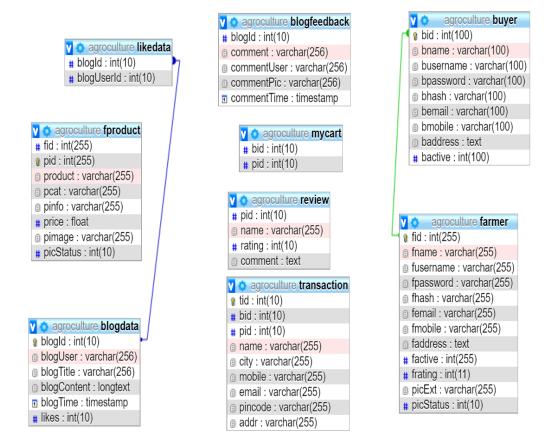


Fig 7: ER Diagram

ER diagram show all the relationships between entity sets stored in the database. It illustrates the logical structure of the database. It helps to visualize how data is connected in general ways.

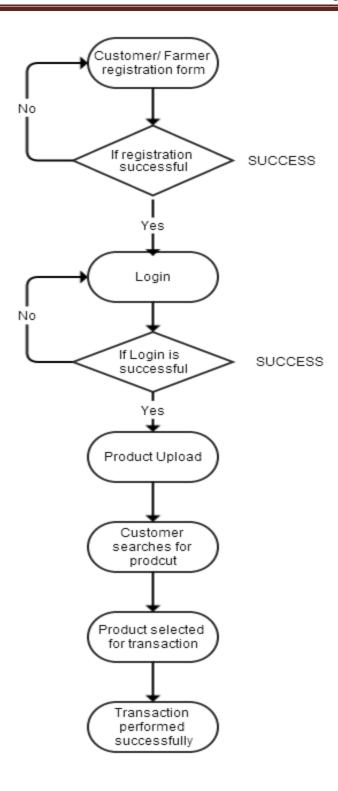


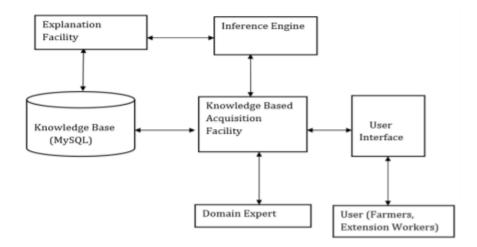
Fig 7: Actual flow

## 4.2 Purchasing information

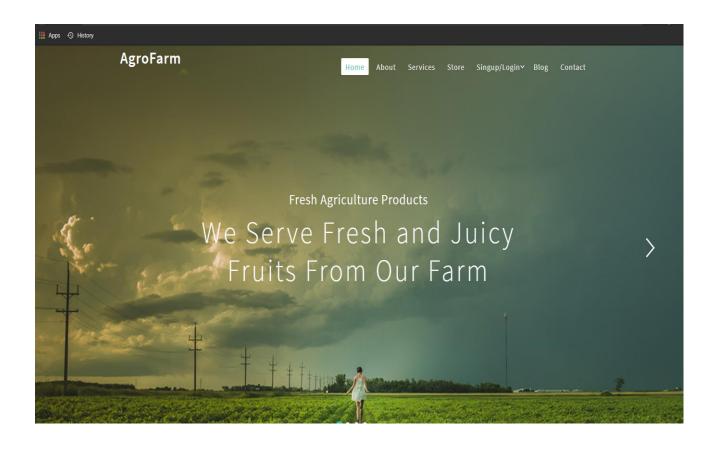
Products	Price(Rs)
Server	40,000
Harddisk	4000
RAM	8GB-10,000

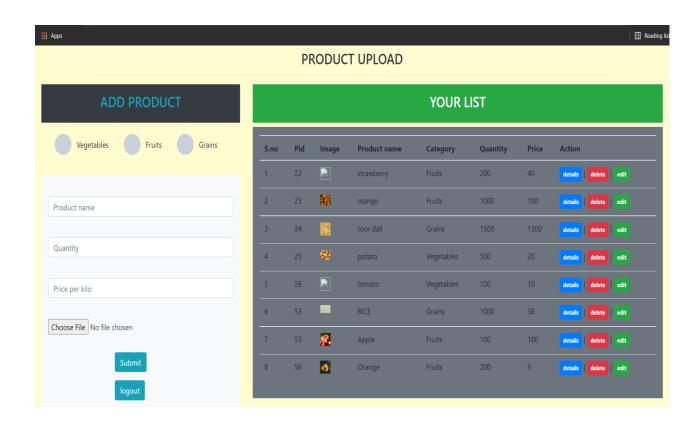
#### **4.3 Development Process**

- The Actual Concept of Our project is to provide a safe and secure platform for Farmer and customer to sell and buy products.
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- This helps to build mutual understanding between farmer and customer.
- The main thing of all is farmer is the king of the website. He is going put the price grab customer and sell.



#### **4.4 Final Product**





#### **Post Product Realization Activities**

#### 5.1 Delivery details (Date, Place, means etc,.)

We have created a project AgroFarm and maintained relationship within the activities and scheduled the project.

As per the duration maintained in activities and relationship scheduling is done and arrived the stat and finished date for the project and scheduled dates for activities.

1. In Procurement activity which is created as internal having duration of 10 days and start date after scheduling is 10.04.2021 and finished date is

15.07.2021, I have assigned a material and created PR.

- 2. As per setting activity start date 01.07.2021 is copied as requirement date for material and PR is created.
- 3. As per the vendor communication delivery can be met only on 05.07.2021 so delivery date is changed to 05.07.2021

### 5.2 Feedback on delivered product

AGROFARM USER SURVEY			
Customer Name			
Р	Laxminarayana		
First Name	Last Name		
Email	a@gmail.com		
Email	a@gmail.com		
Email	a@gmail.com .com		
Email laxminarayan example@example	a@gmail.com .com		

12-05-2021	=======================================
Date	
Address	
Suryapet	
Street Address	
Street Address Line 2	
Miryalguda	Telangana
Miryalguda	Telangana State / Province

How much will you rate our website?	How Long You have been using this website?
2 3 4 • 5	Since 2 months to sell my products
Where you facing any problem while accessing website?  Yes	
No	Are You satisfied with our product?
Any Suggestions and Feedbacks???  Need some neat interface	Yes, it gave me better results than mediators

## 5.3 Re Design

#### 1.Blog:

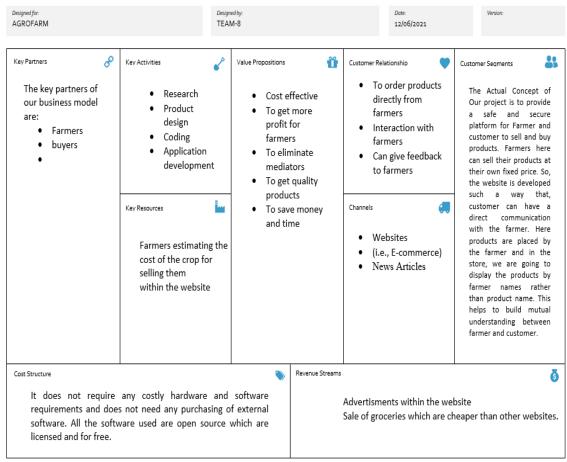
A blog is a discussion or informational website published on the World Wide Web consisting of discrete, often informal diary-style text entries. Posts are typically displayed in reverse chronological order, So that the most recent post appears first, at the top of the web page.

#### 2. Storeuserinterface:

Individual farmer's store where each and every farmer's is having a place to sell there products.

## **BUSINESS MODEL**

#### **Business Model Canvas**



Team 8., Vardhaman College of Engineering, Hyderabad - 501 218.

#### CONCLUSION

Agrofarm is a web application developed for farmers. Agrofarm is a project developed to build a website which will help farmers from to sell their products to different cities through online. Farmers can use this facility and can learn how it is possible and how they can use online farming to sell their products. If the farmers have knowledge of computer then they can directly register in the site and sell their product otherwise they can contact company's computer professional who will schedule classes to teach the basics of computers and internet. They can know how they can open this site and register with it and sell their products online etc. Customers are the potential users. This project can also help the customers by providing quality products. In this project we will eliminate mediators and will establish a direct connection between farmer and the customer. Here the customer can order the products they need, or they can even visit the farmers place. Hence the customers can also know the farmers techniques. Hence, providing a wider market and helping them to not restrict themselves to the local market, they can sell their products throughout the world. It helps buyers and sellers in saving a lot of time and money.

## **REFERENCES**

- [1] https://studentprojectguide.com/php/agriculture-management-system/
- [2]https://www.researchgate.net/publication/343101946\_E-
- \_Farming\_A\_Breakthrough\_for\_Farmers
- [3] https://www.irjet.net/archives/V2/i8/IRJET-V2I8207.pdf
- [4] evoltechnologies.com