A Project Report

On

CONNECTING FARMER WITH CONSUMERS DIRECTLY

Submitted in partial fulfillment of the requirement for the award of the degree of

Bachelor of Technology in Computer Science and Engineering

**Under The Supervision of Mr.
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SCHOOL OF COMPUTING SCIENCE AND ENGINEERING

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

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2021

SCHOOL OF COMPUTING SCIENCE AND ENGINEERING
GALGOTIAS UNIVERSITY, GREATER NOIDA

CANDIDATE'S DECLARATION

I/We hereby certify that the work which is being presented in the project, entitled **CONNECTING FARMER WITH CONSUMERS DIRECTLY"** in partial fulfillment of the requirements for the award of the **BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING**

submitted in the **School of Computing Science and Engineering** of Galgotias University, Greater Noida, is an original work carried out during the period of **JULY-2021 to DECEMBER-2021**, under the supervision of **Mr. Raj Kamal Kishor Gupta, Assistant Professor**, **Department of Computer Science and Engineering** of School of Computing Science and Engineering , Galgotias University, Greater Noida

The matter presented in the project has not been submitted by me/us for the award of any other degree of this or any other places.

19SCSE1010771 MOHIT KUSHWAHA

This is to certify that the above statement made by the candidates is correct to the best of my knowledge.

Supervisor

(Mr Raj kamal Kishor gupta, Assistant Professor)

CERTIFICATE

The Final Thesis/Project/ Dissertation Viva-Voce examination of **19SCSE1010771 MOHIT KUSHWAHA** has been held on _____and his/her work is recommended for the award of **BACHELOR OF TECHNOLOGY IN COMPUTER SCIENCE AND ENGINEERING**.

Signature of Examiner(s)   **Signature of Supervisor(s)**

Signature of Project Coordinator   **Signature of Dean**

Date:

Place:

CONNECTING FARMER WITH CONSUMERS DIRECTLY

Abstract

Farmers do not get the right price of the commodities they produce because the Middle men are eating away the major portion of their income. Farming sector is the most un-organised field.Farmers cannot demand or bargain about the price of their products. Traders manipulate the prices of agriculture commodites.

To solve this problem a E-commerce Platform is required to be cre+-ated to facilitate the transactions that will take place between farmers and consumers. A suitable infrastructure is required for taking farm products from the farms of the farmers and deliver them to the consumer's door step. We need to manage the services of payments, dispute resolution, processing of farm products, packaging, replacement, quality control etc.
We will create a online plateform by devoloping app and website where we will provide them E-market for getting maximum and best revenue from their products by directly selling to the consumers.

The technology required to build it are java,android studio,html,css,javascript,php.

It will solve the most of the problems of the farmer. We will save the life of farmers who commit suicide because of not getting the revenue from their products which leads them to the debt, hunger and starvation.

Keywords –Farmers, Buyers, Middlemen, linking, E-commerce, Digital Platform

Contents

1. Introduction

In ancient days the farmers were being exploited by the british government before the independent and later on after the independence the farmers were gradually started being completely dependent on middlemen for selling off their produce crops and vegetables because of the lack of proper transportation.

The technology has made a changes in almost every field very rapidly but in agriculture sector it doesn't bring any significant change.Even nowdays farmers are practicing the same old ways of farming. The main reason for this is that most the people who do farming are not enough educated especially in developing countries so they are unable to implement the new technologies.The other reason for this is that most of the farmers do not have enough money to buy and implement the new technologies especially the small farmers.

2. The role of middlemen in decreasing profit of farmers

The middleman who is involved in the entire transaction which takes place between the farmers and the buyers. Around 70% of the farm produce is sold to the middlemen. The farmers sell their produce to these middlemen at a very cheap price and these middlemen sell those products to the buyers at a much higher cost.

Let's see the example of tomato

Farmer sell at price = 25

Market price = 40

So middle man get the profit= 40 - 25 = 15

Which is almost 60% to the price of farmers income. On some products sometimes it raises to more than 80%

Here is the list of some products. You can clearly see the price difference between what the farmers get and the consumer pays

Green chilli
1 kg

| Market: | ₹ 60 |
| Farmer: | ₹ 38 |

Onion
1 kg

| Market: | ₹ 40 |
| Farmer: | ₹ 22 |

Rice
1kg

| Market: | ₹ 45 |
| Farmer: | ₹ 27 |

Carrots
1 kg

| Market: | ₹ 35 |
| Farmer: | ₹ 20 |

Cauliflower
1 kg

| Market: | ₹ 45 |
| Farmer: | ₹ 28 |

Tomatoes
1 kg

| Market: | ₹ 40 |
| Farmer: | ₹ 24 |

Eggs
1 dozen

| Market: | ₹ 96 |
| Farmer: | ₹ 55 |

Wheat Flour
1 kg

| Market: | ₹ 25 |
| Farmer: | ₹ 18 |

Cabbage
1 kg

| Market: | ₹ 50 |
| Farmer: | ₹ 32 |

Milk
1 Litre

| Market: | ₹ 35 |
| Farmer: | ₹ 55 |

Apples
1 kg

| Market: | ₹ 100 |
| Farmer: | ₹ 65 |

Potatos
1 kg

| Market: | ₹20 |
| Farmer: | ₹ 5 |

Prices on - DECEMBER 2021

3. Problem faced in selling to supermarket

Supermarket and retail stores are strict about the quality, shapes and sizes of the vegetables and fruits that they will buy but in reality the fruits and vegetables that are naturally produce are in different range of shapes and sizes. This result in a surplus of items of small and large

sizes that they cannot sell there so they have to find other platform to sell the remaining items.If the farmer want to sell their produce in those supermarket and store then they have to produce in surplus quantity so that they can meet their requirement

The market demands food at particular time and in specific quantities.It is almost impossible to maintain a steady crop production that is timed perfectly according to the markets need. There are also many other factors that effect their production like bad weather, pests and insects which destroy their yield of fruits and vegetables and make it difficult to deliver on their contracts with supermarkets.

4. The need for an E-commerce platform that connects the farmers and the buyers

Through the initiation of digital innovation and globalization in agriculture the scenario and the condition of farmers will get completely changed. With the help of digital e-commerce platform farmers will be directly in touch with the customer and market. With the help of access to regular market pricing information, the farmers will be better informed about the current prices of a product and he can make the right informed decisions about their product prices.

The problems like low value for their produce, lack of good marketing strategy for their products that they have been encountering all this time. So to help the farmers not face these issues there is a very urgent need for the establishment of innovation such as a E-commerce platform which will improve the quality of their life.

A online registration will be required to done of each and every farmer including big and small.This registration must be transparent and must be accessible to the general public. On the basis of their registered information and data we will provide them the information about the demand of consumers and how much they should produce and supply.
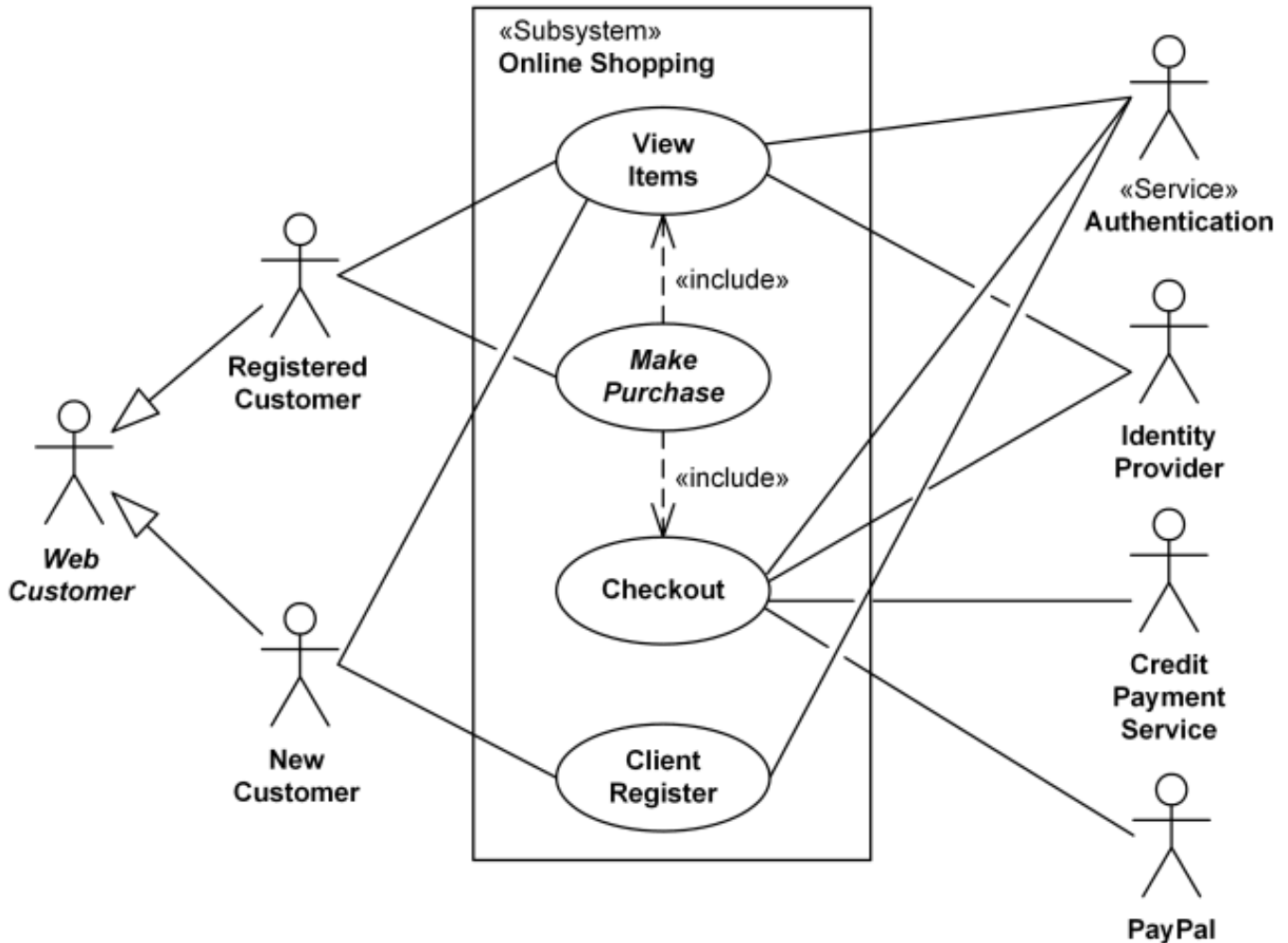We will also provide them information about following things:
1. Knowing the kind and strength of their farming soil.
2. Providing the right seeds and information about it.
3. Right time to sow the seeds
4. Right time for Harvesting their crops
5. Information about the monsoon

6. Marketing their products to get the right price

5. FarmKart App

Farmkart App is a e-commerce type app. But it is different from other e-commerce applications in some aspects. this application provides a platform where seller and buyer interact directly

5.1 UML USE CASE DIAGRAM

«Subsystem»
Online Shopping

View Items

«include»

Make Purchase

«include»

Checkout

Client Register

Registered Customer

Web Customer

New Customer

«Service» Authentication

Identity Provider

Credit Payment Service

PayPal

5.2 App Features

Responsive App(UI) Design

In this application, we used XML language for designing user interface .

Shopping Cart.

A shopping cart is a Part of the e-commerce platform that acts as an online store's catalog and ordering process. Shopping carts vary considerably. Features might embody progress indicators to assist customers to perceive wherever they're within the dealings method, automatic calculation of tax and shipping, customizable style, and layout.

Firebase

In this application, we use Firebase for user authentication. It is developed by Google, and app development is most of the developers are fairly used to it. it provides many services like user authentication, analytics, and many more. it makes fast app development with completely managed backend infrastructure, releases, and monitors the stability and performance of apps. Also, Firebase boosts user engagement with A/B testing, rich analytics, and messaging campaigns it is very easy to implement.

Product Promotion

This feature is best for app marketing In this Features can include discounts or coupons, gifts, discount pricing, volume pricing, autoresponder (automatically sends out offers by e-mail). Some packages offer cross-selling functions

Affiliate Marketing Feature

We used the Affiliate program in this Application, Affiliate marketing is a low-cost way to advertise Affiliates advertise your store on their website and they earn a commission on each sale they generate.

Order Processing Feature

We used an order processing feature, This feature provides several ordering features such as viewing new orders by email, online, or fax, automatic notification to customers alerting them to any changes in the status of orders, etc.

Location Tracking System Feature

This app mechanically captures the situation of the person exploiting mobile GPS and fetches the value of crops in those Date 2021-12-25 Words 718 Characters 4780 Page 1 of 2 markets that fall among the vary of fifty klicks. There is another option to get prices of any market

Analytics and Reporting Features

We used the Firebase analytics and reporting feature in our application They can help keep track of sales, pages viewed by customers, referring sites, and keywords customers use to find your product

Customer Support Feature

We provide 24/7 customer support where you can ask any query related to your order our team will try to solve your problem.

Order collection
This is the primary step for a client to ascertain a semipermanent relationship along with your store. It ought to be straightforward for a customer to position an associate degree order either through his mobile or a laptop. Our app is very simple easy to use

Order execution

A report by cloth, a micro-fulfillment company specializing in grocery operations, says that sixty-fifth of consumers would modification their grocery provider if they may not give same-day delivery. So, it's vital to contour the provision chain.

Payment collection

We used online and mobile payment facilities like Paytm, Phone-Pe, UPI for customers that should be fast and also prevent fraud. If the customer wants to home delivery, so we can add additional shipping fees while the customer is placing an order.

Decide the delivery region

Since most customers insist on same-day delivery, we must arrange for a fleet of vehicles. or, we can employ deliver boys with two-wheelers. The range of our delivery area is 5 km.

Choose a method of payment

If we have a reliable doorstep delivery system in place, the best option will be the Cash on Delivery (or COD) for accepting payment from customers. An added incentive is that we

shill not have to wait for the payment as is the case with many credit/debit card payment gateways. we shall also get to save on the additional 2.5 percent payment deducted by them as transaction fees.

5.3   App Security

Encryption:

The scrambling of information in such the simplest way that it will be unscrambled and read-only by those for whom it's meant. In frequency Identification (RFID) systems, encoding is employed to safeguard info hold on a transponder's chip or to stop the interception of communications between the tag and reader.

SSL (Secure socket Layer):

The technology is used to secure transactions. SSL provides unique identification and data encryption facilities in the connection between a browser and a web server.

6   Conclusion

There are so many advantages that farmers and buyers will receive as a result of the E-commerce plateform which will help in the reduction of crop loss, and the farmers will also get informed about the best prices that they can obtain in exchange for their products. Buyers will also get the opportunity to place advance orders and receive them at affordable and good prices.It is helpful for both the farmers and the buyers and both of them will deal directly

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