INSTITUTE FOR ADVANCED

COMPUTING AND

SOFTWARE DEVELOPMENT

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Documentation On

"ONLINE AGRICULTURAL MARKETING ''

(e-FARMERS MARKET)

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1. Introduction

Farming is the Prime Occupation in India in spite of this, today the people involved in farming belongs to the lower class and is in deep poverty. The Advanced techniques and the Automated machines which are leading the world to new heights, is been lagging when it is concerned to farming, either the lack of awareness of the advanced facilities or the unavailability leads to the poverty in farming. Even after all the hard work and the production done by the farmers, in today's market the farmers are cheated by the Agents, leading to the poverty. Agro-marketing would make all the things automatic which make easier serving as a best solution to all the problems. Farmer's e-Market will serve as a way for the farmers to sell their products across the country just with some basic knowledge about how to use the website. The site will guide the farmers in all the aspects. Getting availed to the required information related to the markets and different products can be made possible through the SMS facility. Farmers e-Market is the web application that will help the farmers to perform the agro-marketing leading to achieve success and increase in their standard of living.

Document Purpose

Farmer's E-market is online shopping website where buyer can buy farm produce directly from farmers. Various types of farmer's products are available for purchase at reliable price. Farmer's E-market basically focuses on user friendly interfaces and promotes user to purchase the product faster.

It has registration facility and any information entered in registration table is very secure and no one can access the information. Security is given utmost importance while designing the website. If any user is not valid or involved in any kind of illegal work in the website is blocked by the admin. Even the user is not activated unless admin approves.

For any query buyer and producer both can contact admin through mail. They can use this facility any time

Problem Statement

Existing system for a Crops Marketing is based on our traditional way Farming is the Prime Occupation in India in spite of this, today the people involved in farming belongs to the lower class and is in deep poverty. The Advanced techniques and the Automated machines which are leading the world to new heights, is been lagging when it is concerned to farming, either the lack of awareness of the advanced facilities or the unavailability leads to the

poverty in farming. Even after all the hard work and the production done by the farmers, in today's market the farmers are cheated by the Agents, leading to the poverty. Agro-marketing would make all the things automatic which make easier serving as a best solution to all the problems. Farmer's e-Market will serve as a way for the farmers to sell their products across the country just with some basic knowledge about how to use the website.

Product Scope

This project traverses a lot of areas ranging from business concept to computing field, and required to perform several researches to be able to achieve the project objectives. The area covers include:

- Farming Market: This includes study on how the daily Market work actually is being done, process involved and opportunity that exist for improvement.
- J2EE Technology used for the development of the application.
- Farmers as well as the Buyers will be able to use the system effectively.
- Web-platform means that the system will be available for access 24/7 except when there is a temporary server issue which is expected to be minimal.

Aims & Objectives

Specific goals are: -

- To produce a web-based system that allow the Buyers to add current Market Prices of crops and Buy the farmers Products directly from home so that farmers will get more benefits than current situations .
- To ease Farmers to sale their crops by providing different functionalities to it.
- To ease Transporters to add their profiles on this platform and have different functionalities.

Overall Description

Product Perspective:

2.1.1 Existing system function:

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III. PROPOSED SYSTEM

Product functionality:

Online Farmers Market System provides the features for Buyers, Producers and Transporters. It includes several functionalities describes as below:

Crops Management :

It provides facility to add, update, delete and view the Crops detials those are used to display on particular buyers profile so that producers can observe the real market prices from end vendors

Generating Notice:

The admin can generate a common notice which can be viewed by all the other Buyers and Producers in header .

Benefits of Online Farmers Market System

- The central concept of the application is to allow the buyer to shop virtually using internet and allow customers to buy products of their own choice.
- Improve the services of buyers and producers eliminating the middlemen between them.
- Maintaining details of customer payments, product receipts, and also updation of the same.

- The information pertaining to the products are stored on RDBMS at the server side. The server process the customers and the items are shipped accordingly
- Capable of storing all the day to day transactions
- Since, all the data are stored in the database analysis of data can be done. The admin can keep record of what product is sold to which buyer from which farmer. Every data can be accessed and analysis can be done which will help in generation of reports for future use.

Users and Characteristics:

1. Admin:
2. Buyers:
    - Local vendors(retailers)
    - Hotel owners
    - Schools / college canteens
    - Caterers • Restaurants
3. Producer:
    - Farmer

One of the most important part, providing 'TRANSPORTATION FACILITIES' for delivery of finished produce is under process. We could not think of any alternative which is best suited for every individual user (from producers to buyers). But we have managed to think of simple alternative in which buyer can ask for transportation facility to admin or can avail the transportation all by himself. Since the information is stored by admin of all the transportation company so the admin can keep track of delivery of product to the buyer.

We have also implemented searching transportation company by city of Producers so that delivery of products will become much easier.

Operating Environment:

Server Side:

Processor: Intel® Xeon® processor 3500 series

HDD: Minimum 500GB Disk Space

RAM: Minimum 2GB

OS: Windows 8.1, Linux 6

Database: MySql 8.0

Client Side (minimum requirement):

Processor: Intel Dual Core

HDD: Minimum 80GB Disk Space

RAM: Minimum 1GB

OS: Windows 7, Linux

Design and Implementation Constraints:

- The application will use Spring Boot Rest Api, jQuery, Angular and css as main web technologies.
- HTTP and FTP protocols are used as communication protocols. FTP is used to upload the web application in live domain and the client can access it via HTTP protocol.
- Several types of validations make this web application a secured one and SQL Injections can also be prevented.
- Since Online Agricultural Marketing System is a web-based application, internet connection must be established.
- The Online Agricultural Marketing System will be used on PCs and will function via internet or intranet in any web browser.

Specific Requirement

External Interface Requirements:

User Interfaces:

- All the users will see the same page when they enter in this website. This page asks the users a username and a password.
- After being authenticated by correct username and password, user will be redirect to their corresponding profile where they can do various activities.
- The user interface will be simple and consistence, using terminology commonly understood by intended users of the system. The system will have simple interface, consistence with standard interface, to eliminate need for user training of infrequent users.

Hardware Interfaces:

- No extra hardware interfaces are needed.
- The system will use the standard hardware and data communication resources.
- This includes, but not limited to, general network connection at the server/hosting site, network server and network management tools.

Application Interfaces:

OS: Windows 7, Linux **Web**

Browser:

The system is a web-based application; clients need a modern web browser such as Mozilla Firebox, Internet Explorer, Opera, and Chrome. The computer must have an Internet connection in order to be able to access the system.

Communications Interfaces:

- This system uses communication resources which includes but not limited to, HTTP protocol for communication with the web browser and web server and TCP/IP network protocol with HTTP protocol.
- This application will communicate with the database that holds all the Buyers ,Producers and Crops information. Users can contact with server side through HTTP protocol by means of a function that is called HTTP Service. This

function allows the application to use the data retrieved by server to fulfil the request fired by the user.

System Design :

Data Flow Diagram

Figure 1: Level 0 Data Flow Diagram

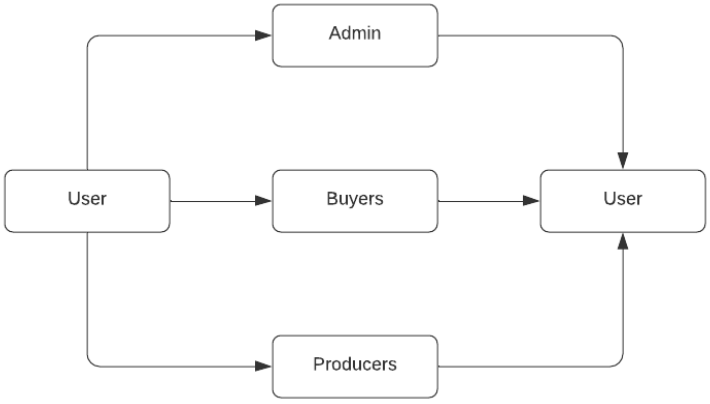

Figure 2: Level 1 Data Flow Diagram

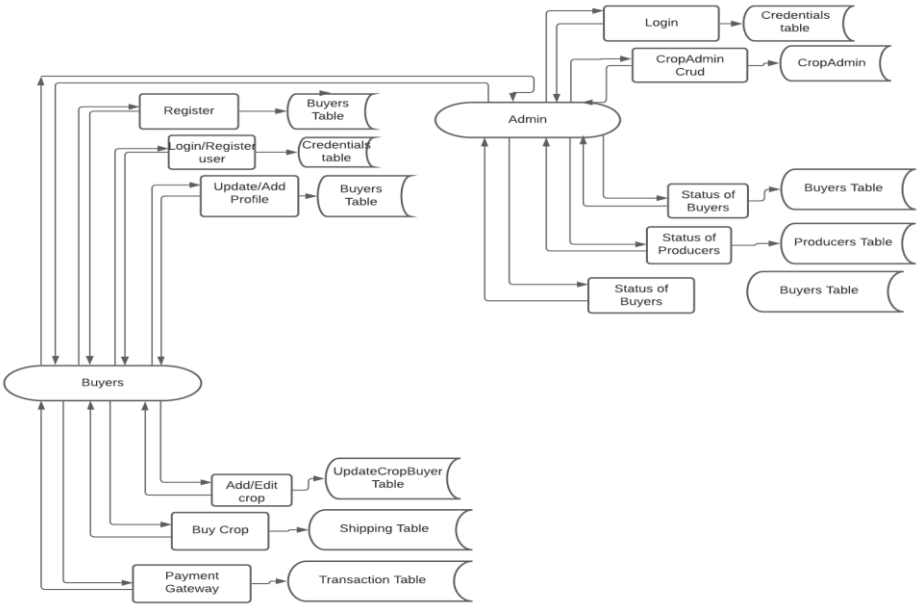

Figure 3: Level 2 Data Flow Diagram

Use Case Diagram

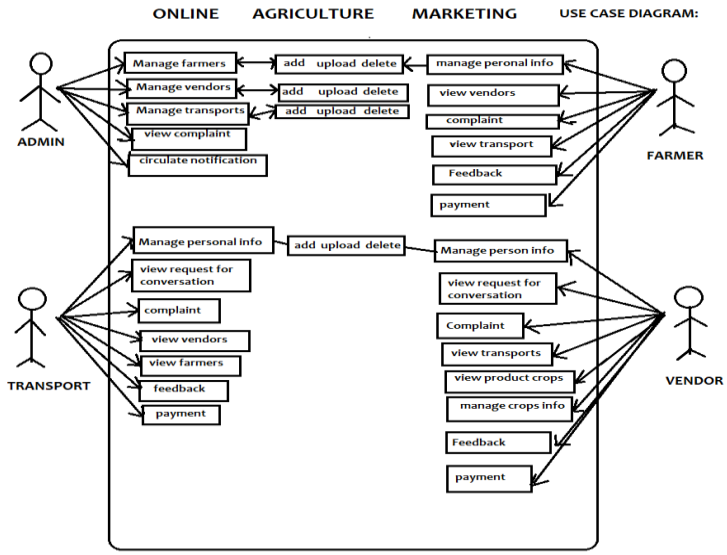

Figure 4: Use Case Diagram

ER Diagram

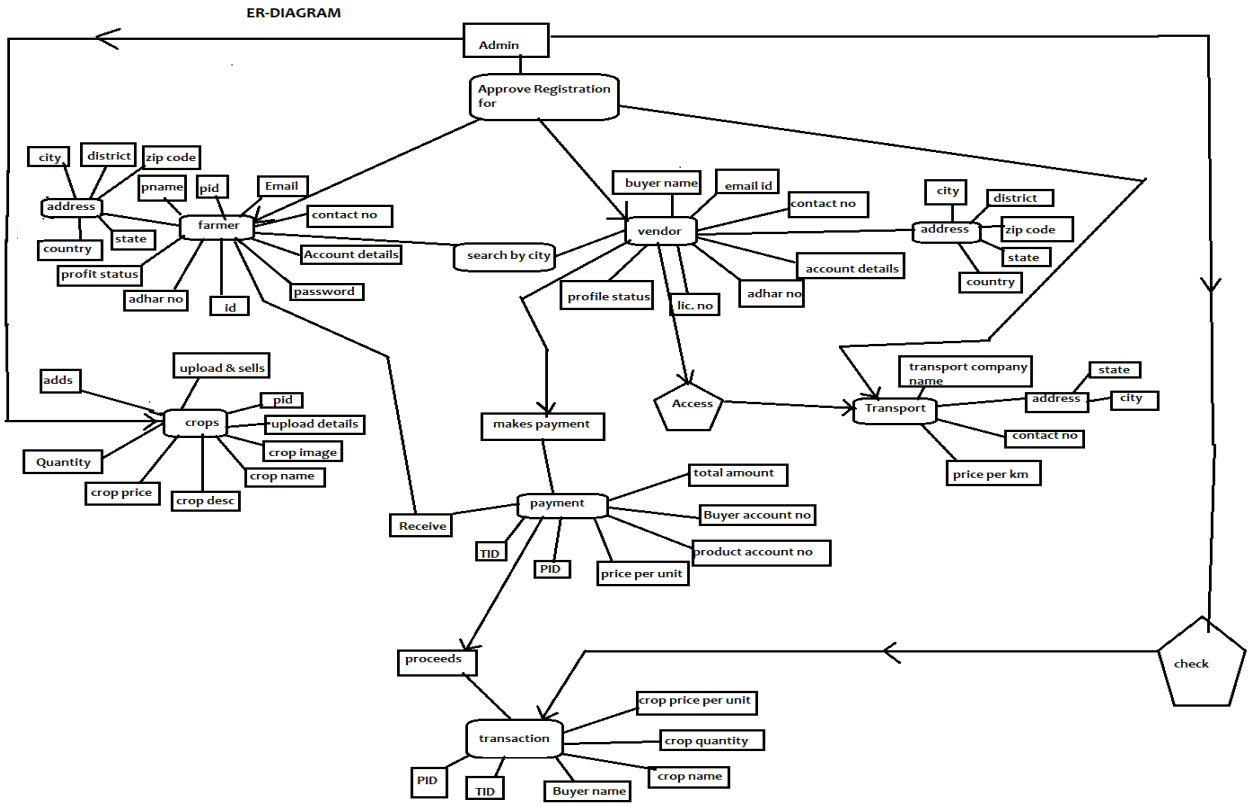

Figure 5: ER Diagram

Table Structure :

Buyers:

Field	Type	Null	Key	Default	Extra
bid	int	NO	PRI	NULL	auto_increment
pincode	int	YES		NULL	
aadhar_no	bigint	YES	UNI	NULL	
account_no	bigint	YES		NULL	
address	varchar(30)	YES		NULL	
bname	varchar(30)	YES		NULL	
city	varchar(255)	YES		NULL	
contact_no	bigint	YES	UNI	NULL	
district	varchar(255)	YES		NULL	
email_id	varchar(255)	YES	UNI	NULL	
licence_type	varchar(255)	YES		NULL	
state	varchar(255)	YES		NULL	

Producers:

Field	Type	Null	Key	Default	Extra
pid	int	NO	PRI	NULL	auto_increment
pincode	int	YES		NULL	
aadhar_no	bigint	YES	UNI	NULL	
account_detials	varchar(40)	YES		NULL	
address	varchar(30)	YES		NULL	
city	varchar(255)	YES		NULL	
contact_no	bigint	YES		NULL	
district	varchar(255)	YES		NULL	
email_id	varchar(255)	YES	UNI	NULL	
pname	varchar(30)	YES		NULL	
state	varchar(255)	YES		NULL	
account_no	bigint	YES		NULL	

Crop Admin:

Field	Type	Null	Key	Default	Extra
crop_id	int	NO	PRI	NULL	auto_increment
crop_name	varchar(255)	YES		NULL	
crop_ubid	int	YES	MUL	NULL	

UpdateCropBuyer:

Field	Type	Null	Key	Default	Extra
ubid	int	NO	PRI	NULL	auto_increment
date	date	YES		NULL	
crop_price	double	YES		NULL	
cropname	varchar(255)	YES		NULL	
crop_id	int	YES	MUL	NULL	
bid	int	YES	MUL	NULL	

Transportion:

Field	Type	Null	Key	Default	Extra
tc_id	int	NO	PRI	NULL	auto_increment
address	varchar(30)	YES		NULL	
c_name	varchar(30)	YES		NULL	
city	varchar(20)	YES		NULL	
contact_no	bigint	YES		NULL	
price_per_km	int	YES		NULL	

Credentials:

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	auto_increment
password	varchar(255)	YES		NULL	
role	varchar(20)	YES		NULL	
user_name	varchar(20)	YES	UNI	NULL	

Transactions:

Field	Type	Null	Key	Default	Extra
tid	int	NO	PRI	NULL	auto_increment
crop_id	int	YES	MUL	NULL	
dot	date	YES		NULL	
bid	int	YES	MUL	NULL	
pid	int	YES	MUL	NULL	
bname	varchar(30)	YES		NULL	
crop_price_per_unit	double	YES		NULL	
status	bit(1)	NO		NULL	
total_amount	double	YES		NULL	

Conclusion

The project report entitled " Farmer’s E-Market" is still under construction. The work on the project is under progress. The part of our system has been developed with much care that it is free of errors and at the same time it is efficient and less time consuming. The important thing is that the system is robust. We have tried our level best to make the site as dynamic as possible. Also provision is provided for future developments in the system. The entire system is secured. This online system is made keeping in mind all pros and cons.

This project helps in understanding the creation of an interactive web page and the technologies used to implement it. The building of the project has given us the idea and a precise knowledge about how the application can be developed , how it connects to the database and how the data and web pages are modified as required.

Future Scope

1.Partial Payment:

Partial payment will help user as well as farmer to buy and sell the product required by user accordingly. If the product is more with farmer then farmer can update his left over product for further purchasing.

2.Payment Gateway:

In this project we have designed false transaction which will show only that transaction is successful, similar to virtual transaction for better understanding. Since the implementation of payment gateway is not possible right now, it will be implemented in future.

3.Implementation of Debit/Credit payment modes:

In this website we have worked upon implementation of net banking only. Debit and credit will be implemented in future.

7.0 References

- http://farmersweb.com/
- http://farmer.gov.in/
- Google
- Wikipedia
- http://localvendorscoalition.org/