DISSERTATION

ON

Farmer Retailer's Bidding Platform

SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF
DEGREE OF BACHELOR OF VOCATION
IN

Software Development

SUBMITTED BY

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UNDER THE GUIDANCE OF

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DEPARTMENT OF BACHELOR OF VOCATION
BHIWAPUR MAHAVIDYALAYA
BHIWAPUR

2022-2023

DEPARTMENT OF BACHELOR OF VOCATION
BHIWAPUR MAHAVIDYALAYA
BHIWAPUR, NAGPUR

CERTIFICATE

This is to certify that the project work entitled Farmer Retailer's Bidding Platform, is a bonafide work done by Tikeshwar Wandhare, Gaurav Lakade And Prajwal Dudhe in the Software Development section of the Bachelor of Vocation, Bhiwapur Mahavidyalaya, Bhiwapur, Nagpur, in partial fulfillment of the requirement for the award of Bachelor of Vocation in Software Development.

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ACKNOLEDGEMENT

I wish to express my deepest sense of gratitude and obligation to my revered teacher and guide Asst. Prof. A.P. Ramteke, Software Development, Department of Bachelor of Vocation, Bhiwapur Mahavidyalaya, Bhiwapur, Nagpur for his inspirational guidance, suggestions, constructive criticism through out my graduate studies. I relied heavily on his professional judgment and encouragement, which benefited me immensely in carrying out this project.

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I wish to express my gratitude to my parents for sparing me to undertake this research project without any hindrances.

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DECLARATION

This Project wok entitled Farmer Retailer's Bidding Platform is my own work carried out under the guidance of Mrs. A.P. Rametek Assistant, Professor in Bachelor of Vocation, Bhiwapur Mahavidyalaya, Bhiwapur, Nagpur. This work in the same form or in any other form is not submitted by me or by anyone else for the award of any degree.

Tikeshwar Wandhare Gaurav Lakade Prajwal Dudhe

CERTIFICATE

This is to certify that the Project work entitled Farmer Retailer's Bidding Platform, is the bonafide work done by Tikeshwar Wandhare, Gaurav Lakade And Prajwal Dudhe and is submitted to Bhiwapur Mahavidyalaya, Bhiwapur, Nagpur, for the partial fulfillment of the requirements for the degree of Bachelor of Vocation in Software Development.

ABSTRACT

The main aim of this project is to provide an actual cost to the farmer for their hard work. Many of times we found that farmers are struggling in order to get value for their grwon crop and this leads to huge loss for them as well as to government by leaving farmer's loan. However this is not an solution, for this we must have some system in order to manage the growth of farmer in order to overcome this kind of issues. The main objective is to provide a real value to the hardwork of farmers. As we know that many case study shows that the vegetables farmers have to sell at Rs.3 to Rs.4 per kilograms to retailers and whereas when it reaches to common man its price reaches to 40-50 per kg by vendors. This is due to huge domination of retailers over markets and doesn't leads to increase in price for bulk purchase. It clearly shows that the real originator are getting much less amount than expected and this leads to huge loss to farmers.In order to deal with this situation we have come with a solution of centralized platform for retailers and farmers.

The concept of centralized platform will provide solution to farmers issue and also a good price for their crops. Here, we planned to create a bidding platform where farmers can register as well as retailers can register. Farmers will list their crop in bulk prior to 2-3 days of sale and retailers will accept offer. Same if any other farmers list same vegetable he can able to keep bid of 50 paisa or 1 Rupee less than the earlier farmer. So this will create transparency over farmers if bidding starts for Rs.15 they can able to restrict it for Rs.12. This will help them to get good cost of vegetable due to centralized platform and also creates a good unity for farmers to tackle domination of retailers in market. Also, we will provide an admin dashboard from where an government authority can able to keep watch over the sales and will have control over the dropping prices of vegetable and as future scope we can implement a role for admin to control the cap for vegetable prices to provide maximum benefits to farmers. This system will also help to relief common man from rising prices of vegetables.We can achieve this through transparency and centralized platform.

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1. INTRODUCTION

INTRODUCTION

In India, agriculture is the largest dependent sector. As we all know, farmers are struggling to meet their needs. There comes a thought to use software technologies to help farmers with our hands-on project. We are utilizing the latest tech simple to integrate agricultural efforts. Farmers are able to get knowledge of cultivation techniques. A simple user-friendly interface easily helps users to get into our website. Fortunate and very responsive which enables it to work effectively on any type of device. The website functions are in different languages like Hindi, English and some regional languages. The farmers who grow crops according to the season, after harvesting the crops they pack them and contact the vendor regarding the stock availability. The wholesale vendor asks for the price, the farmer tells the price at which he can trade at. The vendor who is striving for his profits negotiates with the farmer regarding the price the needy farmer sacrificing their profits generally accept the price told by the vendor. Due to financial conditions and the unavailability of vendors, the farmer will sell their products at low prices demanded by the market. Farmers grew their crop since there are various other problems such as soil infertility, weather changes, seed defects etc. So they expect some profits for their products. Due to wholesale vendors and their marketing strategies farmers are not getting their required profits.

The wholesale vendors after buying the crop from farmers at their quoted price, sell it to retail vendors. Then the retailer vendors sell it to end customers. Here the intermediate vendors are getting enough profits for their selling. Farmers only lose their profits even though the most hard work is theirs. Technology is the driving force in every sector. We use this technology to drive the farmers into a profitable way. Here we are introducing the multivendor E-commerce business for farmers to do their business. It will help farmers by giving an opportunity to sell their products easier on our digital platform. Our main aim is to develop farmers by using the new technology and making their business more efficient and also it is used to speed up their marketing process. It will be helpful for farmers to generate profitable income. It will disconnect the connection with intermediate vendors that helps to save some money.

1.1 Objective

- The main aim of this project is to provide an actual cost to the farmer for their hard work.
- This leads to huge loss for them as well as to government by leaving farmer's loan. However this is not an solution, for this we must have some system in order to manage the growth of farmer in order to overcome this kind of issues.
- As we know that many case study shows that the vegetables farmers have to sell at Rs.3 to Rs.4 per kilograms to retailers and whereas when it reaches to common man its price reaches to 40-50 per kg by vendors.
- The concept of centralized platform will provide solution to farmers issue and also a good price for their crops.
- Here, we planned to create a bidding platform where farmers can register as well as retailers can register. Farmers will list their crop in bulk prior to 2-3 days of sale and retailers will accept offer.

2. LITERATURE REVIEW

LITERATURE REVIEW

Significant research has been done on the agriculture market and various studies in journals about the agricultural sector. Making a distinct platform for farmers helps them to share some information about agriculture. Technology is existing everywhere from well equipped cities to a small village in the current generation. So there are no difficulties in using the technology to move into this e-commerce field. In the study, we got to know that the majority of the farmers are not getting enough profits for their crops. All the intermediate market strategies doing all these losses to the hard-working farmers. Despite all the hard work and patience to grow the crops, farmers play a crucial role in the agricultural life cycle but still they are facing a lot of issues to get profit due to their bad circumstances. In India two-third of the one billion population relies on agricultural entities. Now the country is not matching the requirements for agriculture. As it led to so many dropdowns in agriculture.

The farming sector has to formulate with the rise in the market to do such increments there should be unique development that has to be done. That is the new techniques and technology should be used to build modern farming in a high yield manner. A lot of countries are doing their research on technologies to use them in farming, in the process, they are achieving good outcomes. With the spread technology, agricultural system connections between regions become easy and they can easily get the information they are seeking. The modern IT(Information Technology) infrastructure simplifies the integration in the network. We can use information technology in an enormous amount in the agricultural sector. From planting saplings to harvesting the present advances in information technology help us to adopt new automated ways in farming. All of this resulted in that information technology is very much beneficial in all the techniques carried out in the farm management system. After harvesting, there is the main struggle to begin selling the product, every farmer wants to sell their product for profits. To analyse the cost in different markets the IT Services are more helpful to farmers. Most of the public are aware of smartphones and their usage which will help to go with the technology. The website we are making is simple in design and easy to understand the interface of the website. Technology has advanced to a high level and farmers have the option of using mobile phones in rural regions effectively.

2.1 Problem Defination

The concept of centralized platform will provide solution to farmers issue and also a good price for their crops. Here, we planned to create a bidding platform where farmers can register as well as retailers can register. Farmers will list their crop in bulk prior to 2-3 days of sale and retailers will accept offer. Same if any other farmers list same vegetable he can able to keep bid of 50 paisa or 1 Rupee less than the earlier farmer. So this will create transparency over farmers if bidding starts for Rs.15 they can able to restrict it for Rs.12. This will help them to get good cost of vegetable due to centralized platform and also creates a good unity for farmers to tackle domination of retailers in market. Also, we will provide an admin dashboard from where an government authority can able to keep watch over the sales and will have control over the dropping prices of vegetable and as future scope we can implement a role for admin to control the cap for vegetable prices to provide maximum benefits to farmers. This system will also help to relief common man from rising prices of vegetables.We can achieve this through transparency and centralized platform.

2.2 Proposed System

In existing models the concept of ecommerce for the farmers had implemented where farmers can directly sell their vegetables to consumer. However for big farms having huge vegetable grown selling vegetable to individual buyers will be quite difficult and this can leads to loss of vendors. So, our platform is different as we will sell bulk vegetables to retailers instead of directly to consumers. This can give a better price to farmers for their yield and easy to manage platform. Also, an good collaboration between farmers for selling same stuffs at good bid price.

2.3 Proposed Work

KisanMandi - KisanMandi Online Agri market Private Limited (KisanMandi.com) is providing assistance to farmers with the help of Gram Sahayaks from grading, packing, logistic support to sell their agriculture produce directly to end customers, and farmers will get the better price of agriculture produce as compared to the current APMC mandi price.

Now farmers (Kisan) can sell their produce directly to end consumer i.e. Retailers, Bulk buyers, Institution, Group Co-operative Societies, Citizen Associations or any other group buyers on KisanMandi.com & also farmer can save a lot of money via Group buying of Agri products or machinery directly from Manufacturing Companies and big distributors on a fair price.

FarmersMandi - Enabling large scale mandi operations across the country with our digital products. Cutting edge tech solutions to empower farmer, retailer, delivery agents, market managers and collection agents. Collection of short stories and memories from our startup journey. For some of us, life at is all about the early morning deliveries and for others it is the late night code releases.

2.4 Problem Scope

The concept of centralized platform will provide solution to farmers issue and also a good price for their crops. Here, we planned to create a bidding platform where farmers can register as well as retailers can register. Farmers will list their crop in bulk prior to 2-3 days of sale and retailers will accept offer. Same if any other farmers list same vegetable he can able to keep bid of 50 paisa or 1 Rupee less than the earlier farmer. So this will create transparency over farmers if bidding starts for Rs.15 they can able to restrict it for Rs.12.

3. SYSTEM REQUIREMENT SPECIFICATION

SYSTEM REQUIREMENT SPECIFICATION

3.1.1 Wordpress

WordPress is a free and open-source content management system written in PHP and paired with a MySQL or MariaDB database. Features include a plugin architecture and a template system, referred to within WordPress as Themes. The best part about WordPress is that it's easy to use and flexible enough to make different types of websites. That's the main reason why WordPress has grown so much in popularity. According to a recent survey, WordPress powers 32.3% of all websites on the internet.Due to it's robust features, many of the top brands use WordPress to power their websites including Time Magazine, Facebook, The New Yorker, Sony, Disney, Target, The New York Times, and more.

3.1.2 WAMP Server

AMPP is one of the widely used cross-platform web servers, which helps developers to create and test their programs on a local webserver. It was developed by the Apache Friends, and its native source code can be revised or modified by the audience. It consists of Apache HTTP Server, MariaDB, and interpreter for the different programming languages like PHP and Perl. It is available in 11 languages and supported by different platforms such as the IA-32 package of Windows & x64 package of macOS and Linux.

3.1.3 MySQL

A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or the vast amounts of information in a corporate network. To add, access, and process data stored in a computer database, you need a database management system such as MySQL Server. Since computers are very good at handling large amounts of data, database management systems play a central role in computing, as standalone utilities, or as parts of other applications.

MINIMUM SOFTWARE REQUIREMENTS

3.2.1 Minimum Software Requirements

- Wamp Server
- Visual Studio Code
- Wordpress 5 or above
- Database: MySQL

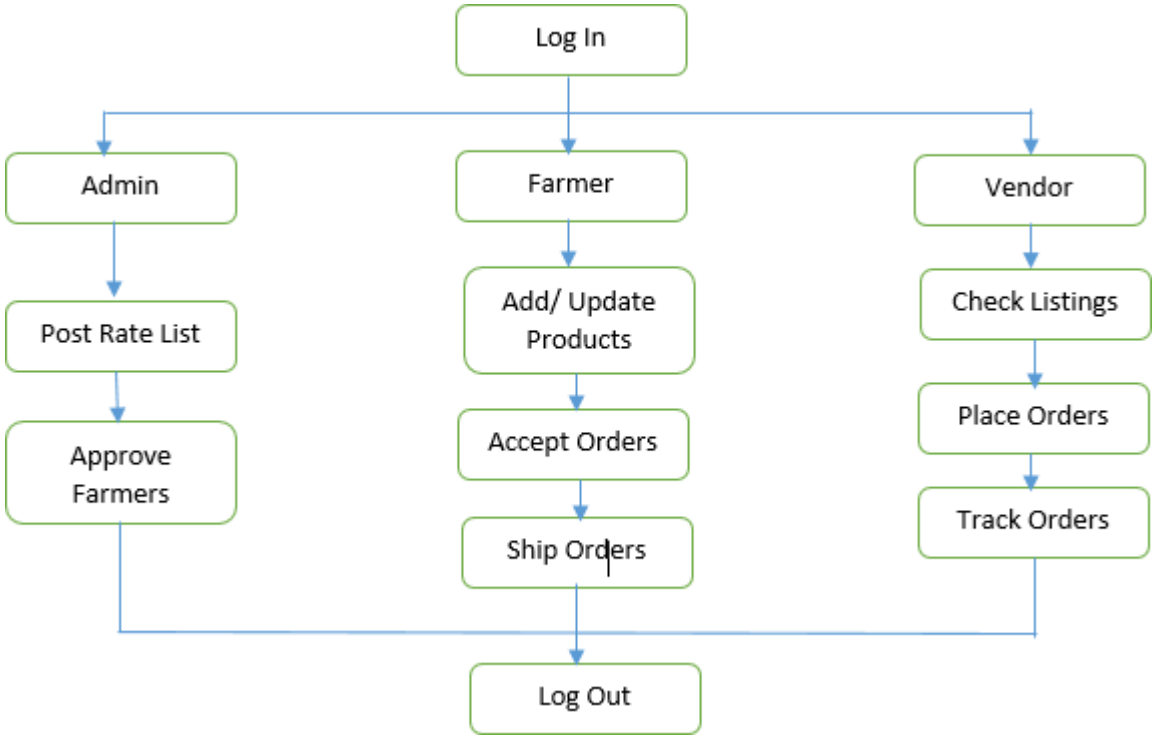
3.2.2 Language Used

- HTML, CSS, Javascript, Bootstrap
- MySQL

4. System Design

SYSTEM DESIGN

4.1 Flowchart Diagram



4.2 Modules

Farmer : Farming is not a job, it is a way of living. Agriculture is completely involved in the Indian culture. Food is one of the major sources of living farmers who are producing these food are not fulfilling their needs. Right now in the country, the farmers are facing a lot of issues in agriculture. In the process of research, we came to know that there is a way to utilize digital technology to help the farmers. Technology is stepping in every field and helping every field in its own way so we were taught to bring this E-commerce business into farming.We are taught that this creative and unique idea will help farmers to reduce their efforts in selling and buying their products. The farmers sell their product to the specific dealer to sustain in these present situations. Here farmers don't know the exact price of the product they are selling. The entire system is not transparent. Farmers are not aware of prices in different markets and thus they don't know where they can sell their products to obtain greater profits. This brings the motivation in us to develop a helpful system for farmers.

Admin Module : Admin can able to post the maximum and minimum cap of the vegetables for bidding by farmers in order provide good prices to farmers on weekly basis.

Quick signup for users: Save your clients time by simplifying the functioning and interface of the website.

Efficient product management: Farmers should be ready to easily add or remove any products they own, specify prices, and supply the required details.

Comfortable order processing with notifications: Vendors got to see exactly what was ordered, how much, the delivery details, and be notified about different changes within the delivery process. Communication through the system we are proposed will be easy.

Review or rating system: The buyers always want to make certain that they will trust the vendor.Products promotion. For farmers and suppliers to sell more, the buy and sell food marketplace should provide tools to market their products, like featured products or discount campaigns.

Customer registration / login: Customers should also access the platform easily.

Attractive interface: The attractive and user-friendly design can make all the difference. Create a platform for your clients that they need to use and continuously return to.

Helpful search with filters: In your buy and sell marketplace development, product search plays a crucial role. Buyers should easily mapped out among different types of food to seek out specially what they're trying to find. Easy checkout tactic of adding products to carts and proceeding to buy them has to be smooth.

Delivery options: Users got to schedule the day & time for delivery. they'll be prepared to devour at the local farm or store or choose delivery to the doors. within the time of pandemic, people are more worried about safety, so confirm you provide them with the contactless delivery option.

5. IMPLEMENTATION

IMPLEMENTATION

5.1 Sample Code

Admin Page Code

```
<?php
/**
 * Core Administration API
 *
 * @package WordPress
 * @subpackage Administration
 * @since 2.3.0
 */

if ( ! defined( 'WP_ADMIN' ) ) {
    /*
     * This file is being included from a file other than wp-admin/admin.php, so
     * some setup was skipped. Make sure the admin message catalog is loaded since
     * load_default_textdomain() will not have done so in this context.
     */
    load_textdomain( 'default', WP_LANG_DIR . '/admin-' . get_locale() . '.mo' );
}

/** WordPress Administration Hooks */
require_once ABSPATH . 'wp-admin/includes/admin-filters.php';

/** WordPress Bookmark Administration API */
require_once ABSPATH . 'wp-admin/includes/bookmark.php';
```

```
/** WordPress Comment Administration API */
require_once ABSPATH . 'wp-admin/includes/comment.php';

/** WordPress Administration File API */
require_once ABSPATH . 'wp-admin/includes/file.php';

/** WordPress Image Administration API */
require_once ABSPATH . 'wp-admin/includes/image.php';

/** WordPress Media Administration API */
require_once ABSPATH . 'wp-admin/includes/media.php';

/** WordPress Import Administration API */
require_once ABSPATH . 'wp-admin/includes/import.php';

/** WordPress Misc Administration API */
require_once ABSPATH . 'wp-admin/includes/misc.php';

/** WordPress Misc Administration API */
require_once ABSPATH . 'wp-admin/includes/class-wp-privacy-policy-content.php';

/** WordPress Options Administration API */
require_once ABSPATH . 'wp-admin/includes/options.php';

/** WordPress Plugin Administration API */
require_once ABSPATH . 'wp-admin/includes/plugin.php';

/** WordPress Post Administration API */
require_once ABSPATH . 'wp-admin/includes/post.php';
```

```
/** WordPress Administration Screen API */
require_once ABSPATH . 'wp-admin/includes/class-wp-screen.php';
require_once ABSPATH . 'wp-admin/includes/screen.php';

/** WordPress Taxonomy Administration API */
require_once ABSPATH . 'wp-admin/includes/taxonomy.php';

/** WordPress Template Administration API */
require_once ABSPATH . 'wp-admin/includes/template.php';

/** WordPress List Table Administration API and base class */
require_once ABSPATH . 'wp-admin/includes/class-wp-list-table.php';
require_once ABSPATH . 'wp-admin/includes/class-wp-list-table-compat.php';
require_once ABSPATH . 'wp-admin/includes/list-table.php';

/** WordPress Theme Administration API */
require_once ABSPATH . 'wp-admin/includes/theme.php';

/** WordPress Privacy Functions */
require_once ABSPATH . 'wp-admin/includes/privacy-tools.php';

/** WordPress Privacy List Table classes. */
// Previously in wp-admin/includes/user.php. Need to be loaded for backward compatibility.
require_once ABSPATH . 'wp-admin/includes/class-wp-privacy-requests-table.php';
require_once ABSPATH . 'wp-admin/includes/class-wp-privacy-data-export-requests-list-
table.php';
require_once ABSPATH . 'wp-admin/includes/class-wp-privacy-data-removal-requests-list-
table.php';

/** WordPress User Administration API */
require_once ABSPATH . 'wp-admin/includes/user.php';
```

```
/** WordPress Site Icon API */
require_once ABSPATH . 'wp-admin/includes/class-wp-site-icon.php';

/** WordPress Update Administration API */
require_once ABSPATH . 'wp-admin/includes/update.php';

/** WordPress Deprecated Administration API */
require_once ABSPATH . 'wp-admin/includes/deprecated.php';
```

5.2 Screenshots

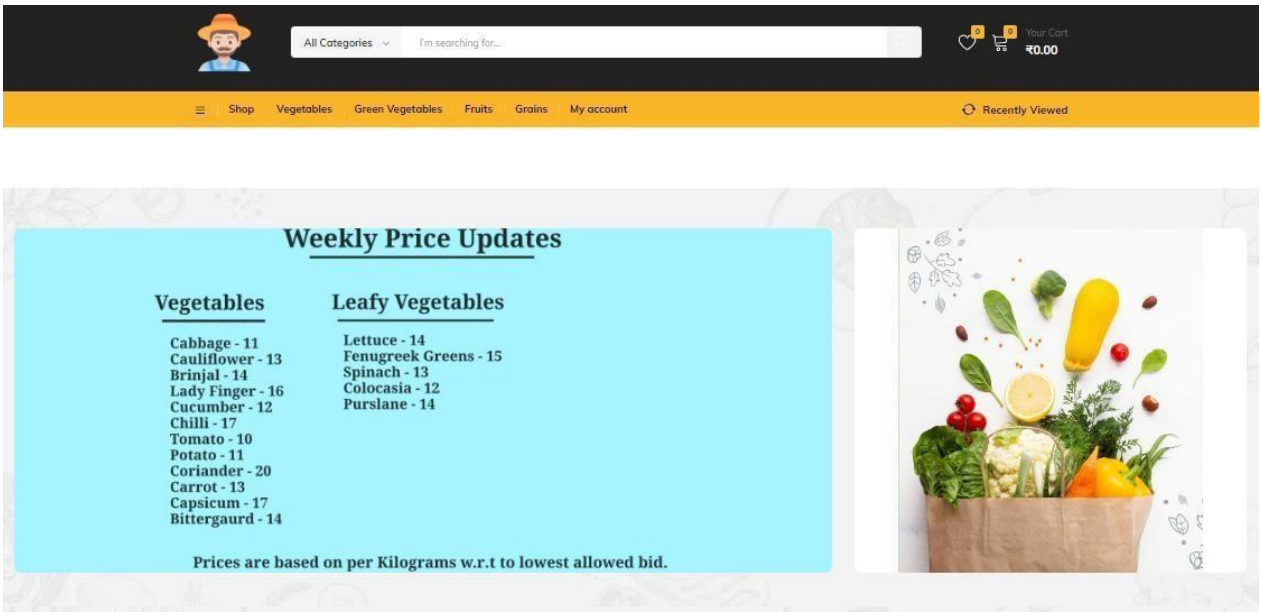


Fig.5.2.1 Homepage

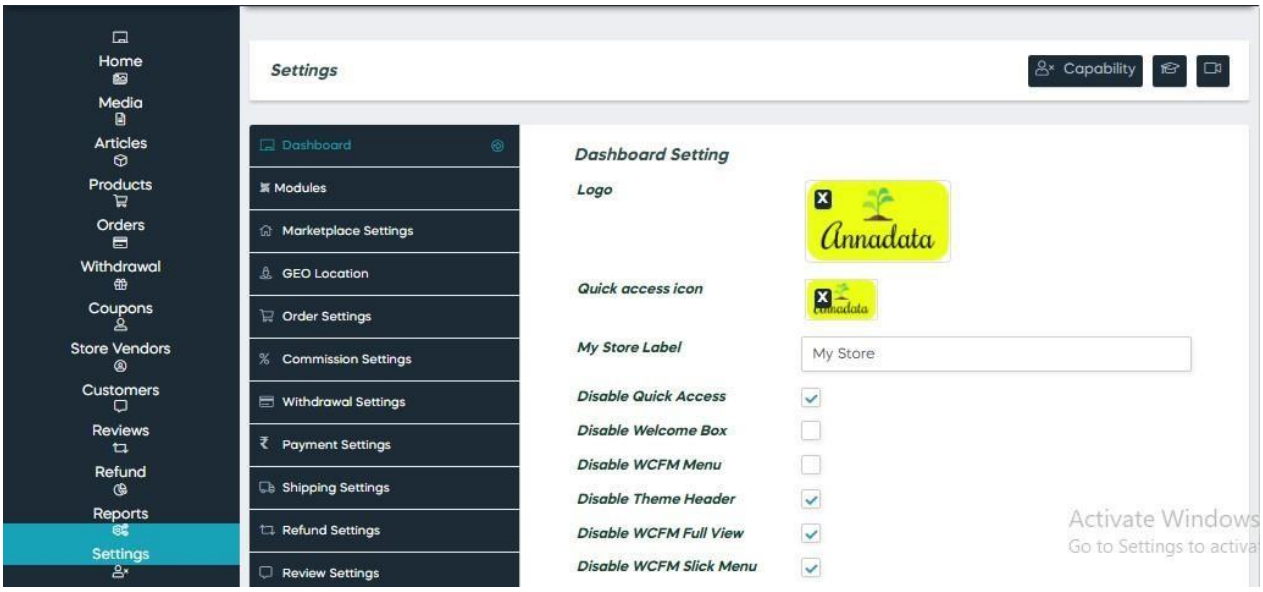


Fig.5.2.2 Farmer's Dashboard

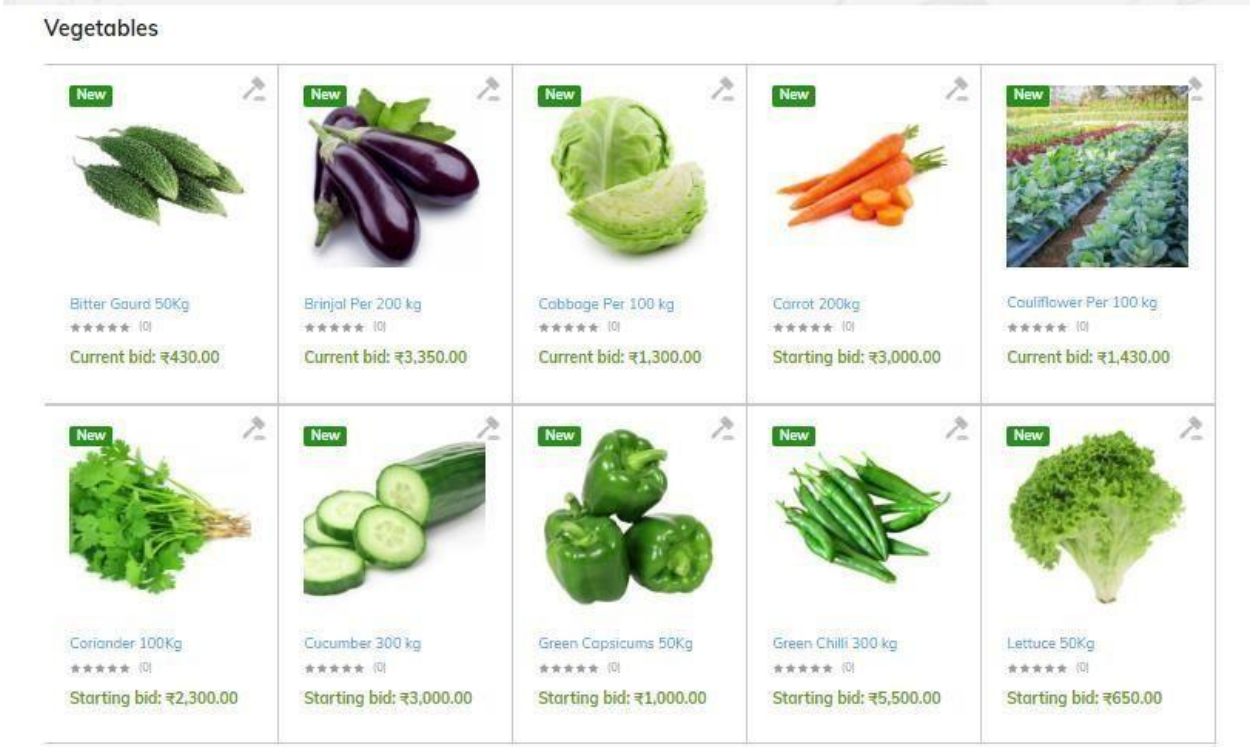


Fig.5.2.3 Products Page

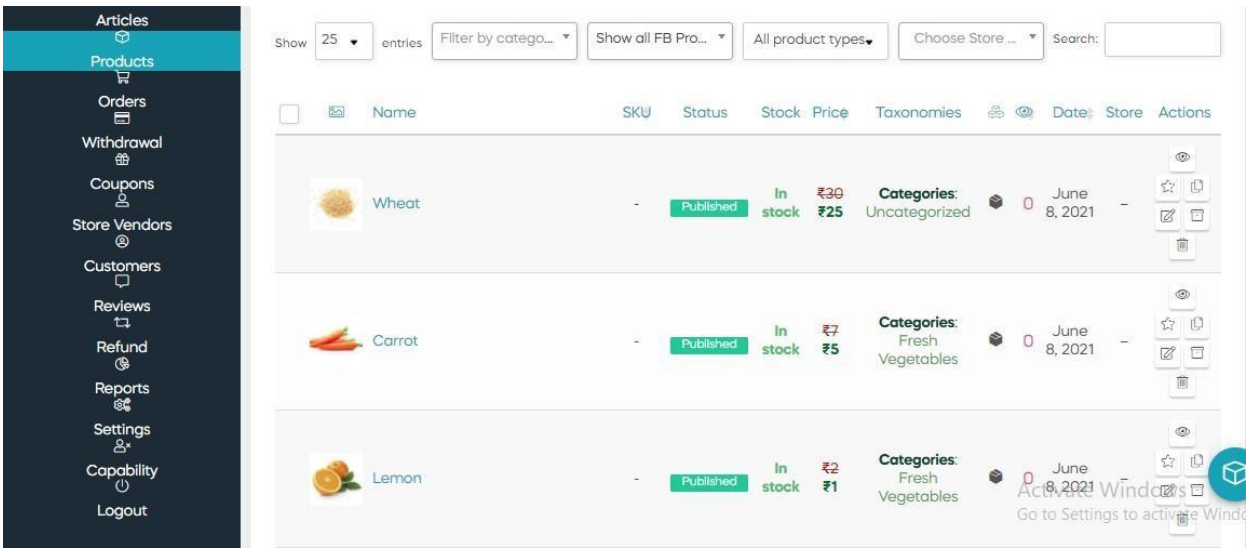


Fig.5.2.4 Product Listing Page

6. ADVANTAGES

ADVANTAGES

Farmers in India have had little freedom in choosing markets and buyers for their produce. This will help them to get good cost of vegetable due to centralized platform and also creates a good unity for farmers to tackle domination of retailers in market. Also, we will provide an admin dashboard from where an government authority can able to keep watch over the sales and will have control over the dropping prices of vegetable. This system will also help to relief common man from rising prices of vegetables. We can achieve this through transparency and centralized platform. The platform hopes to have an increase participation of farmers. Farmers can connect with more consumers and sell their products at a fair price, while retailers can buy fresh products knowing the origin and the production mode of what they eat.

Social privileges:

- It establishes an online presence.
- More customer reach.
- Product promotion is easier as it is a simple process.
- Farmers easily avail their necessities at one point store.
- Communication makes it easier for farmers.
- There will be less efforts.
- We are also providing new cultivation techniques(Blogging).
- Profitable income generation.

7. APPLICATIONS

APPLICATIONS

Technology has opened many doors for farmers to keep in close touch with their clients. Buy and sell food marketplaces are really appealing to food producers, as they can connect to customers online without having to build their own websites. Such platforms allow them to:

- Reach more customers
- Establish an online presence;
- Promote their shop
- Deliver products conveniently
- Track orders

Lots of farmers and ranchers have implemented or are looking for a way to implement a new digital approach of transferring their produce to our kitchens. However, the transition of agriculture to an online world will not likely stop after its end, but will only widespread and grow. We have all seen how quickly our whole lives can change because of the pandemic, and our food buying habits are not an exception. Less or even no visits to food markets, lower demand for restaurants, increased e-commerce deliveries, and a rise in eating at home had an irretrievable effect on how, where and what kinds of food we buy.

8. CONCLUSION

CONCLUSION

9.1 Work Done

- Farmers in India have had little freedom in choosing markets and buyers for their produce.
- This will help them to get good cost of vegetable due to centralized platform and also creates a good unity for farmers to tackle domination of retailers in market.
- Also, we will provide an admin dashboard from where an government authority can able to keep watch over the sales and will have control over the dropping prices of vegetable.
- This system will also help to relief common man from rising prices of vegetables. We can achieve this through transparency and centralized platform.
- The platform hopes to have an increase participation of farmers. Farmers can connect with more consumers and sell their products at a fair price, while retailers can buy fresh products knowing the origin and the production mode of what they eat.

9.2 Future Enhancement

- Admin can be implemented to control the prices of vegetable to prevent loss of farmers .
- An platform can also be made for farmer to consumers as our platform is just for farmer to retailers.
- Pre- order strategy can be made in order to book vegetables by retailers for pre-listing by farmers in order to get assured the cost of vegetables they are growing to grow.
- Enhancement in bidding strategy for retailers and farmers for quicker solution.
- Pick facility can be provided by farmers to retailers.
- Transporters can be allocated as soon an retailer accepts farmer's offer and dynamically transporter can be allocated to retailer's orders.

9. REFERENCES

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