



West Visayas State University
COLLEGE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY
La Paz, Iloilo City

USER'S MANUAL

Rice Procurement and Distribution Management System

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RICE PROCUREMENT AND DISTRIBUTION
MANAGEMENT SYSTEM

An Undergraduate Thesis

Presented to the Faculty of the
College of Information and Communications Technology
West Visayas State University
Luna St., La Paz, Iloilo City

In Partial Fulfillment
of the Requirements for the Degree
Bachelor of Science in Information System

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DISCLAIMER

This software project and its corresponding documentation titled "Rice Procurement and Distribution Management System" is submitted to the College of Information and Communications Technology, West Visayas State University, in partial fulfillment of the requirements for the degree, Bachelor of Science in Information System. It is the product of our own work, except where indicated text. We hereby grant the College of Information and Communications Technology permission to freely use, publish in local or international journal/conferences, reproduce, or distribute publicly the paper and electronic copies of this software project and its corresponding documentation in whole or in part, provided that we are acknowledged.

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GUIDE FOR DEPLOYING AND USING THE SYSTEM'S MAIN FUNCTIONS

Getting Started

Introduction

Rice Procurement and Distribution Management System is web-based application system that accessed via HTTP and runs in a web browser. This can help the farmers, traders and NFA when it comes to effective and efficient buy and sell transaction. This system has a different function and features one of this a marketplace platform that connects the farmers, traders and NFA for selling and buying produce. This also gives the farmers the privilege to choose among the traders who bid for their produce based on the highest bidding or nearest location to them. This system has also a distribution scheduling model for NFA user to allocate and distribute the rice produce. This system has also an inventory management model to track the stocks levels in the warehouse. This document provides a software manual for the user on how to use the system and what software is needed to run the system.

System Requirements

In the hardware necessities, the researcher tested the system on a laptop with the processor of intel core i3-10056G1, 4GB DDR, 128GB SSD in a windows 10 Home.

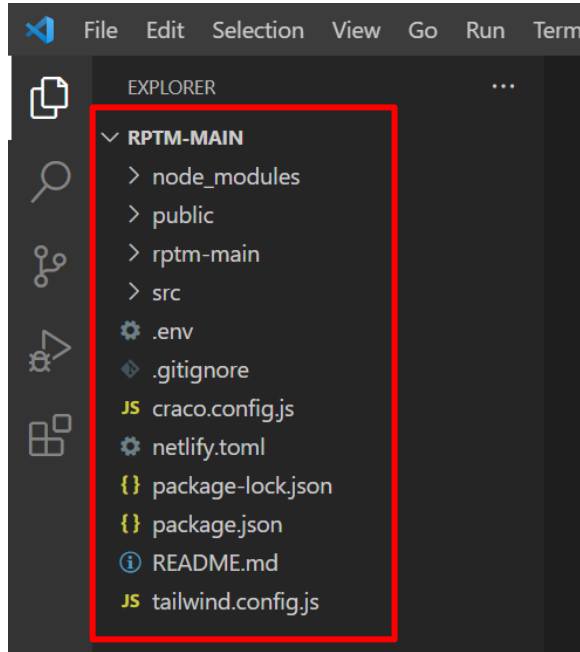
Installation

The needed software in order to run the system is via web browser such as Google Chrome and Microsoft Edge and also the NodeJs to run the system in various platform. Visual Studio for the code and web browser for the users.

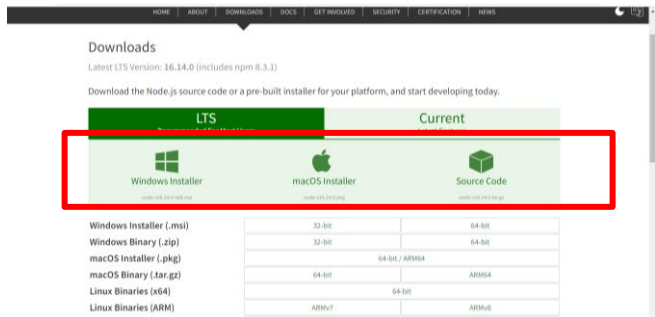
Using the System

Deploying the system to the localhost server

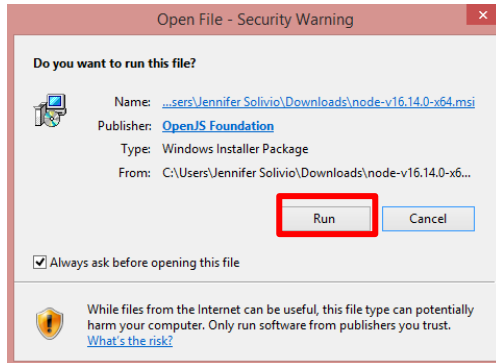
1. In order to run the system to the localhost, Open the file of vscode of the system.



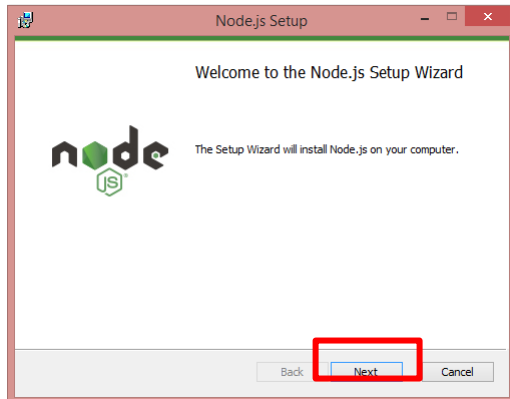
2. Download the **Nodejs** (<https://nodejs.org/en/download/>). Click the windows Installer if you're using windows and macOS Installer is Mac then it will automatically download.



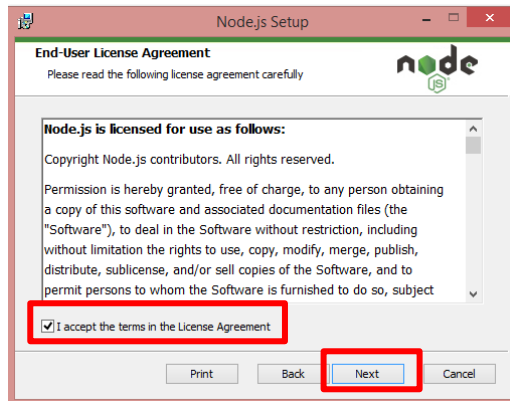
3. Open the downloaded file of nodejs then setup.



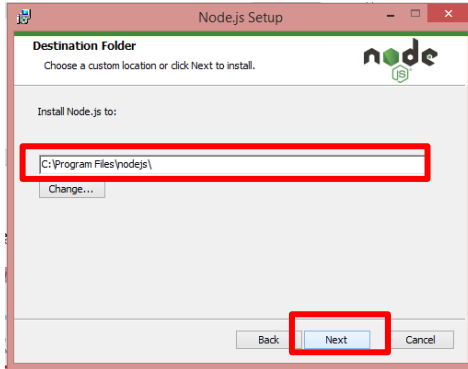
click **run**,



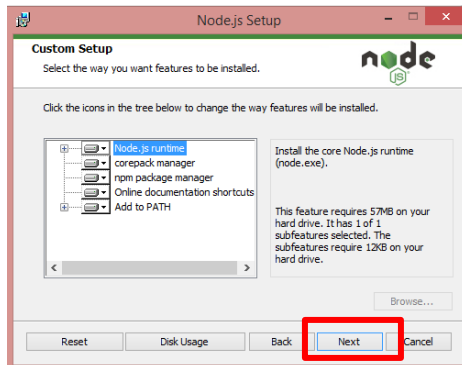
Click **I Agree**, then **Next**



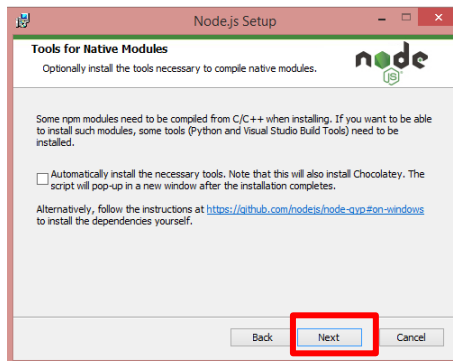
then, look for a location you want to install the Nodejs, then click, **Next**



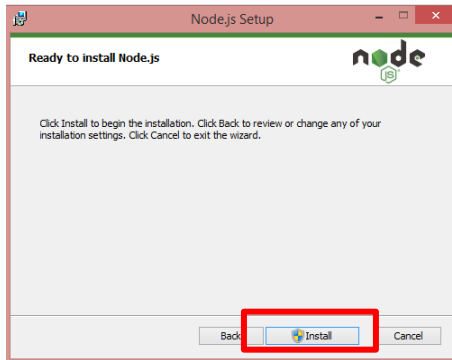
click **Next**,



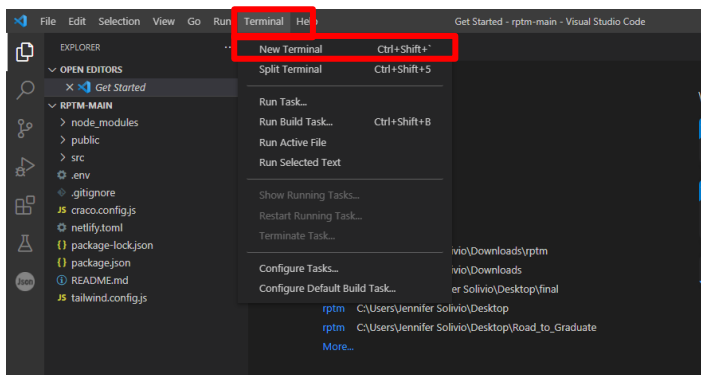
Click **Next**,



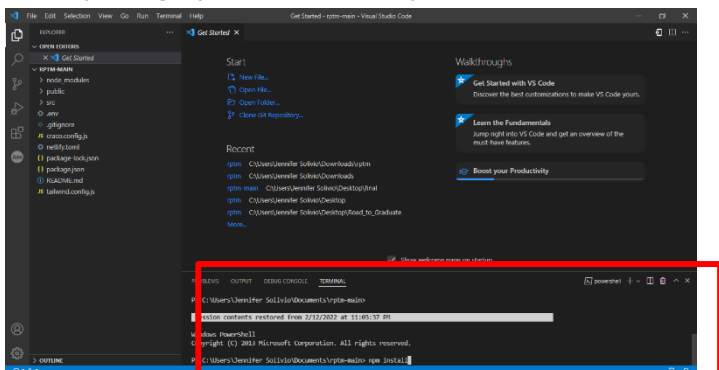
then, Click **Install**. Then **Finish**.



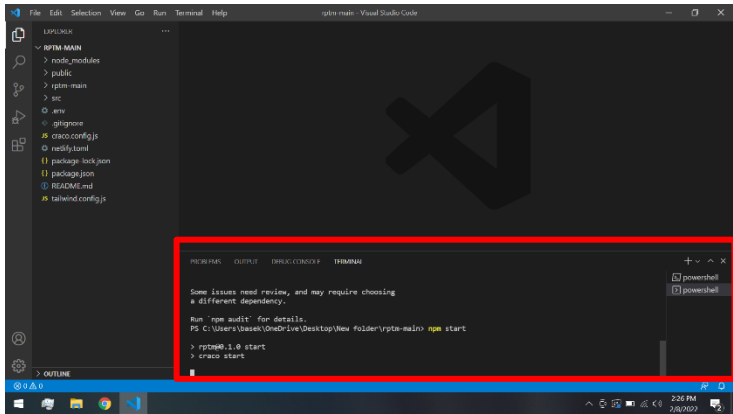
4. Back to the VSCode then click **Terminal**, then, **New Terminal**.



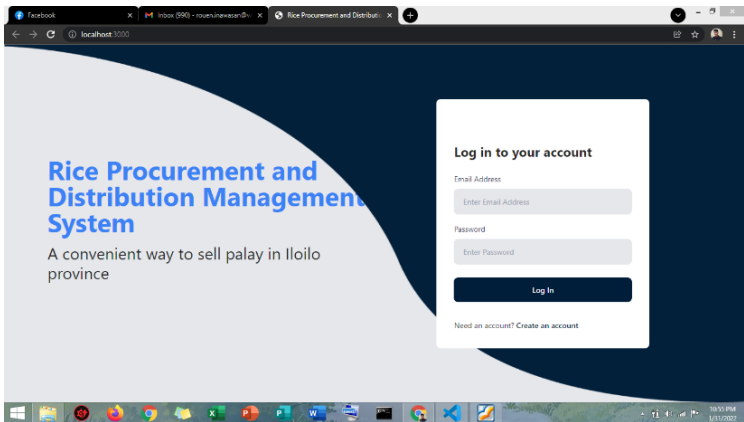
5. In the terminal, Input **NPM Install** to install the modules that are listed in package .json and their dependencies. then, **Enter**.



6. After the installation, Input **NPM START** to execute the defined file. then after that **Enter**.



Then, the system will automatically open in the default web browser.

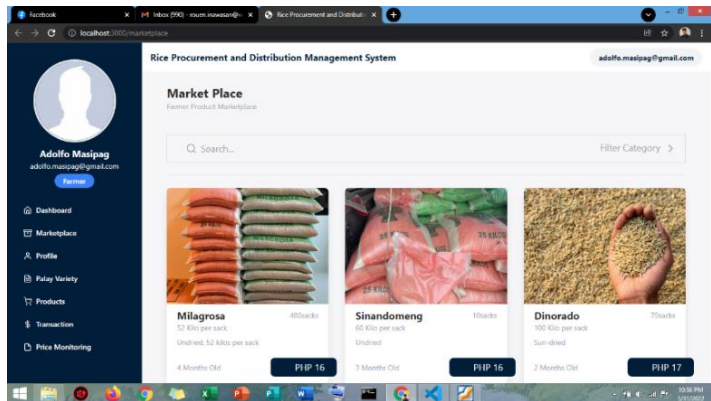


Using the system per main features.

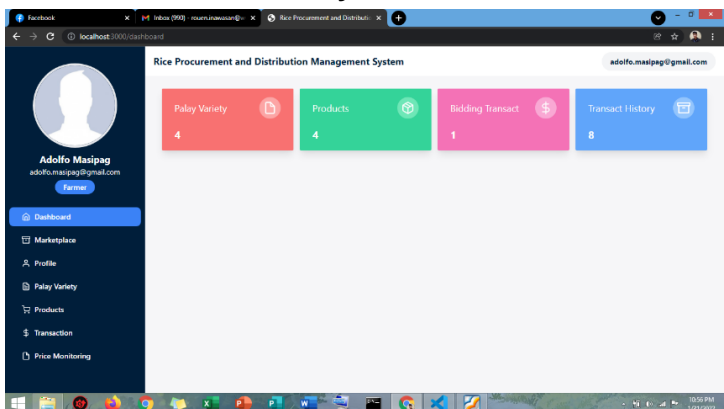
Farmer Side

— — —

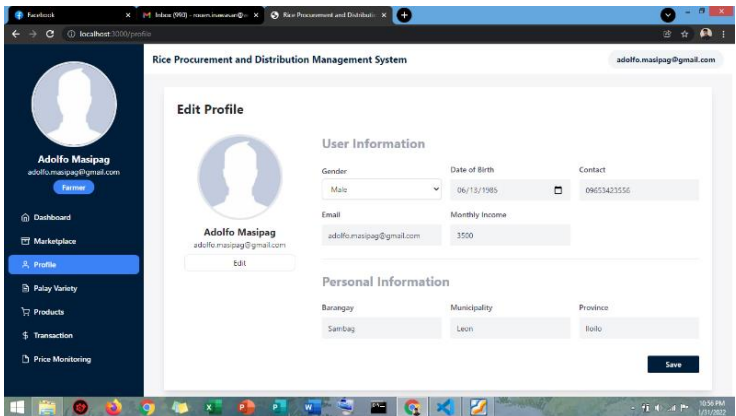
1. In the **farmer side**, the default page/ landing is the **marketplace**. where you can view different palay/rice that are sell by the different farmers. In order to bid, just click the **Price**. You can filter or sort the product by clicking the **Filter Category**



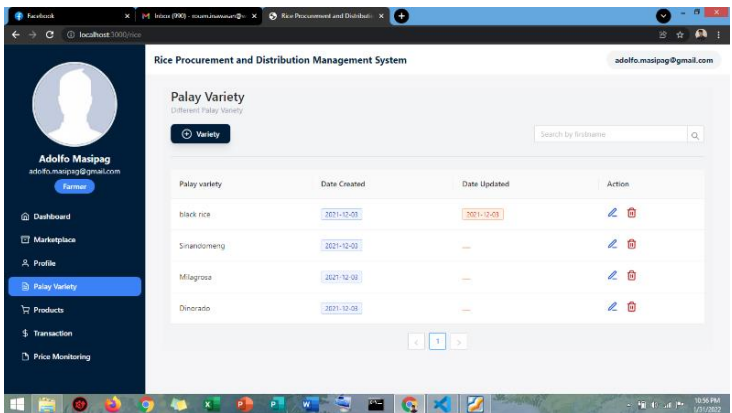
2. **Dashboard**, what they can view here are the **Total palay variety** they have, **Total product** they sell pr posted in marketplace, **Total Bidding Transaction** who bid their product and **Total Transaction History** who have successful transaction.



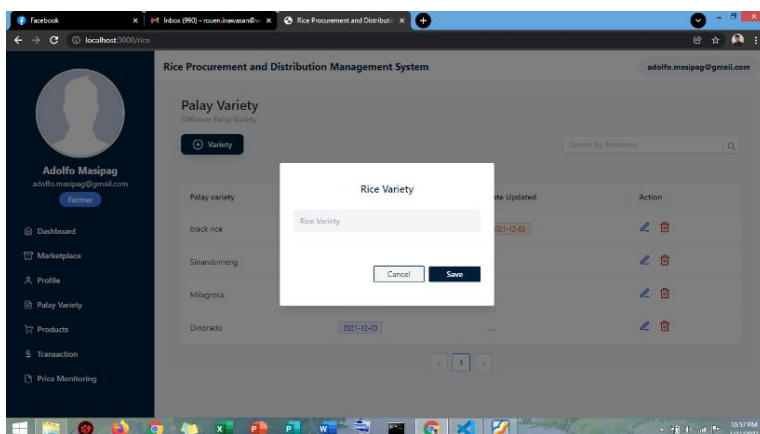
3. **Profile**, this page is a user's personal information, whereas they can update, edit and delete. In updating/ editing, click **Edit**, after you finish edit or update your information click **Save**.



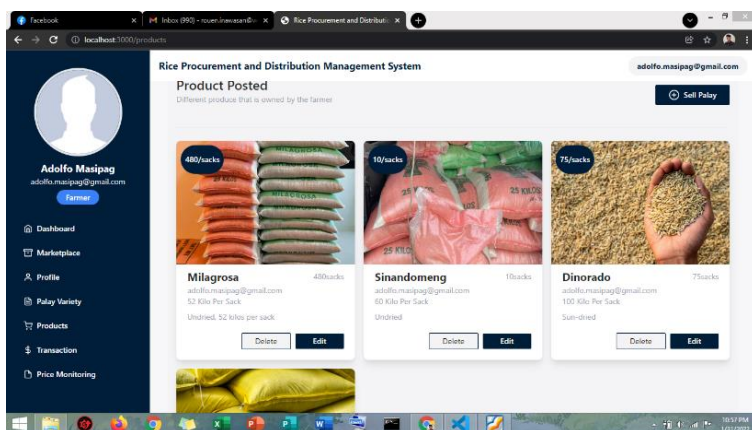
4. In **Palay Variety**, what you can view are the different palay variety, where as they can also **Add, Edit** and **Delete** variety.



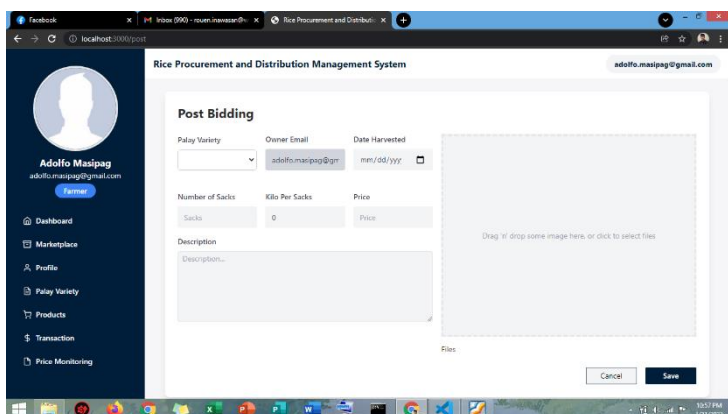
Click **Variety** to add then, the variety box will pop up, input your variety then click **Save** or **Cancel**.



5. In **Product page**, what they can view are the products that are posted in marketplace, in that page, the farmer user can edit and delete their product. These are the following steps:



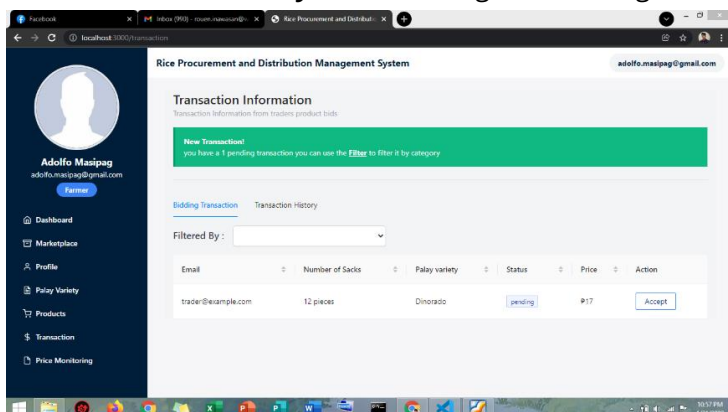
1. Click **Sell Palay**, then this page will pop up. Enter/ Select **palay variety**, then the **Owners email** is default, then, enter **Date Harvested**, then **Number of sacks**, **Kilo per sacks**, then, **Bidding Price** and **Description** then Upload a picture of Product by Drag and Drop or Select from the folder. after fill out, Click **Save**.



2. Click, **delete** if want to delete product.
3. Click, **edit** if want to edit product.

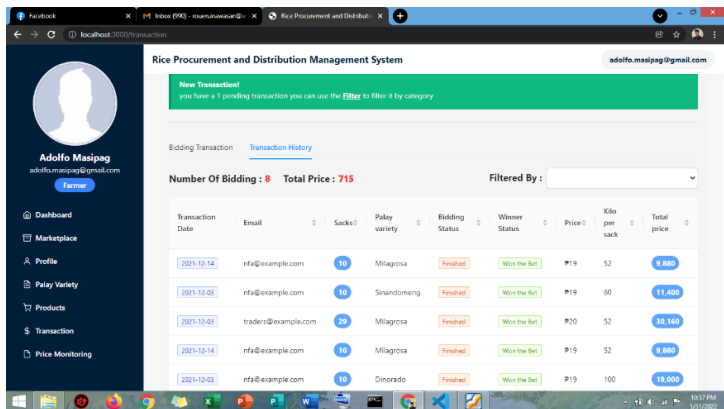
Note: All product that are posted in product page are automatically can be viewed or seen in marketplace. If someone bid the product, the number of palay that are bid are automatically deduct in the total number of sacks in product page.

6. In **Transaction**, what they can view is the **bidding history** and the **transaction history**. The following are the usage:

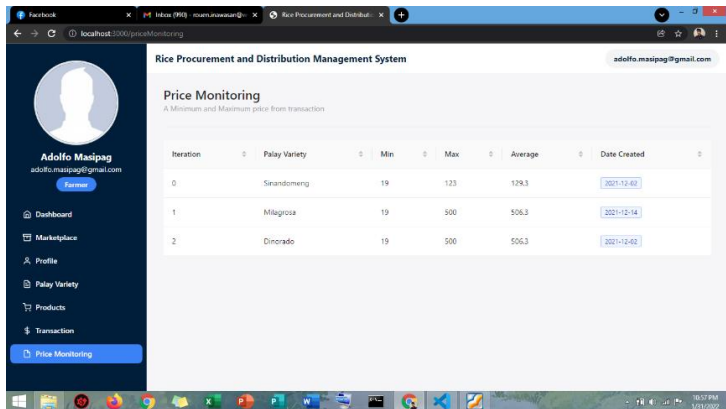


In **Bidding History**, these where you can view the traders/ NFA bidding, you can choose here you desire buyers by clicking the

Accept button. In **transaction History**, you can view here the successful transaction, you can filter or sort transaction by clicking **Filtered by**.

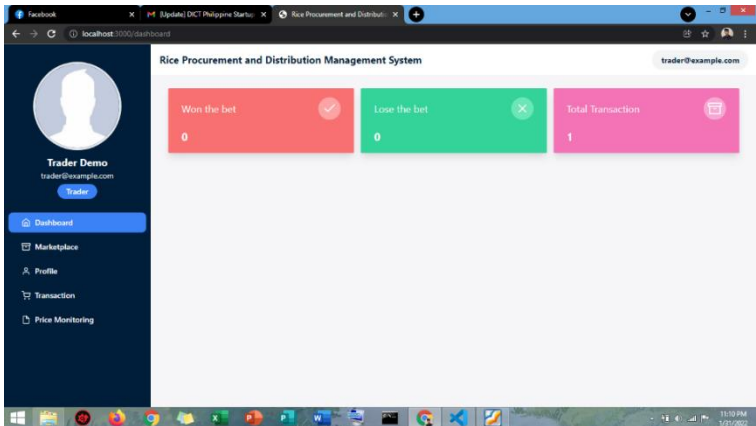


- In **Price Monitoring**, what they can view here is the minimum and maximum price of transaction per variety. the usage of these page is to determine the average price product per variety in successful transaction.

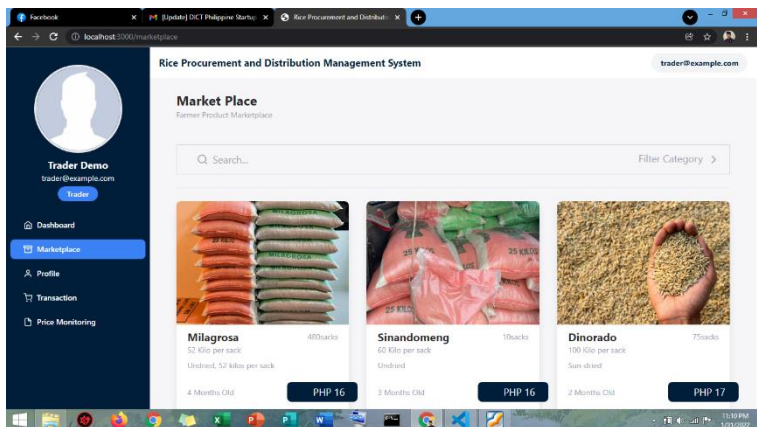


Traders Side

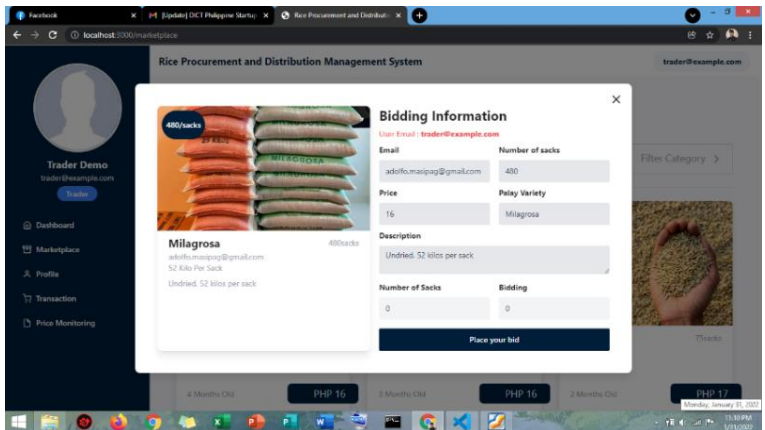
1. **Dashboard**, the usage of these dashboard in traders is to visualize the **total number of Won the bet**, **total number of lose the bet** and **total transaction** they have.



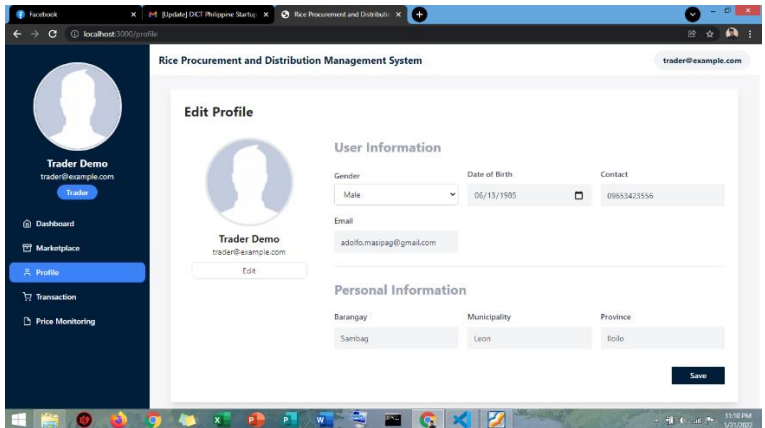
2. **Marketplace**, the usage of marketplace is where you can view and see the product of all farmers where you can select palay to bid.



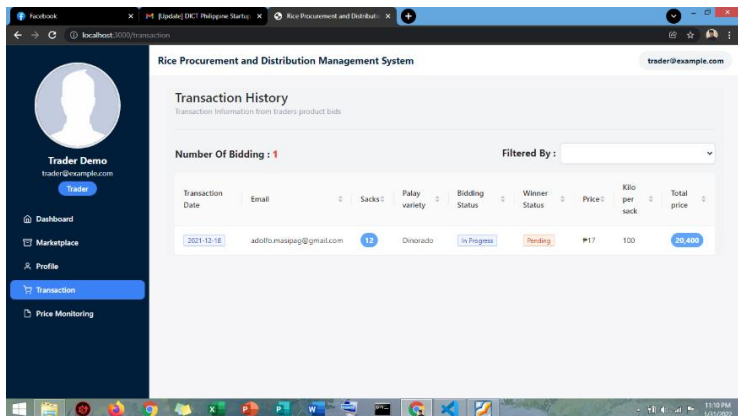
To bid palay, click the **Price**, then **email of the farmer**, in this case the email is already default, then **number of sacks** and **bidding price** then click **Place you bid**



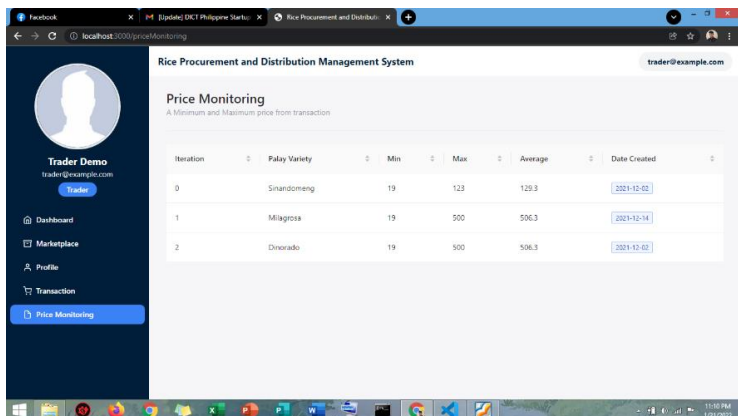
- Profile, these are the user's profile where they can update, edit and delete information. Click **edit**, then after **Save**.



- In **Transaction**, all products that you bid in the marketplace can be seen or viewed here in transaction whether it was accepted or still pending. You can filter transaction by clicking **Filter by**.

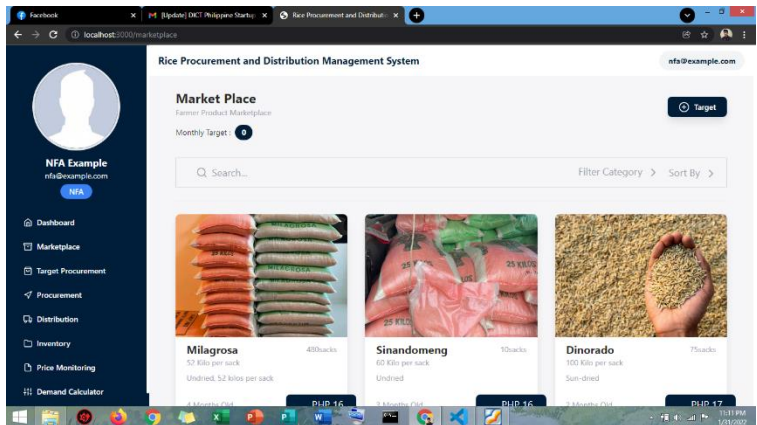


5. In **Price Monitoring**, what they can view here is the minimum and maximum price of transaction per variety. the usage of these page is to determine the average price product per variety in successful transaction.



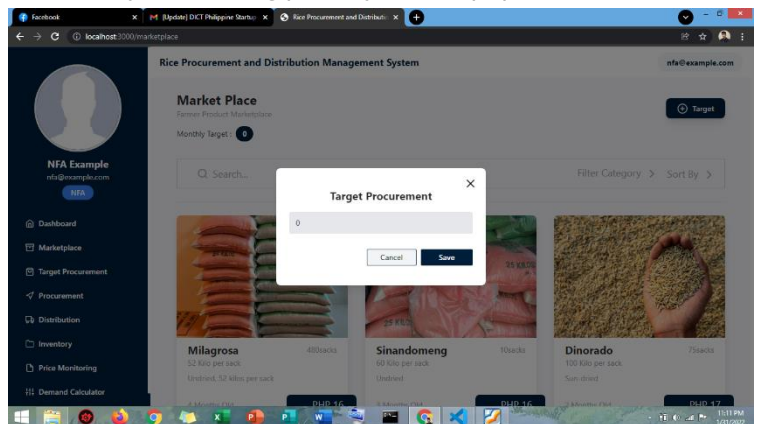
NFA Side

1. **Marketplace**, everytime they will sign in, they will be redirected to **marketplace**, where they can select farmers product.



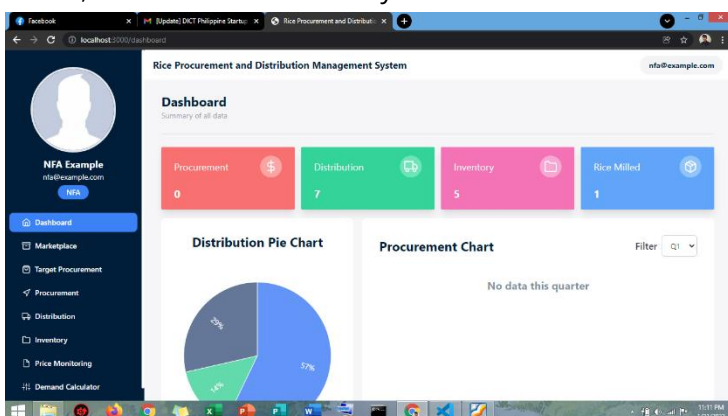
In **NFA**, they have a monthly target that needs to procure. To add **monthly target**, click **Target**, then, the **target procurement** box will pop up, then **input the number** that need to procure then click **save** or **cancel**.

***Note:** The default bidding price of NFA 19 php.*

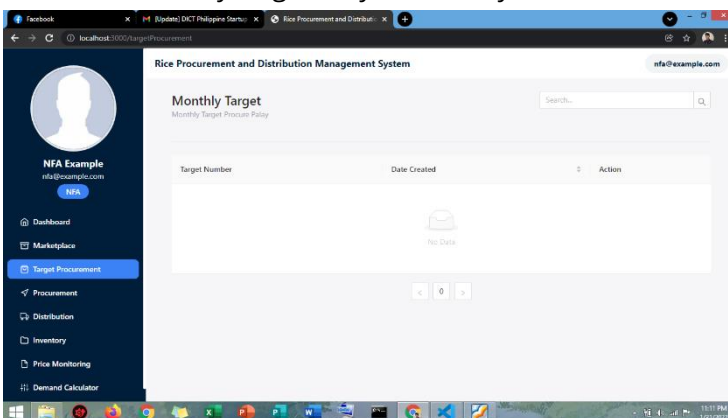


2. **Dashboard**, what they can view here are the **total procurement**, **distribution**, **total inventory** and **total rice**

milled. The usage of this page is to visualized the data that been procured, distribute and inventory to monitor the buffer stocks.



3. **Target Procurement**, the usage of this page is to identify and differentiate monthly target they have in a year.



4. **Procurement**, these are procurement data of NFA. What you can view here are the **procured palay** from the farmer. The usage of this page is to easily **record and generate report** of the procurement transaction of NFA. This record is automatically added to the number of inventory and also visualized in the dashboard.

Rice Procurement and Distribution Management System

Procurement Information
Procured Rice Data

Search...

Date Created	Harvest Date	Farmer Email	Number of Sacks	Kilo Per Sack	Price per kilo	Total price	Action
2021-12-14	2021-09-14	adofo.masipag@gmail.com	10	52	19	9,800	
2021-12-03	2021-11-14	adofo.masipag@gmail.com	10	60	19	11,400	
2021-12-14	2021-09-14	adofo.masipag@gmail.com	10	52	19	9,800	
2021-12-03	2021-11-13	adofo.masipag@gmail.com	10	100	19	19,000	
2021-12-14	2021-11-13	adofo.masipag@gmail.com	5	100	19	9,500	

5. **Distribution**, these are the distribution data of NFA. There are 3 categories of distribution; the **Police supply, relief operation** and **market**. The usage of this page is to easily **identify the distribution**. The data in distribution are visualized in dashboard to easily analyze the data.

Rice Procurement and Distribution Management System

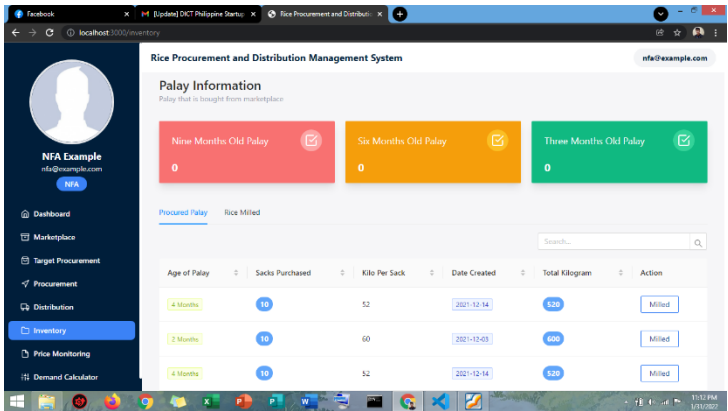
Distribution Information
Data that needs to distribute in different sectors

Search...

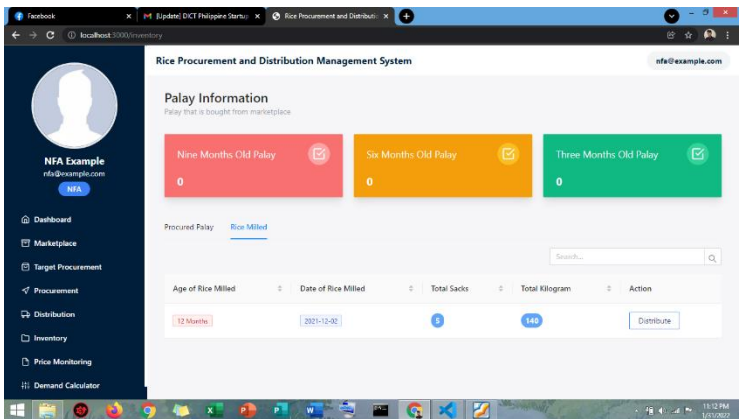
Distribution Type	Distribution Date	Number of Sacks	Barangay	Municipality	Province	Recipient Name	Event Purpose	Action
Market	2021-12-02	231	Santa Barbara	Santa Barbara	Iloilo	Jorge Dualoque	Store	
Police	2021-12-02	5	Santa Barbara	Santa Barbara	Iloilo City	Jorge Dofamingo	Bagging Eneng	
Relief Operation	2021-11-01	10	Daga	Santa Barbara	Iloilo	Bi-o	Omicron Vaccine	
Police	2021-10-01	6	Santa Barbara	Santa Barbara	Iloilo	Boelling Gonzales	Bagging Eneng	
Relief Operation	2021-12-03	100	Santang	Jaro	Iloilo	Regin	Bagging Rouen	

6. **Inventory**, the usage of these page is to easily identify the **3,6,9 rules of the NFA**. **Three (3) months**, the palay should not be more than 3 months old from the date harvested in buying in the marketplace. **Six (6) Months**, the palay should be milled on or before 6-month-old from the date harvest. **Nine (9) Months**, the rice milled should be distributed on or before 9-months-old from the date of milled. Everytime the NFA procure a palay to

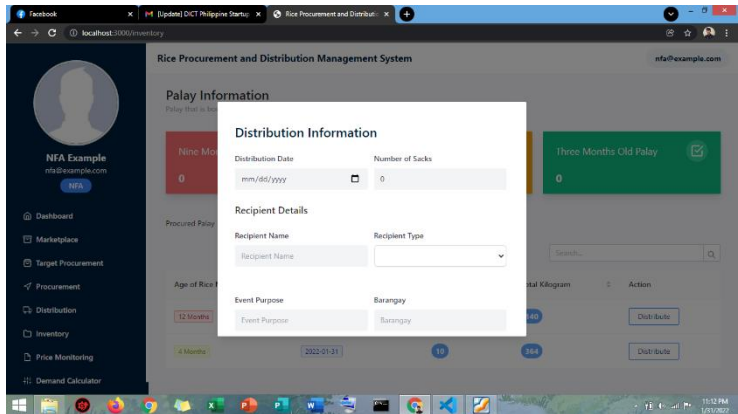
the farmer the data are automatically add to the inventory under **procured palay table** and every distribution the inventory is also deduct.



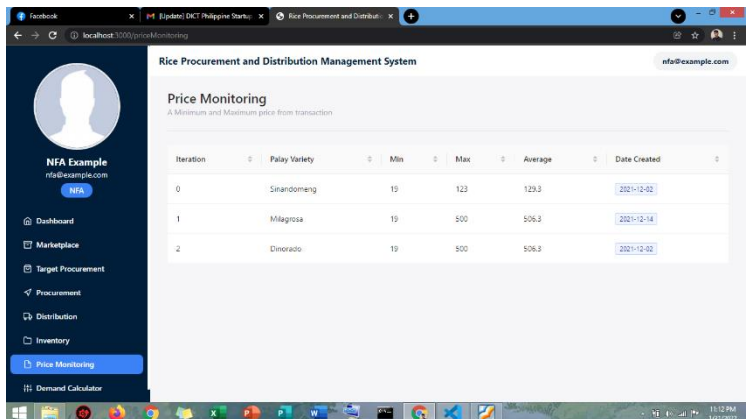
then the palay that already milled will added to the **rice milled table**.



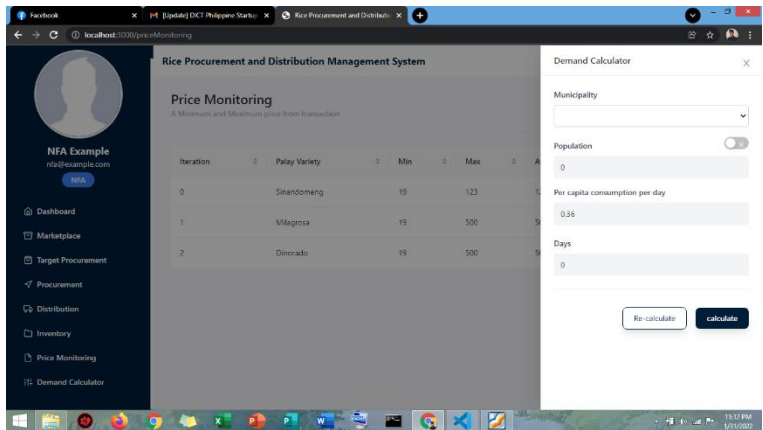
To record distribution: Click **Distribute**, then, **distribution information** will pop up then, input **Distribution date**, **Number of sacks**, **Receipt's Name**, **Receipt's type**, **event purpose** and **Barangay** then **Save**.



7. **Price Monitoring**, what they can view here is the minimum and maximum price of transaction per variety. the usage of these page is to determine the average price product per variety in successful transaction.



8. **Demand Calculator**, this is the additional feature we made to the NFA. The purpose of this demand calculator is to determine the **total number of rice** that need to distribute in the municipality, for example if there are calamities that needs relief operation.



Troubleshooting for Possible Issues/ Problems

In case of problem/issues occurrences, try the following;

1. check the network cables, modem and routers for connection problem.
2. Restart the web browser and run the system again.
3. Open the **VSCode of the system**, in **terminal**, click **new terminal**, then Enter NPM install, after, **NPM start**, then lastly, NPM start and wait to load the system by the generated local host.
4. If above mention is still not working. restart the PC.
5. Contact all development team for assistance

FAQs (Frequently Asked Questions)

Q1. What is rice procurement and distribution management system?

RPDMS or rice procurement and distribution management system is a web-based system that connect the farmer, traders and NFA for buying and selling rice and palay produce through bidding, whereas this system empower the farmer choose buyers of their produce.

Q2. RPDMS possible to deployed online?

Yes, RPDMS will be deployed online. However, the resources of the development team are limited, this management system is deployed in local host for the meantime. If the system will be utilized, it can be deployed online so that it can be access by the user anywhere as long as they have the knowledge in using and internet connection.

Q3. Who is the user of the system?

The users of the system are farmer, trader and NFA.

Q4. How can we access the system or website?

The website or the system can be access through link provided or generated by running the system in VSCode.

Q5. How do I know if I have bidding from the traders or NFA? and how do I know if I win the bidding?

In transaction page, there's a bidding history and transaction history. If someone bid for palay, the record will be redirected to the bidding history. You can view the people who bid for you palay, after, you can choose buyer. In farmers user interface, it will appear as a selection either you accept or reject. In traders and NFA, it will appear won if you are selected or lose

if rejected. Then, if you have successful transaction the record will be redirected to transaction history.

Q6. How does RPDMS use my personal detailed or information for analysis?

RPDMS uses your personal information details and data especially farmer to make it easier, efficient, reliable for you to find, retrieve, organize and prioritized your stuffs, clients and collaborate to those who have low income and frequently bid your produce. Also, to avoid duplication of record and scams.

Q7. How can we benefit to this system?

This system can benefit to all user. **In farmer**, the features that been implemented are very beneficial to them especially by empowering them to choose their buyers and sell their produce without losing their capital. Also, we added price monitoring to easily monitor the price in all transactions. **In trader**, same with the farmer, they can easily identify and find seller that are legit and also, they can negotiate to the farmers. We also added price monitoring for them to be aware of the prices in every transaction they have. **In NFA**, their a lot of features we added to the NFA user interface that can surely benefit and help them. One of these are procurement page and distribution page, whereas they can easily add, edit and delete records and the data that been summarized and gathered will automatically visualize in dashboard which NFA staffs can easily analyze the data. We also added inventory for them to easily track and identify their buffer stock to distribute.

Q8. Are there any charges if we use this system?

No, since this system was designed to benefit our primary user (farmer, trader and NFA). The payment or charges are depending to the transaction between the buyer and seller.

Q9. Will any of my personal details or information be recorded and used for other purposes?

No, no information will be disseminated or disclosed to the public or any other purposes.

Q10. How will I know if I'm using farmer or trader or NFA interface?

Before you sign up you will be asked of what user you are creating. after you successfully create your account, everytime you log in you will be redirected to what user you create. The other method is in the profile page, it will be indicated of what user you are.

Contact Details of the Development Team

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