Project Report on "AGROWW"

Diploma in Computer Engineering Year 2020-2021

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Submitted To



Computer Engineering - HPP
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CERTIFICATE

This is to certify that the project titled "AGROWW" has been carried out satisfactory by Darshit Parimal Patel (2018033800138841), Priyank Yogesh Panchal (2018033800136455) and Maulik Ureshbhai Patel (2018033800136803) under the guidance of Ms. Bhavini Samajpati and Ms. Ruchita Tailor, in the partial fulfilment of the Diploma in Computer Engineering – HPP (Final Semester) as a part of course curriculum in Diploma of Engineering during the academic year 2020 -2021.

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ABSTRACT

Our website provides information and details regarding crop, seeds, harvesting and hybrid farming techniques through video tutorials to farmers and to those who were planning to start farming a new crop. It also has a crop calendar through which user can see timely information regarding sowing and harvesting periods of locally adapted crops by providing the best suitable period of time for the adapted crop. It enables farmers to purchase different types of tools, seeds, fertilizers on our website at low cost.

CHAPTER 1: INTRODUCTION

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1.1 Problem Statement

The challenge encountered that the farmers have to go different places for buying appropriate tools, fertilizers, seeds, etc. Farmers already gain very less profit due to this uncertain weather. So, our website will help to buy the products at a relatively low cost and also help introduce them to new technology like hybrid farming. Most of the farmers are not smart so they have no idea how to utilize their land at their fullest. So, our website will be one stop destination for farmers as it provides all necessities related to agriculture and farming. Agriculture Management System is farmer management website which helps farmers to give best farming processes. It helps farmers to improve their productivity and profitability.

1.2 Motivation

The Farmers don't have idea about the weather and the different crops which can be grown by them on their land and sometimes due to lack of knowledge, tools, fertilizers the crop gets ruined.

1.3 Objectives

The objective of AGROWW is to help the farmers by providing them information about harvesting and sowing of crops and their suitable temperature and they can also purchase the farming tools and fertilizers for growing healthy crops.

1.4 Scope of The Project:

This website can be used by anyone whether the user is farmer or not and having access to computer. Also, Seller can manage their products using admin panel.

CHAPTER 2: SYSTEM REQUIREMENTS

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2.1 Hardware Requirements:

2.1.1 Developer side:

• Hard disk Drive: 80 GB

• Processor: Intel Core i3

• RAM: 2 GB

2.1.2 User side:

• Any Computer and Laptop with Processor: Intel Core i3.

2.2 Software Requirements:

2.2.1 Developer Side:

• Frontend:

Visual Studio Code

Adobe Dreamweaver

• Backend:

Xampp

2.2.2 User Side:

Web Browser

Just required internet connection.

2.2.1.1 Visual Studio Code

Microsoft Visual Studio is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs, as well as websites, web apps, web services and mobile apps. Visual Studio uses Microsoft software development platforms such as Windows API, Windows Forms, Windows Presentation Foundation, Windows Store.

2.2.1.2 Adobe Dreamweaver

Adobe Dreamweaver is a proprietary web development tool from Adobe Inc. It was created by Macromedia in 1997 and developed by them until Macromedia was acquired by Adobe Systems in 2005. Adobe Dreamweaver is available for the macOS and Windows operating systems. Following Adobe's acquisition of the Macromedia product suite, releases of Dreamweaver subsequent to version 8.0 have been more compliant with W3C standards. Recent versions have improved support for Web technologies such as CSS, JavaScript, and various server-side scripting languages and frameworks including ASP (ASP JavaScript, ASP VBScript, ASP.NET C#, ASP.NET VB), ColdFusion and PHP.

2.2.1.3 Xampp

XAMPP is a free and open-source cross-platform web server solution stack package developed by Apache Friends, consisting mainly of the Apache HTTP Server, MariaDB database, and interpreters for scripts written in the PHP and Perl programming languages. Since most actual web server deployments use the same components as XAMPP, it makes transitioning from a local test server to a live server possible.

CHAPTER 3: SYSTEM ANALYSIS

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3.1 Study of Current System

In current systems, the registration process is mandatory. Also, the system is too complex to act on. The system first asks them for their crop, due to which they only can get knowledge about their owned crop. Even some of the systems are taking charges for providing services whereas some systems provide free services, though they are not as efficient as our system. There is no existing system which provides knowledge about various farming method, crop-calendar and buying of tools, fertilizer and seeds all in one go.

3.2 Proposed System

In the proposed system, the farmer can get almost all kind of help they need. They can get the tools and fertilizers they need from the E-Commerce section. After that if they want to know about the types and method of farming such as Hybrid Technology, Dry Farming, Organic Farming, etc. as well as Crop Calendar in which they can see the planting and harvesting month of a specific crop they want to know and the weather with temperature so that they can be sure that the specific crop can be a success.

3.3 Feasibility Study

Feasibility study means an evaluation of benefits versus cost incurred in developing project,

Where the cost includes man power, time, resources and money.

3.3.1 Economical Feasibility

The open-source web developing platform is used to develop this website. As it is free source of software therefore the money is saved. Also, there is a minimum requirement of the hardware. For using this website, users will also not be charged. As the front end used is Web Platform, it is free to use by just searching the website on any web browser. Hence, system is economically feasible.

3.3.2 Technical Feasibility

The group dealing with the undertaking is sufficiently qualified to finish the errand appropriately. All the individuals are familiar with the technologies which are used in the project. The technical resources required for carrying out the project is Adobe Dreamweaver, Microsoft Visual Studio & XAMPP Web Server (Apache HTTP Server, MySQL).

3.3.3 Operational Feasibility

This system is operationally feasible as it is very easy for end users to operate it. User just need to open our website and they are all good to go. Users can easily gain knowledge regarding different types of farming methods, can view video tutorials with description and can order equipment & product related to farming. User can view crop calendar of the year on just one click. So, over all its very easy to use by a youth or an old person.

CHAPTER 4: SYSTEM DESIGN

CHAPTER 4: SYSTEM DESIGN

4.1 Data Dictionary

Table Name: admin_user

Description: This table contains the details of admins.

Table 4.1 admin_user

Sr.	Field Name	Datatype	Size	Constraints	Description
No					
1	admin_id	Integer	11	Primary key	It contains the
					admins identification
					code.
2	username	Varchar	255	-	It contains the
					admins username.
3	password	Varchar	255	-	It contains the admins
					password.

Table Name: users

Description: This table contains the details of users.

Table 4.2 users

Sr.	Field Name	Datatype	Size	Constraints	Description
No					
1	id	Integer	11	Primary key	It contains the user's
					identification code.
2	name	Varchar	255	-	It contains the user's
					name.
3	password	Varchar	255	-	It contains the user's
					password.
4	email	Varchar	50	-	It contains the user's
					email.
5	mobile	Varchar	10	-	It contains the user's
					mobile number.

i
time of registration.

Table Name: categories

Description: This table contains the details of categories.

Table 4.3 categories

Sr.	Field Name	Datatype	Size	Constraints	Description
No					
1	id	Integer	11	Primary key	It contains the
					categories
					identification code.
2	categories	Varchar	255	-	It contains the
					categories name.
3	status	tinyint	4	-	It contains the status
					of categories.

Table Name: order_status

Description: This table contains the details of the order_status that a order can contain.

Table 4.4 order_status

Sr.	Field Name	Datatype	Size	Constraints	Description
No					
1	id	Integer	11	Primary key	It contains the
					identification code
					of order_status.
2	name	Varchar	50	-	It contains the name
					of the order status
					that a order can
					get.

Table Name: product

Description: This table contains the details of the products.

Table 4.5 product

Sr.	Field Name	Datatype	Size	Constraints	Description
No					
1	id	Integer	11	Primary key	It contains the
					identification code
					of product.
2	categories_id	Integer	11	Foreign Key	It contains the
					identification code
					of the categories.
3	name	Varchar	255	-	It contains the name
					of the product.
4	mrp	float	-	-	It contains the mrp
					of the product.
5	price	float	-	-	It contains the price
					of the product.
6	qty	Integer	11	-	It contains the
					quantity of the
					product.
7	image	Varchar	255	-	It contains the image
					of the product
8	short_desc	Varchar	2000	-	It contains the short
					description of the
					product.
9	description	text	-	-	It contains the
					description of the
					product.
10	status	tinyint	4	-	It contains the
					availability of the

		product.	

Table Name: order

Description: This table contains the details of the order.

Table 4.6 order

Sr.	Field Name	Datatype	Size	Constraints	Description
No					
1	id	Integer	11	Primary key	It contains the
					identification code
					of order.
2	user_id	Integer	11	Foreign Key	It contains the
					identification code
					of the user.
3	address	Varchar	250	-	It contains the
					address of the user.
4	city	Varchar	50	-	It contains the city
					name of user's.
5	pincode	Integer	11	-	It contains the
					pincode of the user's
					area.
6	payment_type	Varchar	20	-	It contains the
					payment type of the
					order.
7	total_price	Float	-	-	It contains the total
					price of the order.
8	payment_status	Varchar	20	-	It contains the
					payment status of
					the order.
9	order_status	integer	11	-	It contains the order
					status.
10	txnid	Varchar	250	-	It contains the
					transaction id of the

					order.
11	mihpayid	Varchar	250	-	It contains the
					payment id of the
					order.
12	payu_status	Varchar	10	-	It contains the payu
					status of the order.
13	added_on	datetime	-	-	It contains the
					date&time when the
					order booked.

Table Name: Order_detail

 $\boldsymbol{Description}:$ This table contains the details of product and its quantity booked by user .

Table 4.7 Order_detail

Sr.	Field Name	Datatype	Size	Constraints	Description
No					
1	id	Integer	11	Primary Key	It contains the order
					detail identification
					code.
2	order_id	Integer	11	Foreign Key	It contains the order
					identification code.
3	product_id	Integer	11	Foreign Key	It contains the product
					identification code.
4	qty	Integer	11	-	It contains the quantity
					of the product.
5	price	float	-	-	It contains the price of
					the order.

Table Name: contact_us

Description: This table contains the details of feedback/comments provided by the users.

Table 4.8 contact_us

Sr.	Field Name	Datatype	Size	Constraints	Description
No					
1	id	Integer	11	Primary Key	It contains the contact
					us identification code.
2	name	Varchar	255	-	It contains the user,s
					name.
3	email	Varchar	75	-	It contains the user's
					email.
4	mobile	Varchar	15	-	It contains the user's
					mobile number.
5	comment	text	-	-	It contains the
					comment provided by
					the user.
6	added_on	datetime	-	-	It contains the
					date&time of the
					comment.

4.2 Data Flow Diagram

4.2.1 Context Level

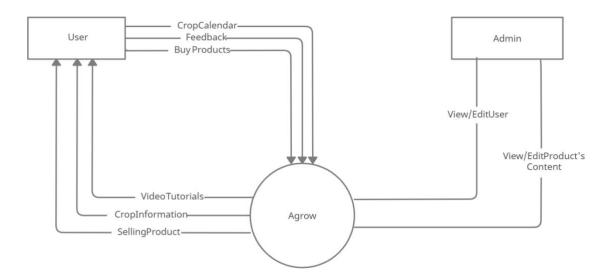


Figure 4.1 Context Level DFD

4.2.2 Level 0

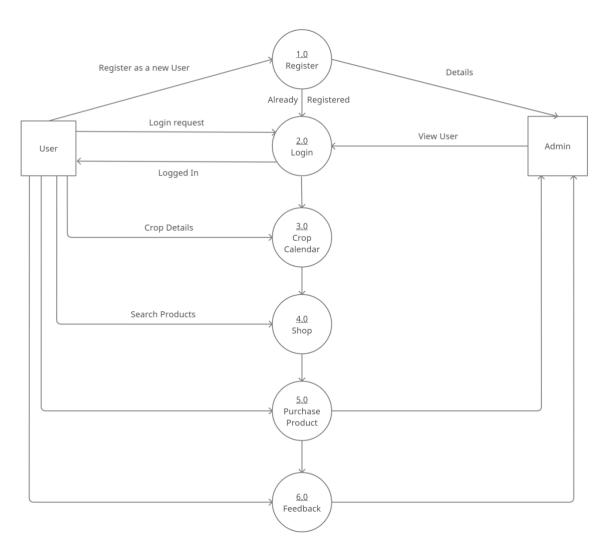


Figure 4.2.2 Level 0 DFD

4.2.3 Level 1

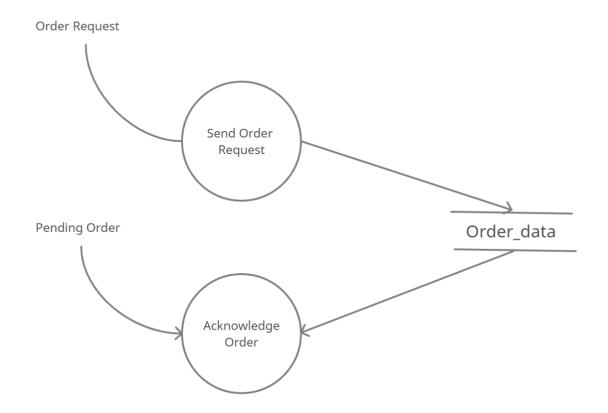


Figure 4.2.3 Lev DFD

4.3 Entity Relationship Diagram

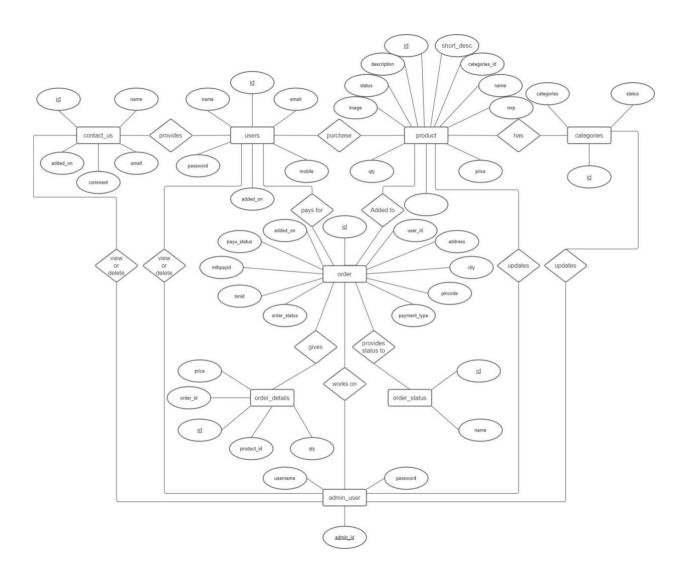


Figure 4.9 Entity Relationship Diagram

4.4 Use Case Diagram

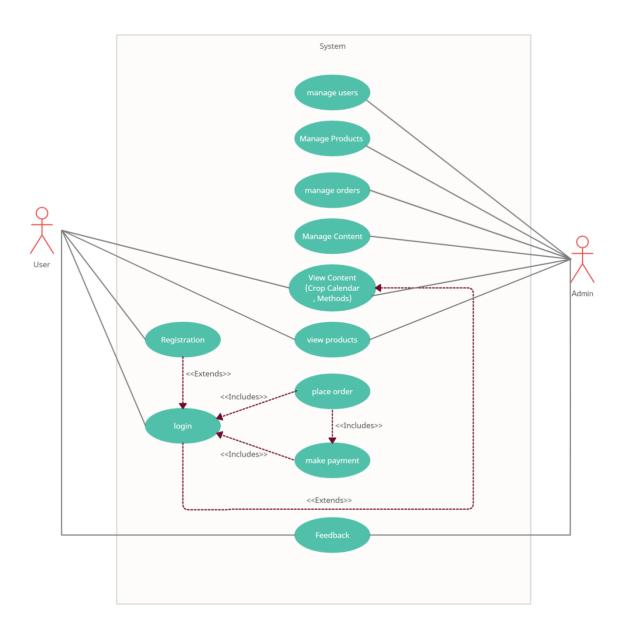


Figure 4.10 Use Case Diagram

CHAPTER 5: IMPLEMENTATION

CHAPTER 5: IMPLEMENTATION

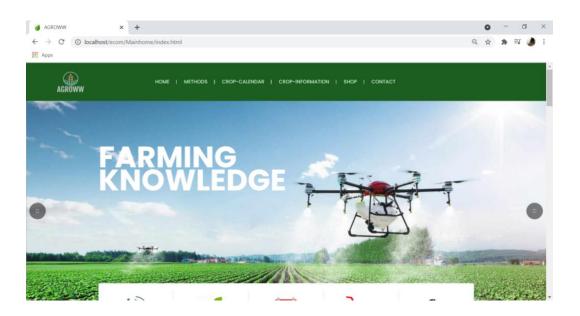


FIGURE 5.1: Home Page

Description: This page shows home screen of the website.

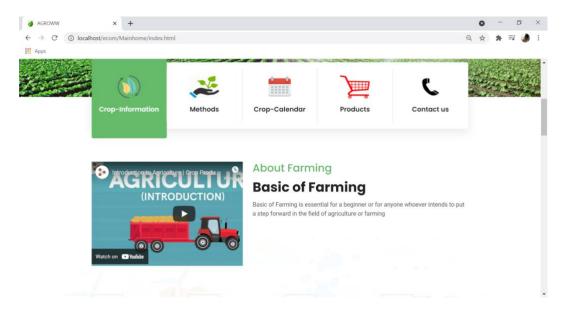


FIGURE 5.2: Home Page

Description: This page shows home screen of the website.

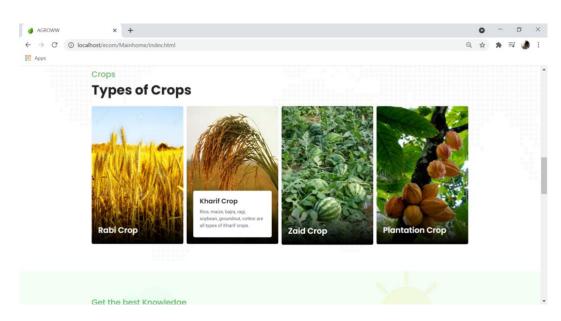


FIGURE 5.3: Home Page

Description: This page shows home screen of the website.



FIGURE 5.4: Home Page

Description: This page shows home screen of the website.

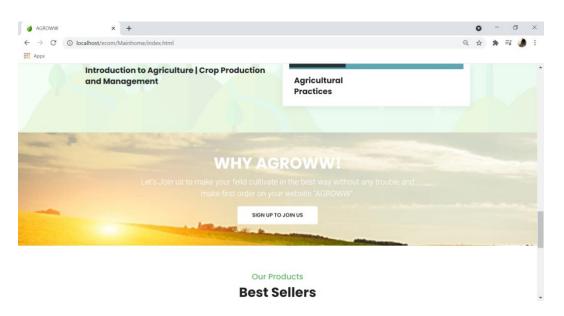


FIGURE 5.5: Home Page

Description: This page shows home screen of the website.

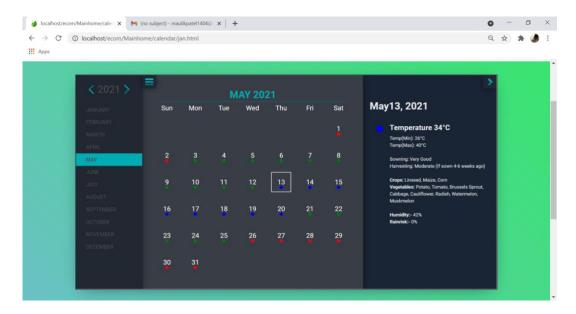


FIGURE 5.6: Crop Calendar Page

Description: This page shows the temperature whether it is favorable for their desired crops.

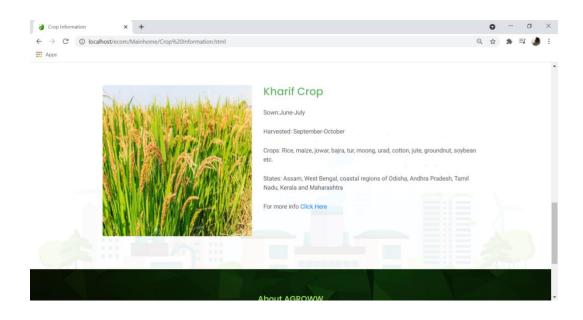


FIGURE 5.7: Crop Information Page

Description: This page shows the information of crops.

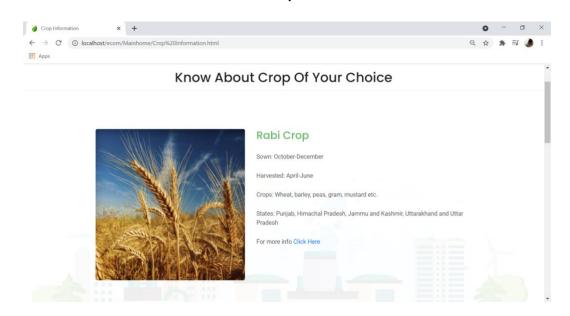


FIGURE 5.7: Crop Information Page

Description: This page shows the information of crops.

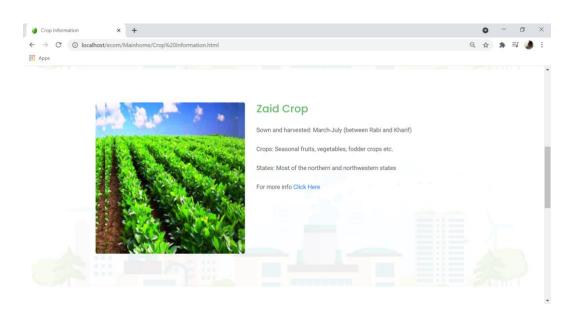


FIGURE 5.8: Crop Information Page

Description: This page shows the information of crops.

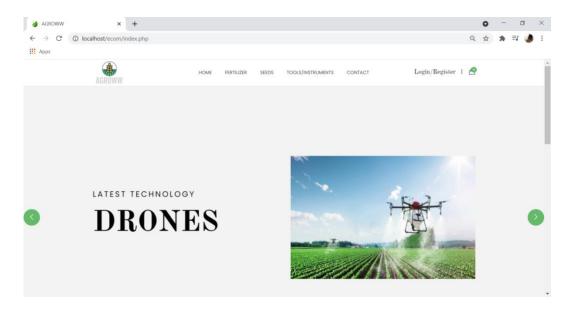


FIGURE 5.9: Shop Page

Description: This is shop page. User can buy their desired products from here.

FIGURE 5.10: Shop Page

Description: This shop page shows the best seller products.

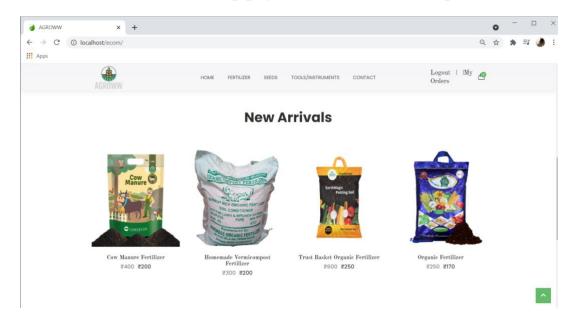


FIGURE 5.11: Shop Page

Description: This page shows the fertilizers available in the website.

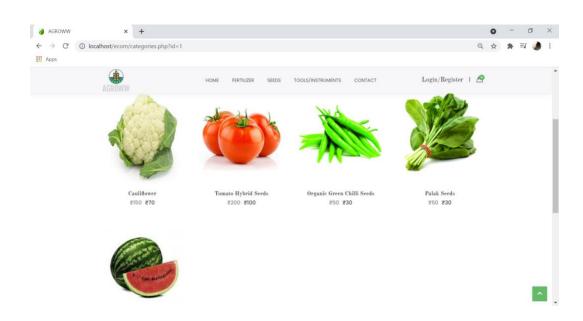


FIGURE 5.12: Shop Page

Description: This page shows the seeds available in the website.

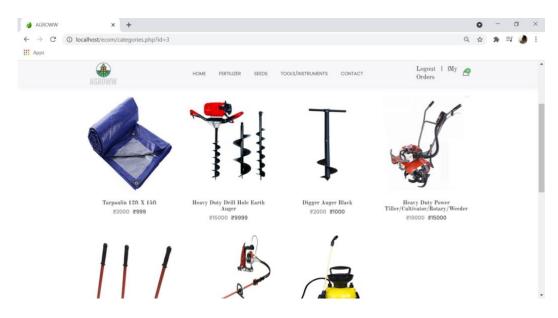


FIGURE 5.13: Shop Page

Description: This page shows the tools available in the website.

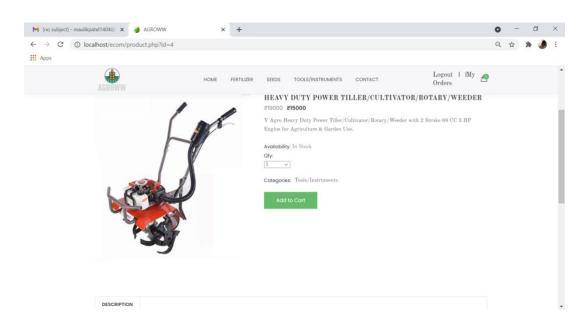


FIGURE 5.14: Product Page

Description: This page contains product. Users have to choose the quantity of product and add it to cart.

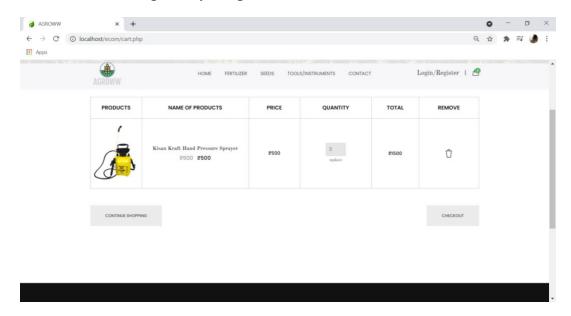


FIGURE 5.15: Cart Page

Description: This page shows the product in the cart.

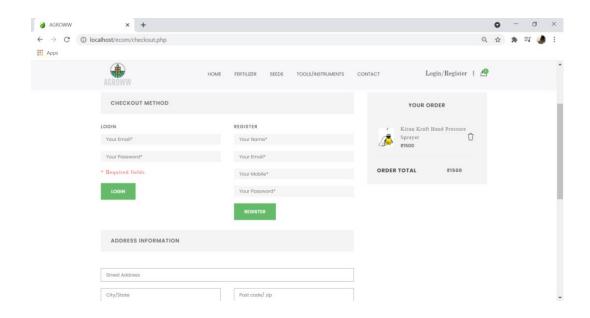


FIGURE 5.16: Checkout Page

Description: This page shows the checkout method. Users have to first login or register then further proceed.

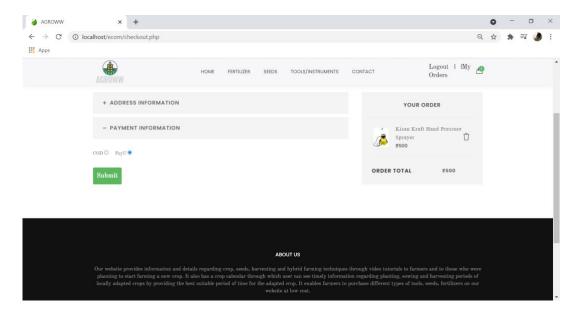


FIGURE 5.17: Checkout Page

Description: This page shows the payment method. User have to choose the payment method.

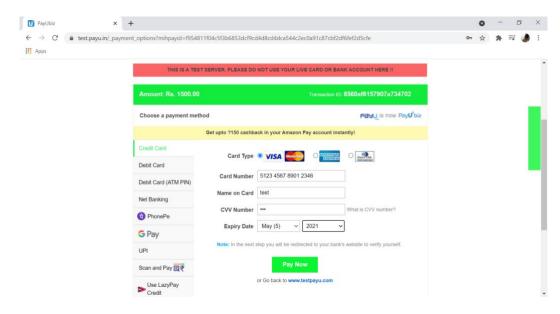


FIGURE 5.18: Payment Page

Description: This page shows the details need to fill by the users for Online Payment Method.

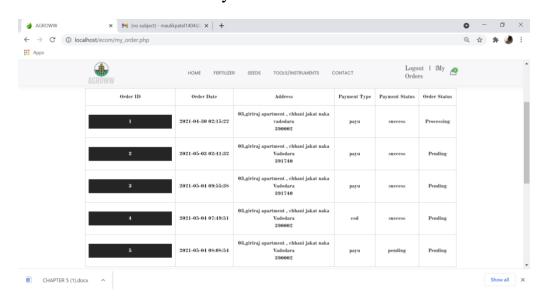


FIGURE 5.19: Order Tracking Page

Description: This page shows order tracking details.

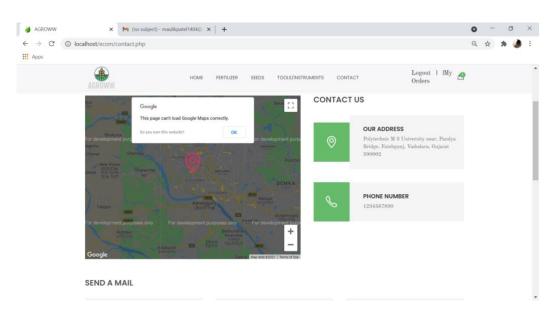


FIGURE 5.20: Contact Us Page.

Description: This page contains contact details.

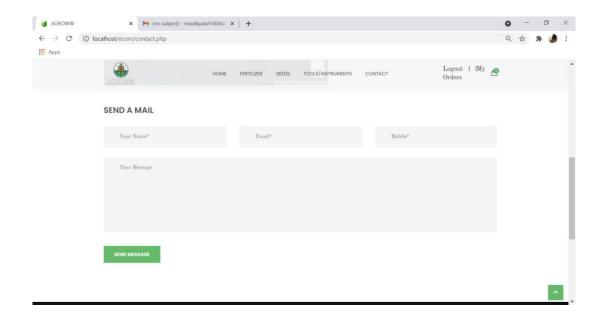


FIGURE 5.21: Contact Us Page

Description: This page contains feedback form.

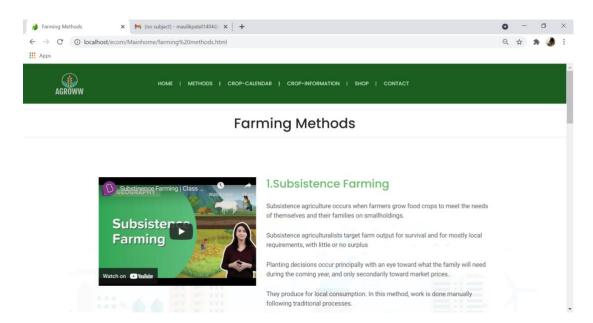


FIGURE 5.22: Farming Method Page

Description: This page shows farming methods and tutorials.

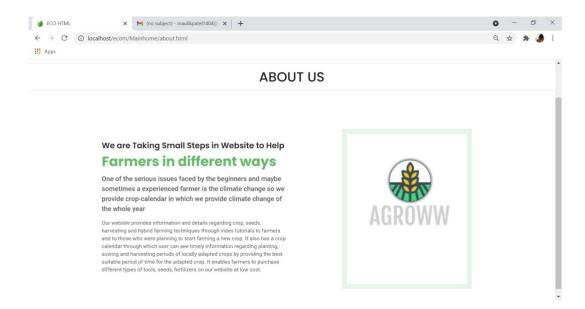


FIGURE 5.23: About Us Page

Description: This page shows about us.

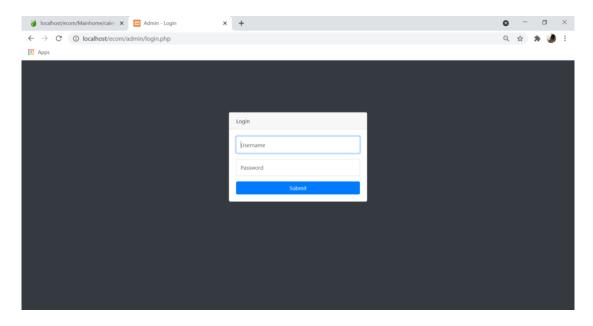


FIGURE 5.24: Admin Login Page

Description: This page shows admin login credential.

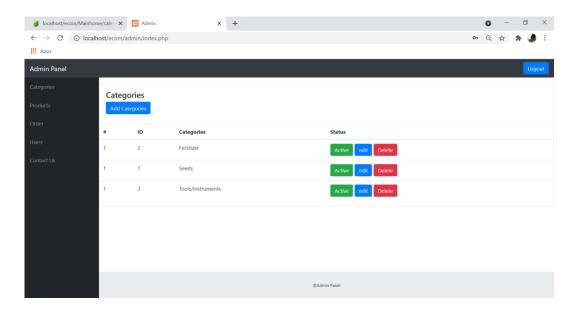


FIGURE 5.25: Categories Page

Description: This page shows categories.

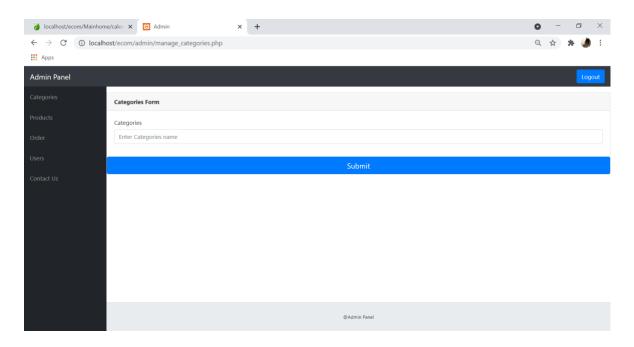


FIGURE 5.26: Add Categories Page

Description: This page shows add categories page.

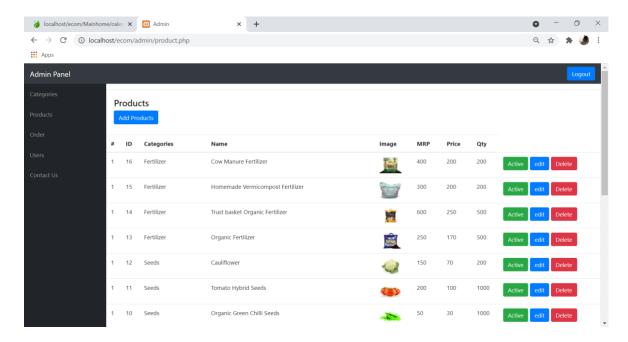


FIGURE 5.27: Products Page

Description: This page shows products page.

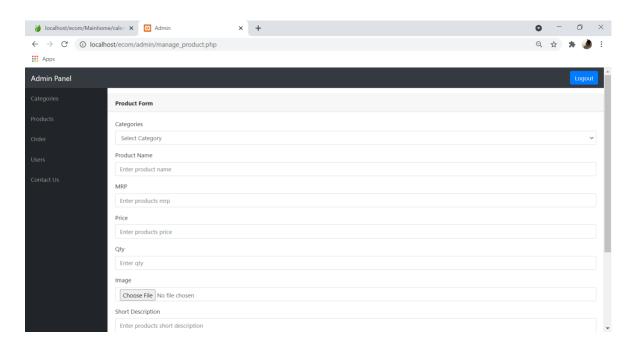


FIGURE 5.28: Add Product Page

Description: This page shows add product page.

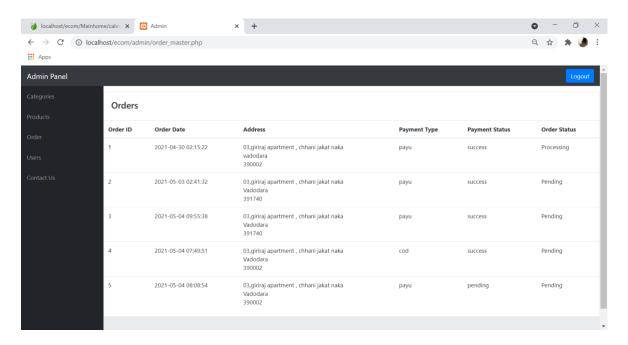


FIGURE 5.29: Orders Page

Description: This page shows add categories page.

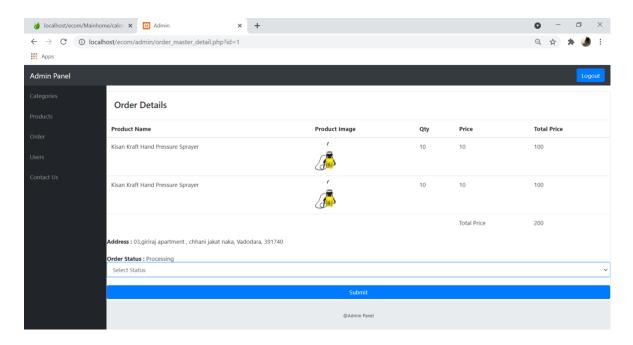


FIGURE 5.30: Order Details Page

Description: This page shows order details page.

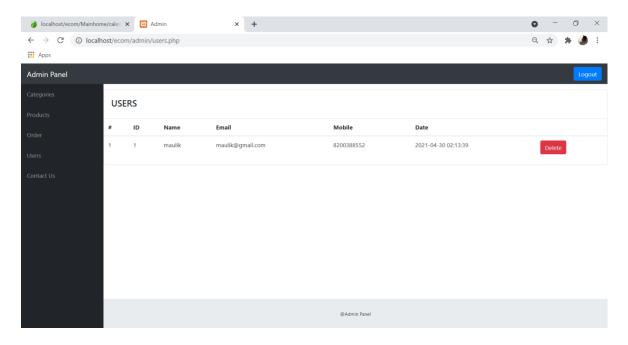


FIGURE 5.31: Users Page

Description: This page shows users page.

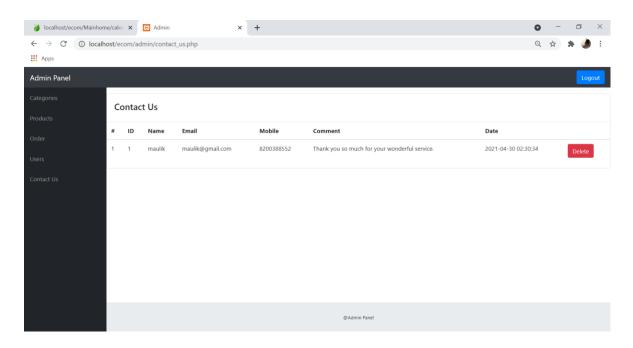


FIGURE 5.32: Contact Us Page

Description: This page shows contact us page

CHAPTER 6: TESTING

CHAPTER 6: TESTING

6.1 Test Planning

The test planning is the process that starts with the project planning. This process defines the functions that are to be tested on the basis of black box testing. This method is named so, because the program, in the eyes of the tester, is like a black box; inside which one cannot see. The main objective of the test will be to identify all the backdoors to the entry of redundant or invalid data in the database.

6.2 Test Strategy

The strategy of testing "AGROWW" is quite simply based on the black box technique in which the tester will not know the structure implementation of the website and will provide us the test results randomly as per their input.

The main parameters of the Testing will be as follows:

- 1. Login Validations.
- 2. Register Validation.
- 3. Contact Us Validation.
- 4. Checkout Validation.
- 5. Payment Validation.

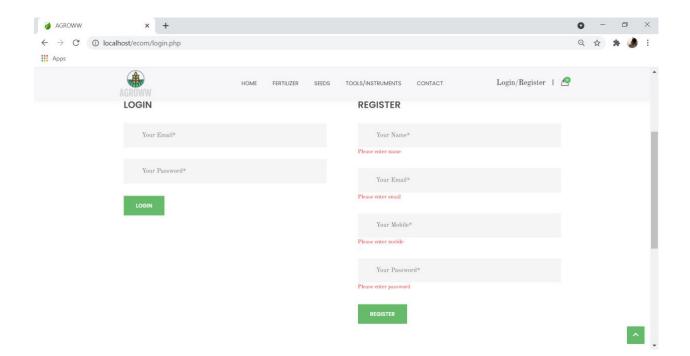


Figure 6.1 Register Page

Description: This page shows the validation to enter details.

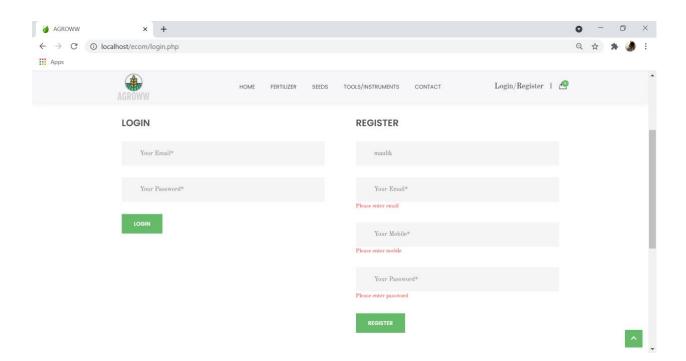


Figure 6.1.1 Register Page

Description: This page shows the validation to enter other details.

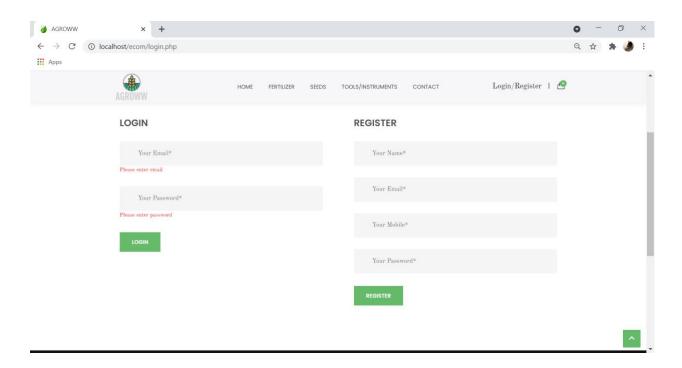


Figure 6.2 Login Page

Description: This page shows the validation of login credentials.

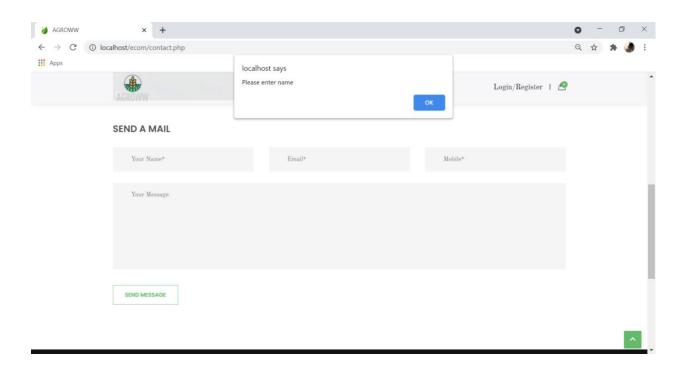


Figure 6.3 Contact Us Page

Description: This page shows the validation to enter details.

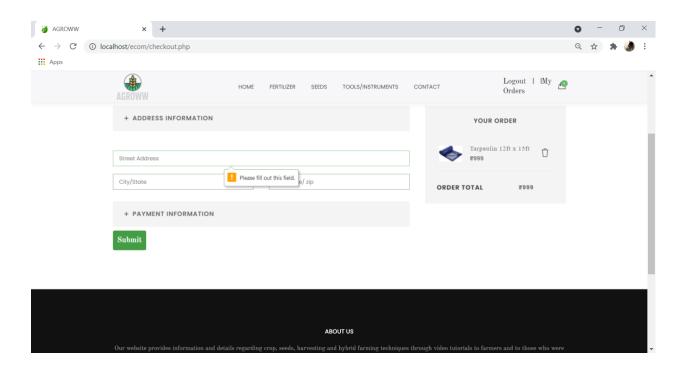


Figure 6.4 Checkout Page.

Description: This page shows the validation to shipping details.

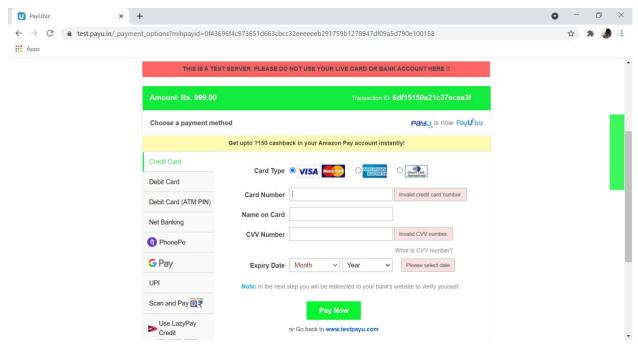


Figure 6.5 Payment Page

Description: This page shows the validation to payment gateway.

CHAPTER 7: CONCLUSION AND FUTURE WORK

CHAPTER 7: CONCLUSION AND FUTURE WORK

7.1 Conclusion:

As explained in proposed system, the main function of the website is to provide information which will help user to understand about different types of farming methods, fetch details about different crops with the help of crop calendar which shows the favourable temperature for sowing and harvesting crops/vegetables. User can also buy products/tools/instruments related to farming.

7.2 Future Work:

In future, this application will be extended in following ways:

- In crop calendar multiple regional data can be added.
- Many varieties of products can be added in shop.
- Blogs section regarding farming and agriculture written by experts will be provided.
- News Section can also be further added by which farmer can get more Information.

CHAPTER 8: BIBLIOGRAPHY

M.S.U. POLYTECHNIC BIBLIOGRAPHY

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The following sources were used for reference to complete our website named AGROWW:-

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