A

Project Report ON

"AgriBuzz"

SUBMITTED TO

SAVITRIBAI PHULE PUNE UNIVERSITY

IN PARTIAL FULFILLMENT OF TWO YEARS FULL TIME MASTERS DEGREE IN COMPUTER APPLICATION (MCA)

FACULTY OF SCIENCE AND TECHNOLGY

SUBMITTED BY

Mr. ABHIJIT JIJARAM KHAMKAR (6423)

UNDER THE GUIDANCE OF

Prof. DHANASHREE KOLPE

GENBA SOPANRAO MOZE COLLEGE OF ENGINEERING,

BALEWADI, DEPARTMENT OF M.C.A. PUNE – 410045

Batch (2023 - 2025)

"EMPOWERMENT THROUGH TECHNOLOGICAL EXCELLENCE"
GENBA SOPANRAO MOZE COLLEGE OF ENGINEERING
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Approved by AICTE and Govt. of Maharashtra, Affiliated to SavitribaiPhule Pune University)
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CERTIFICATE

This is to certify that this project report **"AgriBuzz"** is the bonafide work of "**ABHIJIT JIJARAM KHAMKAR"** who carried out the project work under my supervision for fulfillment of MCA SEM IV Major Project requirements as prescribed by Savitribai Phule Pune University for Academic year 2024-2025. Certified further that to the best of my knowledge the work reported herein does not form part of any project work on the basis of which a degree or award was conferred on an earlier occasion on this or any other candidate.

Prof.Dhanashree Kolpe

Project Guide

Prof.Mukta Deshpande

HOD (MCA)

Dr. Ratnaraja Kumar Jambi

PRINCIPAL

External Supervisor

Name:
Signature:

INTERNSHIP LETTER

PHN
Technology Pvt. Ltd.

Offer Letter for Internship

Dear Khamkar Abhijit Jijaram

We a re pleased to extend an internship offer to you at PHN Technology Pvt. Ltd.
Congratulations on your selection for our internship program! We appreciate your interest in joining our team and are excited to have on board, please find the details of your internship offer below:

Internship Details:

Joining Date: 6th Jan 2025
Duration: 4 Months
Domain: Programming language
Stipend: The stipend will be based on your performance, attendance. completion of tasks. and interview selection.

Responsibilities and Opportunities:

During your internship. you will have the opportunity to gain practical experience and exposure in your desired field. You will be assigned various projects and tasks, are required to perform two essential tasks in live Application testing for our client, as assigned by us and In exchange you will receive valuable on-the-job training and guidance from our experienced professionals. This internship will allow you to develop your professional abilities and acquire new skills.

After completion of this internship duration you will get internship completion certificate.
We a re thrilled to have you as part of our team and look forward to a productive and rewarding internship at P HN Technology Pvt. Ltd. If you have any further questions or require additional information, please do not hesitate to contact us.

Sincerely.
Internship Program Manager,
PHN TechnolOgy Pvt- Ltd.

Solitaire Business Hub E wing 5010,
Near Pheonix Mall, Viman Nagar,
Pune, Maharashtra, 411014.

1800 209 2288
www.phntechnology.com

INTERNSHIP COMPLETION LETTER

TO WHOMSOEVER IT MAY CONCERN

This is to certify that **Abhijit Jijaram Khamkar (Intern ID- 122591)** has successfully completed the Internship in **Programming Languages(Web Development)** presented **by PHN Technology Pvt Ltd, Pune.**

This program was designed to provide valuable hands-on experience and practical knowledge in **Programming Languages.(Web Development)** Through active participation and dedication, he/she has demonstrated exceptional skills, commitment, and a strong work ethic.

During the internship, he/she actively contributed to **Programming Languages(Web Development)** and exhibited professionalism, adaptability, and a willingness to learn. Their enthusiasm and positive attitude have made a significant impact on the overall success of the program.

We extend our sincere appreciation to **Abhijit Jijaram Khamkar** for their valuable contributions and dedication throughout the duration of the virtual internship program.

Internship tenure was from **06/01/2025** to **10/05/2025**.

PNarayankar

Pradip Narayankar
Director
PHN Technology Pvt. Ltd.

PHN Technology Pvt. Ltd. Pune

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I wish to record my heartfelt gratitude and sincere thanks to **Dhanashree Kolpe** Assistant. Professor, Department of MCA, G.S.Moze College of Engineering, Balewadi Pune, for his kind support and inspiration given to me till the end of my project.

I thank **prof.Mukta Deshpande,** Head & Assistant Professor, Department Of MCA, **Dr.Ratnaraja Kumar Jambi**, Principal**,** for their constant support and encouragement given throughout the development of the project.

Last but not the least our sincere thanks to our parents, family members and friends for their continuous support, inspiration and encouragement without which this project would not have been success.

ABHIJIT KHAMKAR

Date:- / / 2025

Place:- Balewadi,Pune-45.

DECLARATION

I, Abhijit Khamkar, undersigned here by state that the project report entitled**, "Agribuzz",** is a genuine and bonafide work carried and prepared by me under the guidance of **Prof. Dhanashree Kolpe**

This project report is submitted to Savitribai Phule Pune University of Pune in partial fulfillment of the degree of **Master in Computer Application** under faculty of Science & Technology for Academic year 2024-2025.

The system presented here is my own work and not submitted to for the award of any other degree, diploma, fellowship or any other similar title.

Name of Student – Abhijit Jijaram Khamkar Signature -

Date: / /

Place : Balewadi, Pune-45.

ABSTRACT

The **AgriBuzz – Online Agriculture Management System** is a web-based application designed to revolutionize the way agricultural trade and management are conducted in India. The platform aims to bridge the gap between farmers, consumers, wholesalers, retailers, and farm laborers by providing a unified, digital marketplace. Through this system, farmers can sell their produce directly to a wider audience, thereby eliminating the dependency on local agents and middlemen.

AgriBuzz offers a variety of features including online sale and purchase of agricultural produce, farming equipment, and supplies such as fertilizers and pesticides. It also facilitates the hiring of laborers, access to agricultural blogs and articles, and provides useful tools like virtual calendars and weather forecasting. Different types of users—administrators, sellers (farmers), customers (buyers), and workers (laborers)—have tailored functionalities to suit their roles.

The system is built using PHP for backend development, MySQL for database management, and HTML/CSS/JavaScript for front-end design. It aims to improve productivity, transparency, and profitability in the agricultural sector by leveraging technology, thus contributing to the modernization and digitization of Indian agriculture.

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CHAPTER 1 : INTRODUCTION

1.1 : Overview of the project

AgriBuzz – Online Agriculture Management System is a web-based platform aimed at transforming traditional agricultural practices through the power of digital technology. It provides a virtual space where farmers, buyers, wholesalers, retailers, and laborers can interact, trade, and collaborate efficiently. The system is designed to simplify the agricultural supply chain by allowing farmers to sell their produce online, customers to purchase agricultural goods and tools, and workers to find job opportunities in the farming sector.

The platform supports multiple user roles—**Administrators, Farmers, Customers, and Workers**—with tailored features for each. It includes modules for **product listing, order management, job postings, article/blog sharing**, and **report generation**. Farmers benefit from access to a broader market and useful resources such as **weather forecasts** and **virtual calendars**, while customers and wholesalers gain direct access to farm-fresh produce and farming equipment.

Developed using **PHP**, **MySQL**, **HTML**, **CSS**, and **JavaScript**, AgriBuzz ensures smooth performance, secure login mechanisms, and a responsive interface. This system not only improves transparency and efficiency in agricultural trade but also empowers rural communities by providing access to digital tools and information, thereby contributing to the growth of the agricultural economy.

1.2 : Problem statement

- Farmers have limited access to wider markets and rely on local agents.
- There is no efficient system for online selling of agricultural produce.
- Hiring farm laborers is unorganized and lacks digital support.
- Farmers lack access to real-time information like weather and farming updates.
- Existing systems are not user-friendly and do not support modern agricultural needs.

1.3 : Existing system

The current agricultural system in many regions is largely traditional and lacks digital integration. Farmers typically sell their produce through local markets or middlemen, which limits their earnings and market reach. There is no centralized online platform for selling agricultural goods, hiring laborers, or purchasing farming equipment. Information about modern farming techniques, weather updates, or government schemes is not easily accessible. Additionally, existing systems (if any) are not user-friendly and do not provide features like secure transactions, role-based access, or report generation.

Current Limitations

1. **Manual Selling** – Farmers rely on local agents or physical markets.
2. **No Online Presence** – Lack of digital platforms for product listing or sales.
3. **Unorganized Labor Hiring** – No system for finding or hiring farm laborers.
4. **Limited Information Access** – Farmers miss out on updates related to weather, technology, and policy changes.
5. **Low Transparency and Reach** – No direct link between farmers, customers, and wholesalers.

1.4 : Scope of the project

The **AgriBuzz** system is designed to bring digital transformation to the agricultural sector by connecting farmers, buyers, laborers, and administrators on a unified online platform. The project focuses on streamlining agricultural trade, providing tools for productivity, and enabling better access to market and resources for farmers.

Key Scope Points

1. **Online Marketplace for Farmers**
   - Farmers can list and sell their produce online, reaching customers, wholesalers, and retailers directly.
2. **Multi-User Access**
   - Supports four user roles: Administrator, Farmer (Seller), Customer (Buyer), and Worker (Laborer), each with specific functionalities.
3. **Product and Equipment Sales**
   - Enables online purchase of fertilizers, pesticides, machinery, tools, and other farming-related products.
4. **Labor Hiring System**
   - Farmers can hire laborers digitally, and workers can accept or reject job offers through the platform.
5. **Knowledge Sharing**
   - Includes articles and blogs to help farmers stay updated with modern techniques, government policies, and best practices.

1.5 : Advantages of the Proposed System

1. **Wider Market Access for Farmers**
   - Farmers can sell their produce online, reaching more buyers beyond their local area and eliminating middlemen.
2. **Direct Buyer-Seller Interaction**

- Enables direct communication and transactions between farmers, wholesalers, retailers, and consumers.

3. **Organized Labor Hiring**
   - Farmers can easily find and hire laborers through the system, while workers can access more job opportunities.
4. **Online Shopping for Farming Needs**
   - Buyers can purchase fertilizers, pesticides, machinery, and tools online, saving time and effort.
5. **Real-Time Agricultural Support**
   - Features like weather forecasts, virtual calendars, and blogs/articles help farmers make informed decisions.
6. **Multiple User Roles with Secure Access**
   - Supports admin, farmer, customer, and worker accounts with role-based access and encrypted login credentials.
7. **User-Friendly Interface**
   - Simple, fast-loading, and responsive design makes it accessible even for users with basic computer knowledge.
8. **Report and Data Management**
   - Admin can generate, view, and print reports to monitor system usage and sales performance.
9. **Support for Government Schemes and Modern Practices**
   - The platform can be updated to align with new policies and promote awareness of modern farming techniques.
10. **Increased Profitability and Efficiency**

- By reducing dependency on intermediaries and improving resource accessibility, farmers can increase their income and productivity.

CHAPTER 2 : REQUIREMENT ANALYSIS

The following software tools and technologies are required for developing and running the Agribuzz:

2.1 Programming Languages Used:

- Design and Interface: HTML, CSS
- Programming language: PHP
- Scripting language: AJAX, Javascript
- Database: MySQL Server
- Front End: HTML, CSS, Javascript, Bootstrap
- Back End: PHP & MySQL

2.2Hardware Requirements:

- Operating System: Windows XP, 7 OR 8
- Processor: Intel Core Duo 2.0 GHz or more
- RAM: 1 GB or more
- Hard Disc: 80 GB or more
- Monitor: 15 inches CRT or LCD Monitor
- Keyboard: Normal or multimedia keyboard
- Mouse: Compatible Mouse

2.3Software Requirements:

- XAMPP Software
- Apache Server
- MySQL Server 5.4
- Notepad++
- Browser: Google Chrome, Mozilla Firefox, Microsoft Edge

CHAPTER 3 : SYSTEM DESIGN

System Design describes the overall architecture and internal structure of the **AgriBizz** system. It explains how different modules such as user management, product listing, labor hiring, and blog/article sharing interact with each other to create a complete online agriculture platform. This chapter highlights the responsibilities of each module and how they work together to offer seamless services to farmers, customers, laborers, and administrators. Additionally, design diagrams like Data Flow Diagrams (DFD), Entity Relationship Diagrams (ERD), and Use Case Diagrams are used to represent workflows and system logic.

3.1: Modules Specifications

The **AgriBizz** system is composed of several functional modules that provide specific services to different types of users. Each module is explained below:

1. User Interface Module

- Manages all interactions through a simple and responsive web design.
- Provides login, registration, dashboard, and profile management for all user types.
- Ensures ease of navigation across functionalities like product browsing, order tracking, and labor requests.

2. User Management Module

- Handles registration and authentication of users (Farmer, Customer, Worker, Admin).
- Manages secure login, session tracking, and password recovery features.
- Implements role-based access control and permissions.

3. Product Management Module

- Allows farmers to add, update, and delete agricultural produce listings.
- Customers can browse, send purchase requests, and place orders.
- Admin can monitor and manage all listed products and their categories.

4. Order & Payment Module

- Manages order placement, request approval, and payment status.
- Tracks delivery and transaction history between users.
- Ensures secure and accurate billing and payment logs.

5. Labor Management Module

- Enables farmers to post job openings for farm labor work.
- Workers can view job listings and choose to accept or decline.
- Keeps track of job history, status, and communication between farmers and workers.

6. Article & Blog Module

- Allows admins to publish informative content for farmers.
- Covers modern agricultural practices, government schemes, and productivity tips.
- Users can read and stay updated on new developments.

7. Reporting Module

- Generates various reports for administrators such as user reports, sales, payments, and labor statistics.
- Helps in system monitoring, analysis, and decision-making.

8. Integration & Communication Module

- Facilitates smooth data flow between frontend (UI) and backend (server/database).
- Ensures real-time updates on product listings, orders, and job requests.
- Coordinates interaction across all modules to maintain system efficiency.

9. Data Management Module

- Stores user profiles, product information, order details, blog content, and more in MySQL.
- Supports CRUD operations and session continuity.
- Ensures data consistency, integrity, and backup support.

10. Admin Module

- Full control over the system: manage users, categories, reports, and website content.
- Monitor system activity and handle complaints or technical issues.
- Perform maintenance and update tasks as needed.

3.2: Activity Diagram

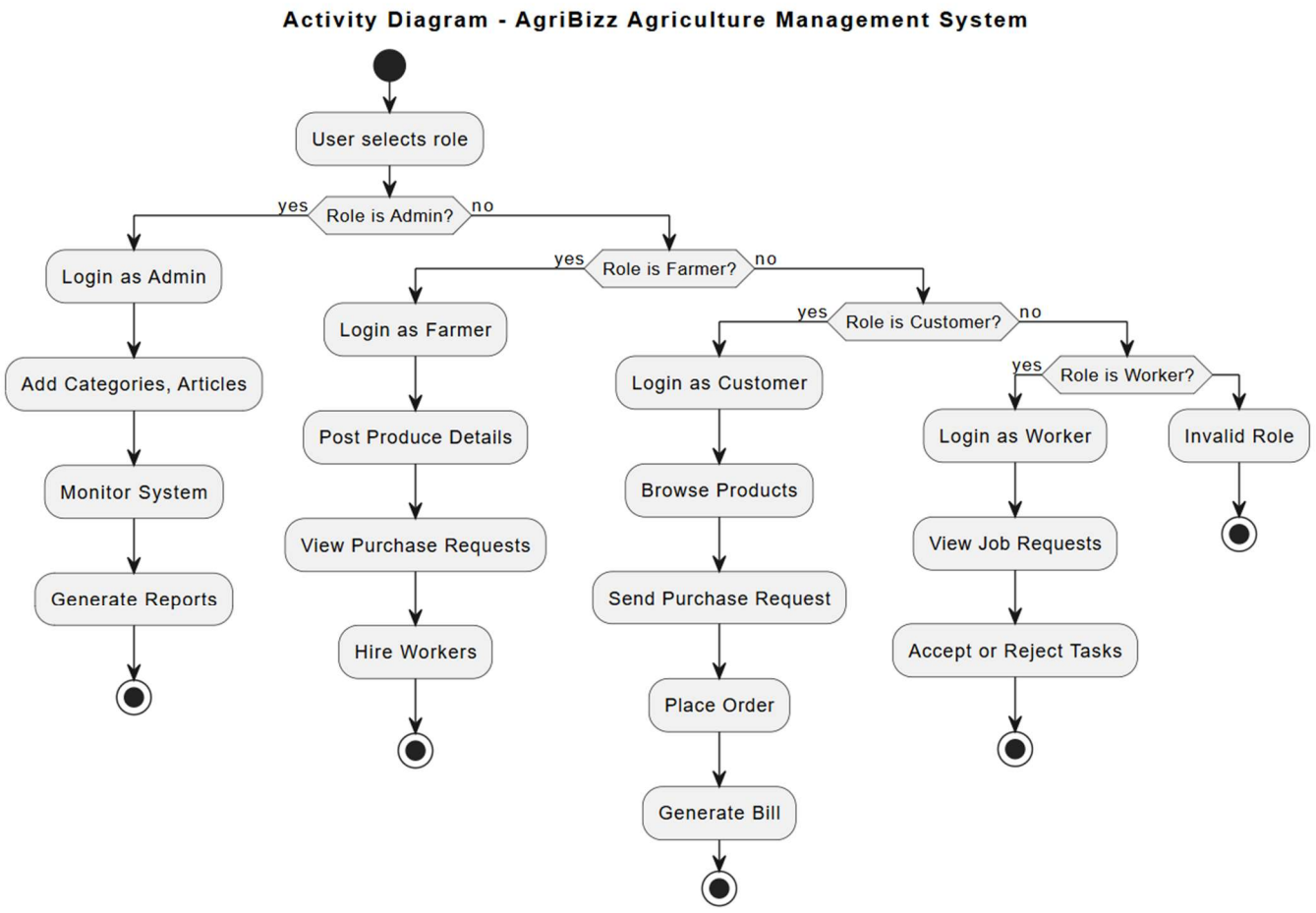


Fig. 1 - Activity Diagram

3.3 : Use Case Diagram

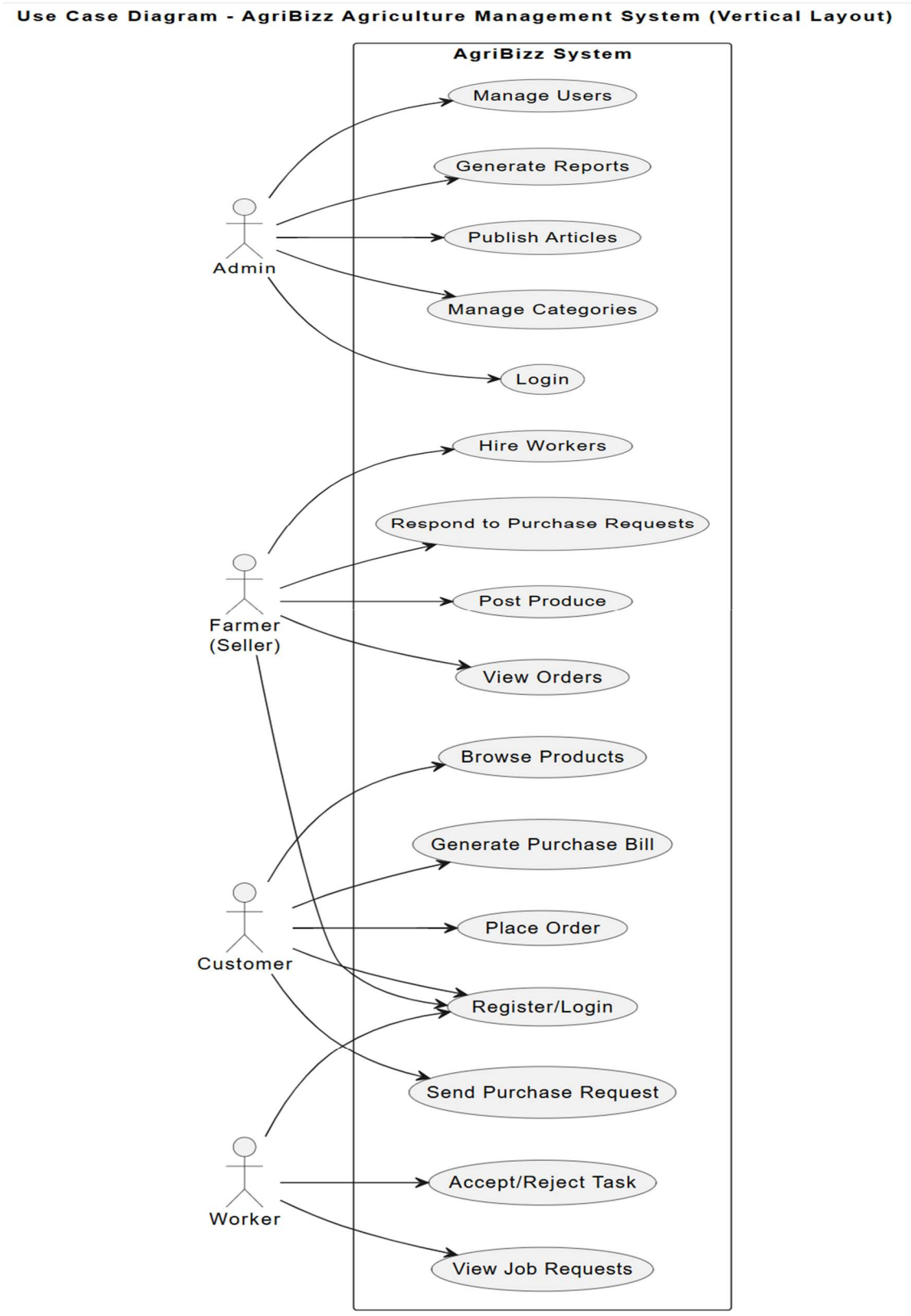


Fig. 2 - Use Case Diagram

3.4 : Object Diagram

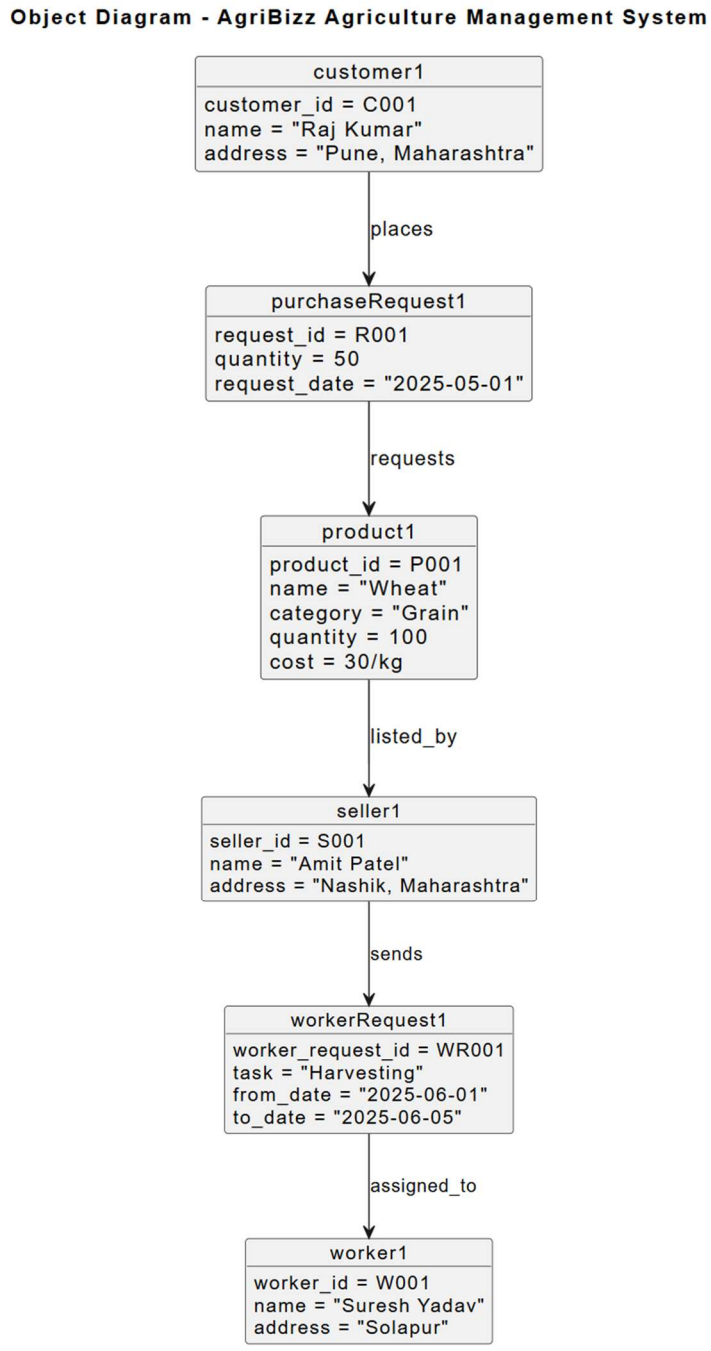


Fig. 3 - Object Diagram

3.5: Class Diagram

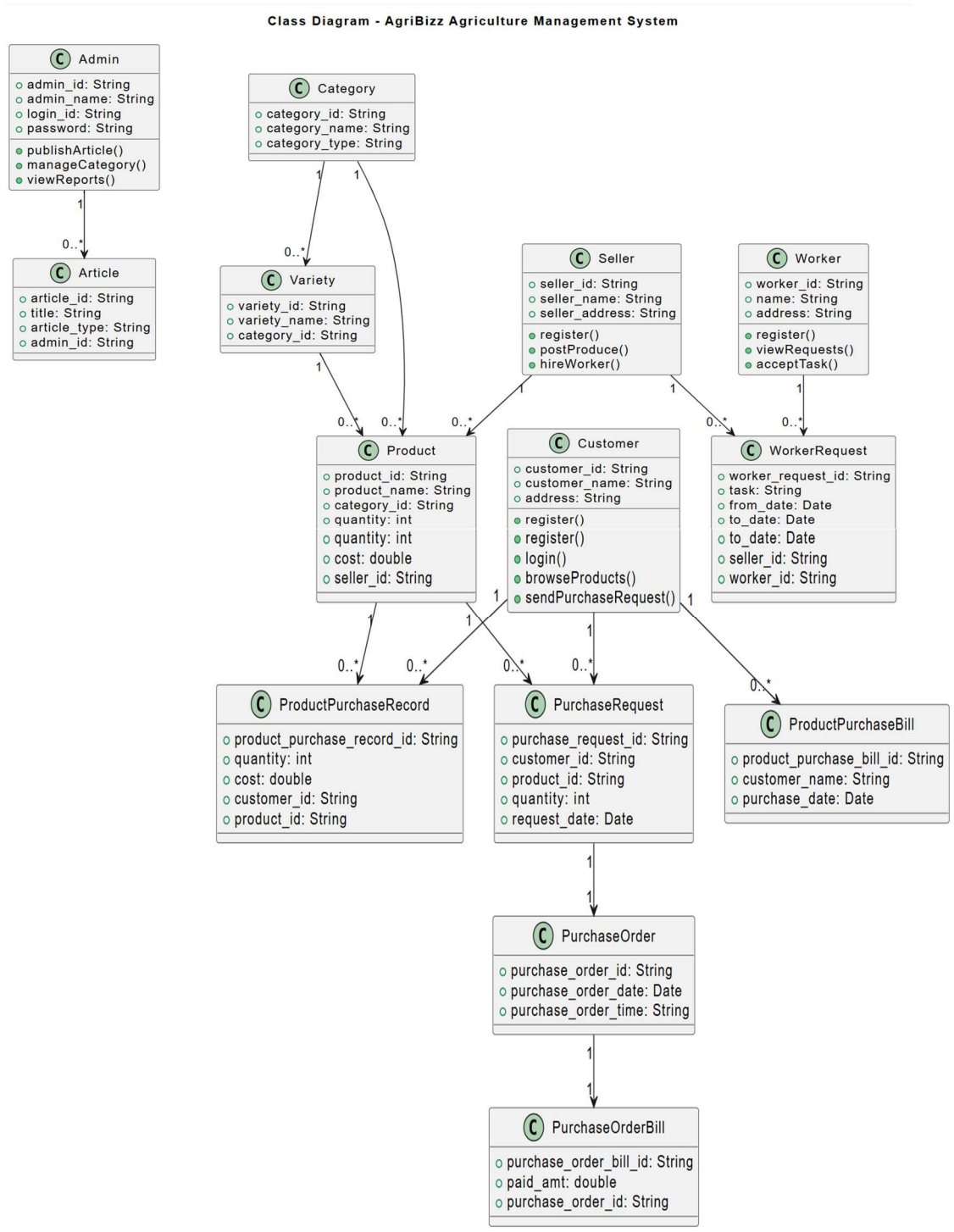


Fig. 4 - Class Diagram

3.6: Website map diagram

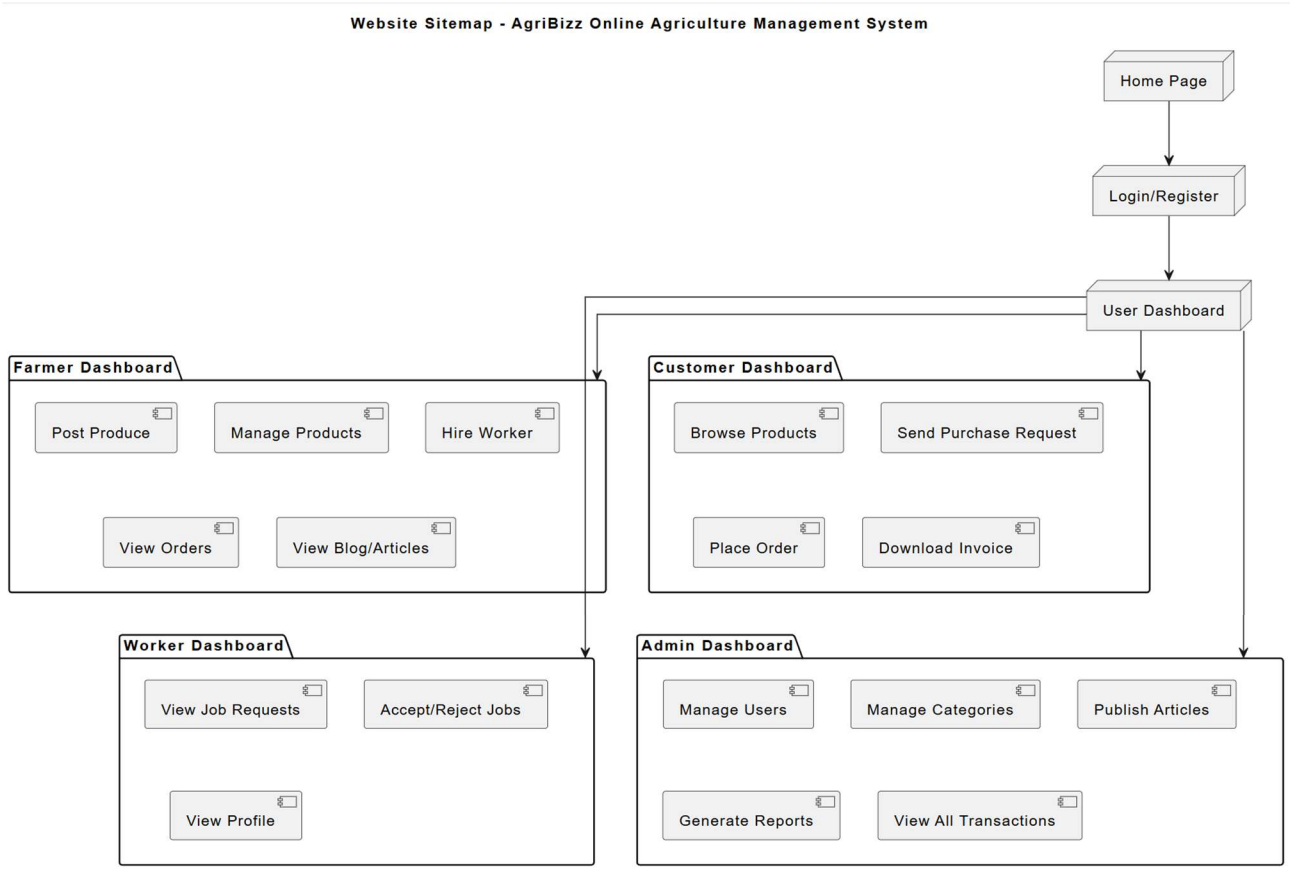


Fig. 5 - Website Map Diagram

3.7: Database Design

Database: A Database is collection of related data, which can be of any size and complexity. By using the concept of Database, we can easily store and retrieve the data. The major purpose of a database is to provide the information, which utilizes it with the information's that the system needs according to its own requirements.

➢ Structure of Table "admin":

Field Name	Field Type	Size	Description
admin_id	int	10	Admin ID
admin_name	varchar	25	Admin Name
login_id	varchar	20	Login ID
password	varchar	50	Password
status	varchar	10	Status

➢ Structure of Table "article":

Field Name	Field Type	Size	Description
article_id	Int	10	Article ID
article_type	varchar	25	Article type
publish_date	date		Publishing date of the article
title	varchar	100	Title of the article
article_description	text		Description of the article
article_img1	varchar	100	Image of the article
article_img2	varchar	100	Image of the article
article_img3	varchar	100	Image of the article
article_img4	varchar	100	Image of the article
article_img5	varchar	100	Image of the article
status	varchar	10	Status

➢ Structure of Table "category":

Field Name	Field Type	Size	Description
category_id	int	10	Category ID
category	varchar	25	Category
category_type	varchar	25	Category type
description	text		Description
img	varchar	100	Image
satus	varchar	10	Status

- **Structure of Table “city”:**

Field Name	Field Type	Size	Description
city_id	Int	10	City ID
country_id	Int	10	Country ID
state_id	Int	10	State ID
City	varchar	25	City
description	text		Description
status	varchar	10	Status

- **Structure of Table “country”:**

Field Name	Field Type	Size	Description
country_id	int	10	Country ID
country	varchar	25	Country
description	text		Description
status	varchar	10	Status

- **Structure of Table “customer”:**

Field Name	Field Type	Size	Description
customer_id	int	10	Customer ID
customer_name	int	25	Customer Name
address	int		Address
country_id	varchar	10	Country ID
state_id	varchar	10	State ID
city_id	varchar	10	City ID
pincode	varchar	10	Pincode
contact_no	varchar	15	Contact number
mobile_no	varchar	15	Mobile number
email_id	varchar	50	Email ID
password	varchar	25	Password
customer_type	varchar	25	Customer Type
status	varchar	10	Status

- **Structure of Table “produce”:**

Field Name	Field Type	Size	Description
produce_id	int	10	Produce ID
category_id	Int	10	Category ID
produce	varchar	25	Produce
description	text		Description
img	varchar	100	Image
status	varchar	10	Status

- **Structure of Table "product":**

Field Name	Field Type	Size	Description
product_id	int	10	Product ID
seller_id	int	10	Seller ID
category_id	int	10	Category ID
produce_id	int	10	Produce ID
variety_id	int	10	Variety ID
Title	varchar	100	Title
img_1	varchar	100	Image of the product
img_2	varchar	100	Image of the product
img_3	varchar	100	Image of the product
img_4	varchar	100	Image of the product
img_5	varchar	100	Image of the product
Quantity	float	10,2	Quantity
quantity_type	varchar	25	Quantity type
description	text		Description
uploaded_date	date		Uploaded date
status	varchar	10	Status

- **Structure of Table "product purchase bill":**

Field Name	Field Type	Size	Description
product_purchase_bill_id	int	10	Product purchase bill ID
country_id	int	10	Country ID
state_id	int	10	State ID
city_id	int	10	City ID
customer_name	varchar	25	Customer Name
customer_address	text		Customer Address
pincode	varchar	10	Pincode
customer_contact_number	varchar	15	Customer Contact Number
purchase_date	date		Purchase Record
Status	varchar	10	Status
payment_type	varchar	25	Payment Type
payment_description	text		Payment Description
seller_id	int	10	Seller ID

- **Structure of Table "product_purchase record":**

Field Name	Field Type	Size	Description
purchase_record_id	int	10	Purchase record ID
product_purchase_bill_id	int	10	Product purchase bill ID
selling_product_id	int	10	Selling Product ID
quantity	int	10	Quantity of the product
cost	float	10,2	Cost of the product
Status	varchar	10	status

- **Structure of Table “purchase_order”:**

Field Name	Field Type	Size	Description
purchase_order_id	int	10	Purchase Order ID
product_id	int	10	Product ID
purchase_request_id	int	10	Purchase Request ID
customer_id	int	10	Customer ID
seller_id	int	10	Seller ID
purchase_order_date	date		Date of purchase order
purchase_order_time	time		Time of purchase order
purchase_amt	float	10,2	Amount of purchase order
quantity	float	10,2	Quantity of purchase order
status	varchar	10	Status of purchase order

- **Structure of Table “purchase_order_bill”:**

Field Name	Field Type	Size	Description
purchase_order_bill_id	int	10	Purchase order bill ID
purchase_order_id	int	10	Purchase order ID
payment_type	varchar	20	Mode of payment
payment_description	text		Description of the payment
paid_date	date		Date of payment made
paid_amt	float	10,2	Amount paid
status	varchar	10	Status of purchase order bill

- **Structure of Table “purchase_request”:**

Field Name	Field Type	Size	Description
purchase_request_id	int	10	Purchase Request ID
customer_id	int	10	Customer ID
product_id	int	10	Product ID
quantity	float	10,2	Quantity of purchase request
request_date	date		Date of purchase request
request_date_expire	date		Expiry date of purchase request
note	text		Note on Purchase Request
status	varchar	20	Status of purchase request

➢ **Structure of Table "seller":**

Field Name	Field Type	Size	Description
seller_id	int	10	Seller ID
seller_name	varchar	25	Name of the seller
seller_address	text		Address of the seller
state_id	int	10	State ID
country_id	int	10	Country ID
city_id	int	10	City ID
pincode	varchar	10	Pincode of the seller's location
contact_number	varchar	15	Contact Number of the seller
mobile_no	varchar	10	Mobile Number of the seller
email_id	varchar	50	E-Mail of the seller
password	varchar	25	Password to login
bank_name	varchar	50	Name of the bank
bank_branch	varchar	50	Branch Name of the bank
bank_IFSC	varchar	25	IFSC Code of seller's bank account
bank_acno	varchar	25	Seller's bank account number
status	varchar	10	Status of the seller

•

➢ **Structure of Table "selling_product":**

Field Name	Field Type	Size	Description
selling_prod_id	int	10	Selling product ID
category_id	int	10	Category ID
product_name	varchar	25	Name of the product
product_ description	text		Description of the product
product_img1	varchar	100	Image of the product
product_img2	varchar	100	Image of the product
product_img3	varchar	100	Image of the product
product_img4	varchar	100	Image of the product
product_img5	varchar	100	Image of the product
quantity_type	varchar	50	Quantity Type
cost	float	10,2	Cost of the product on sale
status	varchar	10	Status of the product on sale

➢ **Structure of Table "state":**

Field Name	Field Type	Size	Description
state_id	int	10	Primary key
country_id	int	10	Foreign key
state	varchar	25	Name of the state
description	text		Description of the state
status	varchar	10	Status of the state

- **Structure of Table "variety":**

Field Name	Field Type	Size	Description
variety_id	int	10	Variety ID
category_id	int	10	Category ID
produce_id	int	10	Produce ID
variety	varchar	25	Name of the produce variety
description	text		Description about the variety
img	varchar	100	Image of the produce variety
status	varchar	10	Status of the produce variety

- **Structure of Table "worker":**

Field Name	Field Type	Size	Description
worker_id	int	10	Worker ID
name	varchar	50	Name of the worker
address	text		Address of the worker
state_id	int	10	State ID
city_id	int	10	City ID
country_id	int	10	Country ID
pincode	varchar	10	Pincode of the worker's location
work_profile	text		Services provided by the worker
biodata	varchar	100	Biodata of the worker
contactno	varchar	15	Contact Number
date_of_birth	date		Date of birth of the worker
login_id	varchar	100	Worker's login ID
password	varchar	100	Worker's password to login
expected_salary	float	10,2	Salary range the worker expects
status	varchar	10	Status of the worker

- **Structure of Table "worker_request":**

Field Name	Field Type	Size	Description
worker_request_id	int	10	Worker Request ID
worker_id	int	10	Worker ID
seller_id	int	10	Seller ID
from_date	date		Date of commencement of work
to_date	date		Date of completion of work
task	text		Task to be done by the worker
country_id	int	10	Country ID
state_id	int	10	State ID
city_id	int	10	City ID
salary	float	10,2	Salary provided
salary_type	varchar	20	Type of salary
seller_status	varchar	20	Status of the seller
worker_status	varchar	20	Status of the worker
seller_comment	text		Comment by the seller
worker_comment	text		Comment by the worker

CHAPTER 4 : EMPLEMETION AND RESULT

The **AgriBuzz – Online Agriculture Management System** was implemented using a combination of web technologies and a relational database. The development process followed a modular approach to ensure easy scalability and maintainability. Each module was developed, tested, and integrated step-by-step to build the complete system.

1. Technology Stack

- **Frontend**: HTML, CSS, JavaScript, Bootstrap
- **Backend**: PHP
- **Database**: MySQL
- **Server Environment**: Apache (via XAMPP)
- **Tools Used**: Notepad++, phpMyAdmin, PlantUML (for diagrams), Google Chrome for testing

2. Implementation Steps

a. Database Design and Setup

- Created MySQL database schema for users, products, orders, blogs, labor profiles, and transactions.
- Defined primary keys, foreign keys, and relational links to normalize the database.
- Used phpMyAdmin to set up tables and test queries.

b. User Authentication

- Implemented secure login and registration modules for different user roles (Farmer, Customer, Worker, Admin).
- Encrypted passwords using PHP `password_hash()` function for added security.
- Included a password recovery option via email verification.

c. Product Listing and Purchase

- Farmers can list their produce/products with details like type, quantity, and price.
- Buyers can browse available items, send purchase requests, and confirm orders.

3. Testing and Validation

- Conducted unit testing for each module.
- Performed integration testing to ensure modules work correctly together.
- User Acceptance Testing (UAT) was done to validate the usability and performance.

4. Deployment

- The system is hosted locally using the XAMPP stack.

CHAPTER 5 : APPLICATIONS AND USE CASES

The **AgriBuzz** system can be used in various real-world scenarios that bridge the gap between farmers, consumers, and agricultural service providers. Below are the key **applications** and specific **use cases** that demonstrate the platform's utility.

5.1: Applications

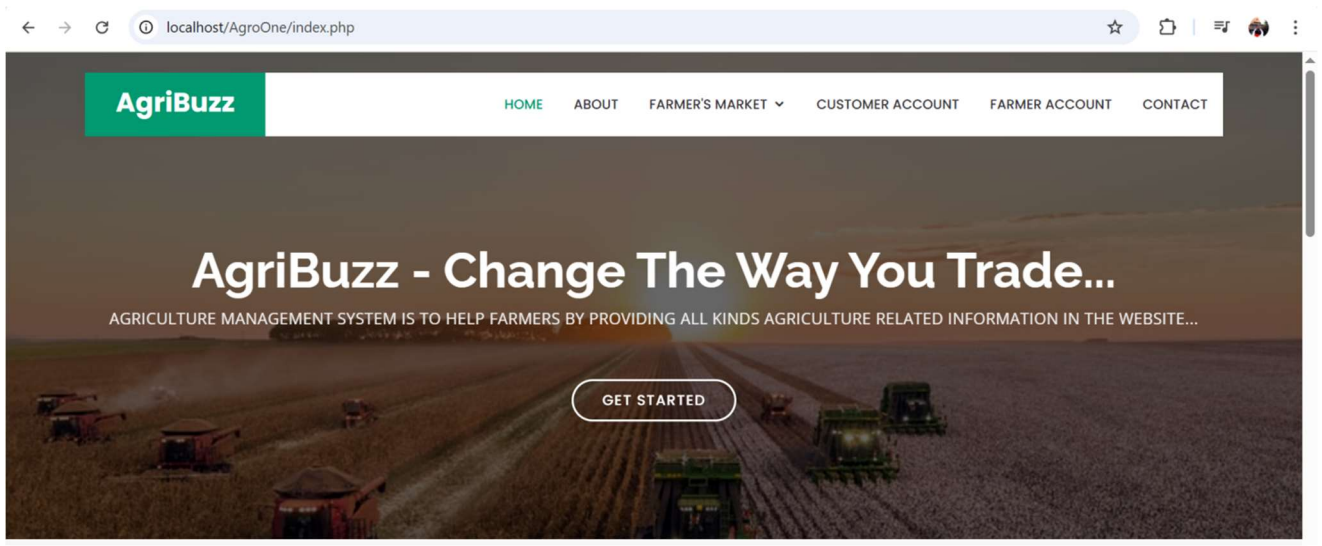
1. **Online Marketplace for Farm Produce**
   - Farmers can directly list and sell their products online.
   - Eliminates the need for middlemen and expands market reach.
2. **Agricultural Equipment and Supply Store**
   - Enables online purchase of fertilizers, pesticides, tools, and machinery.
   - Provides convenience and access to quality products.
3. **Job Portal for Agricultural Laborers**
   - Farm workers can find short-term jobs and apply online.
   - Helps both farmers and laborers streamline the hiring process.
4. **Agricultural Knowledge Hub**
   - Blogs and articles educate farmers on best practices, modern techniques, and schemes.
   - Improves productivity and awareness.
5. **Digital Record Keeping**
   - Farmers can track crops, earnings, weather updates, and production data.
   - Supports informed decision-making.
6. **Admin Monitoring and Reporting**
   - Admin can generate reports on sales, users, labor postings, and blog traffic.
   - Helps in maintaining control and system analytics.

5.2: use Cases

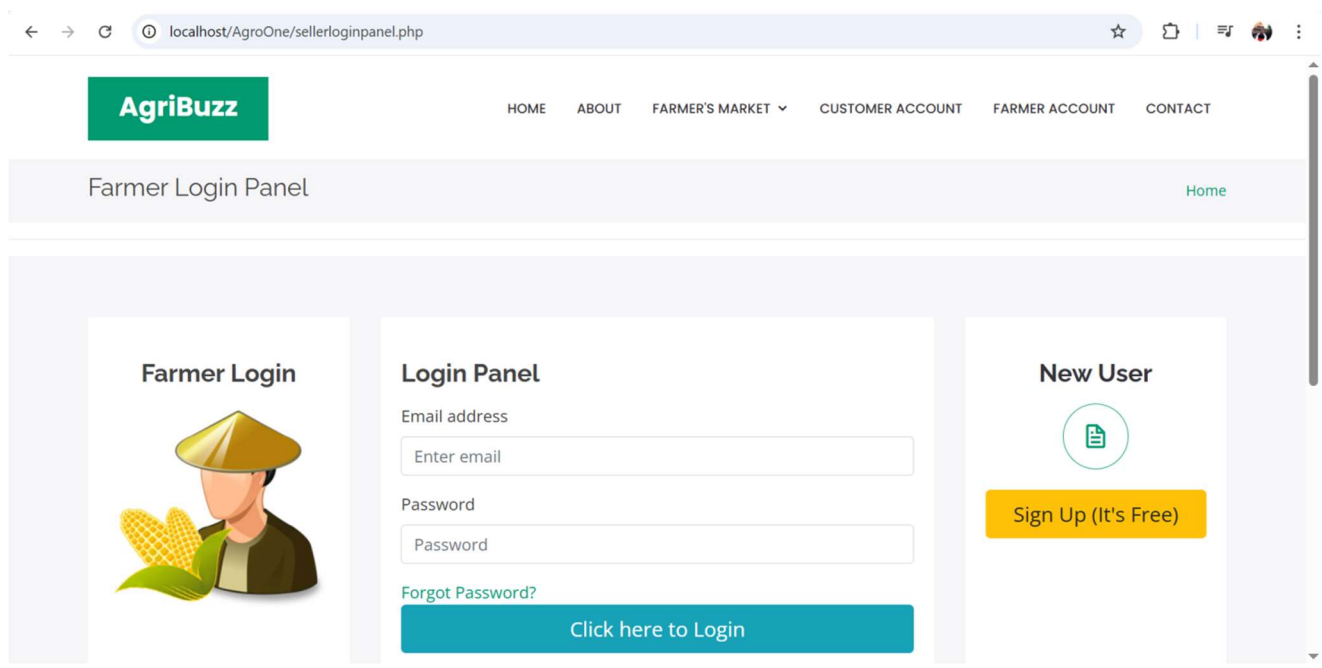
1. **Use Case 1: Direct Produce Sale by Farmer**
   - **Actor**: Farmer
   - **Scenario**: A farmer logs in, lists freshly harvested vegetables, sets price and quantity, and awaits buyer purchase.
2. **Use Case 2: Customer Purchases Farm Product**
   - **Actor**: Customer
   - **Scenario**: A customer browses available farm products, places an order, and receives confirmation after delivery.
3. **Use Case 3: Worker Applies for Farm Job**
   - **Actor**: Worker
   - **Scenario**: A laborer logs in, views job postings near their location, and accepts a job offer for harvesting.
4. **Use Case 4: Admin Publishes Blog**
   - **Actor**: Admin
   - **Scenario**: Admin creates a new blog post on sustainable farming practices and publishes it for users.

5.3: User Interface

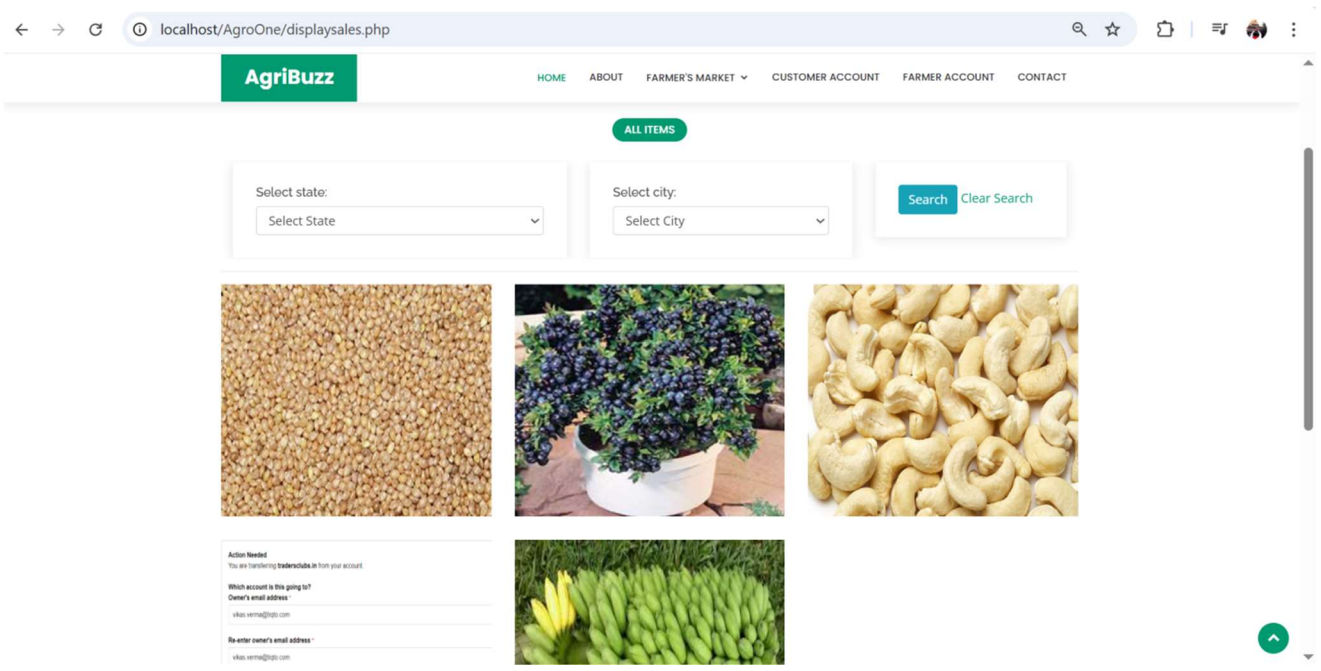
- **Home Page:**



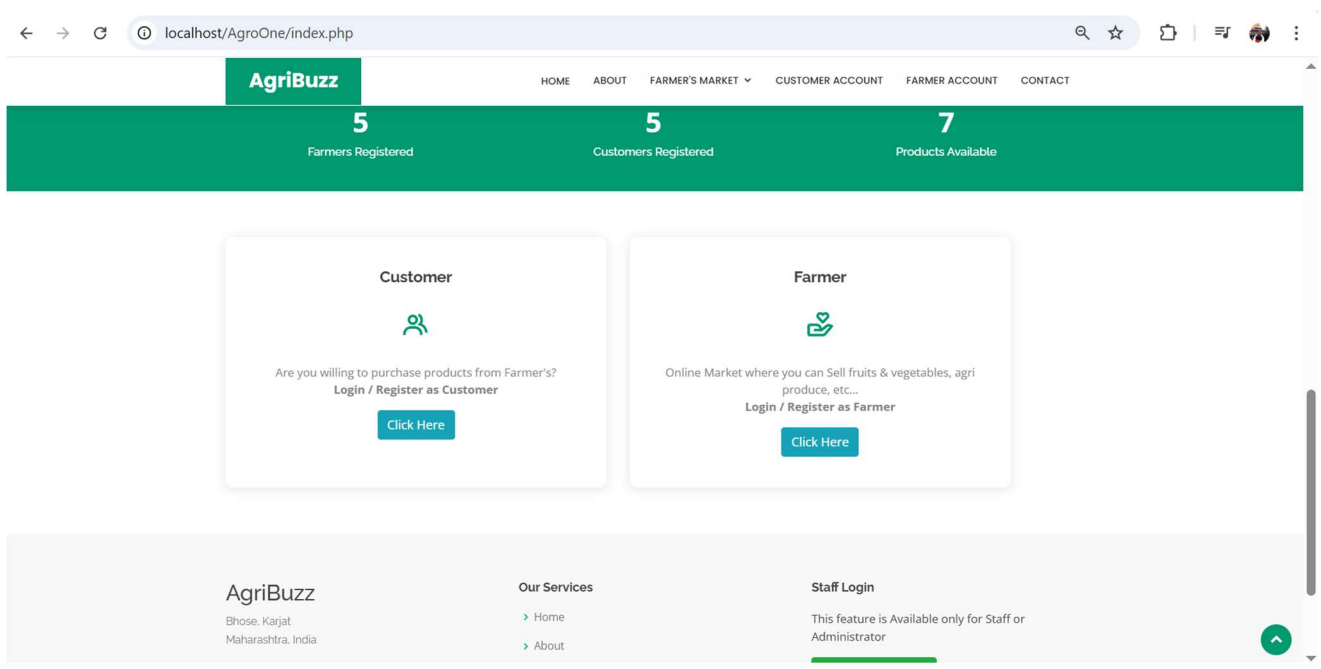
- **Farmer Login:**



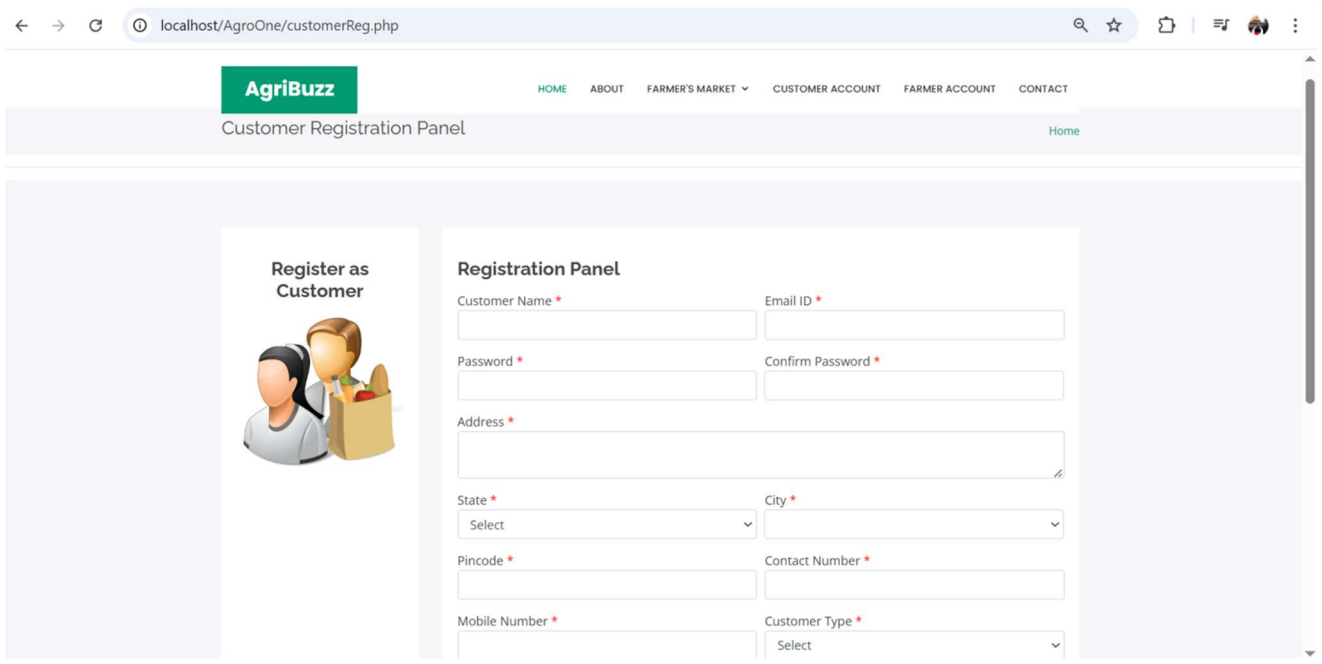
➢ Market Place:



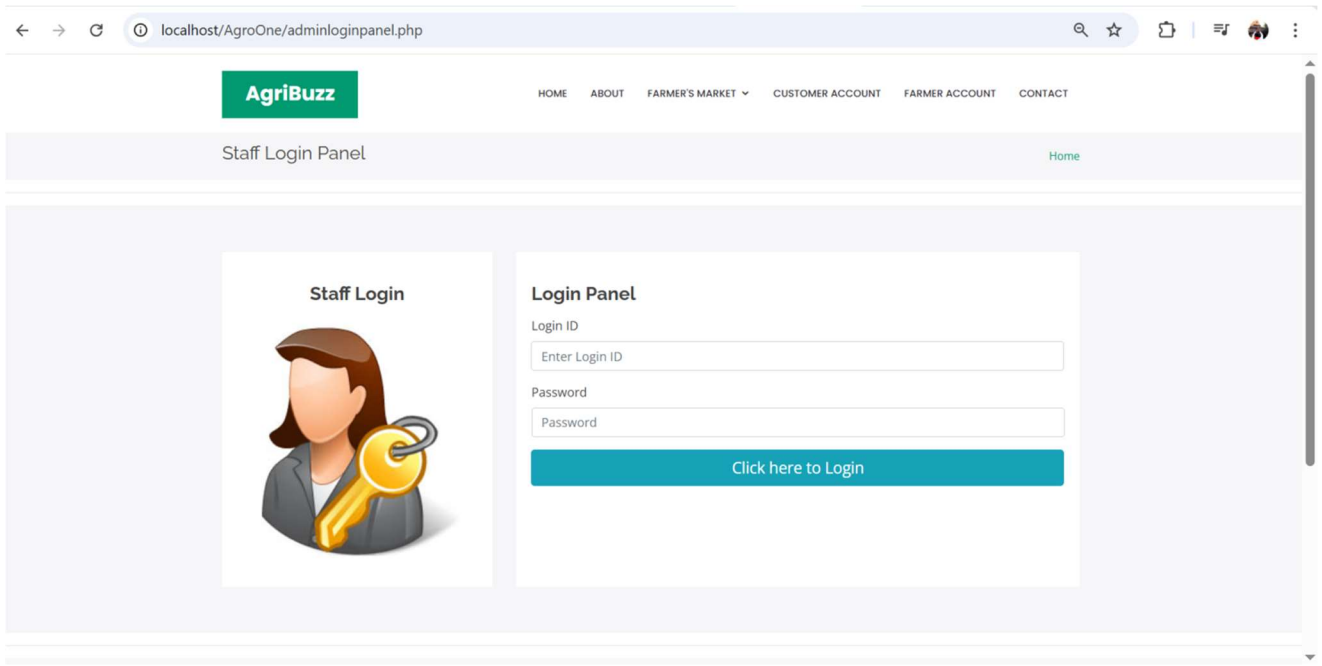
➢ Login Dashboards:



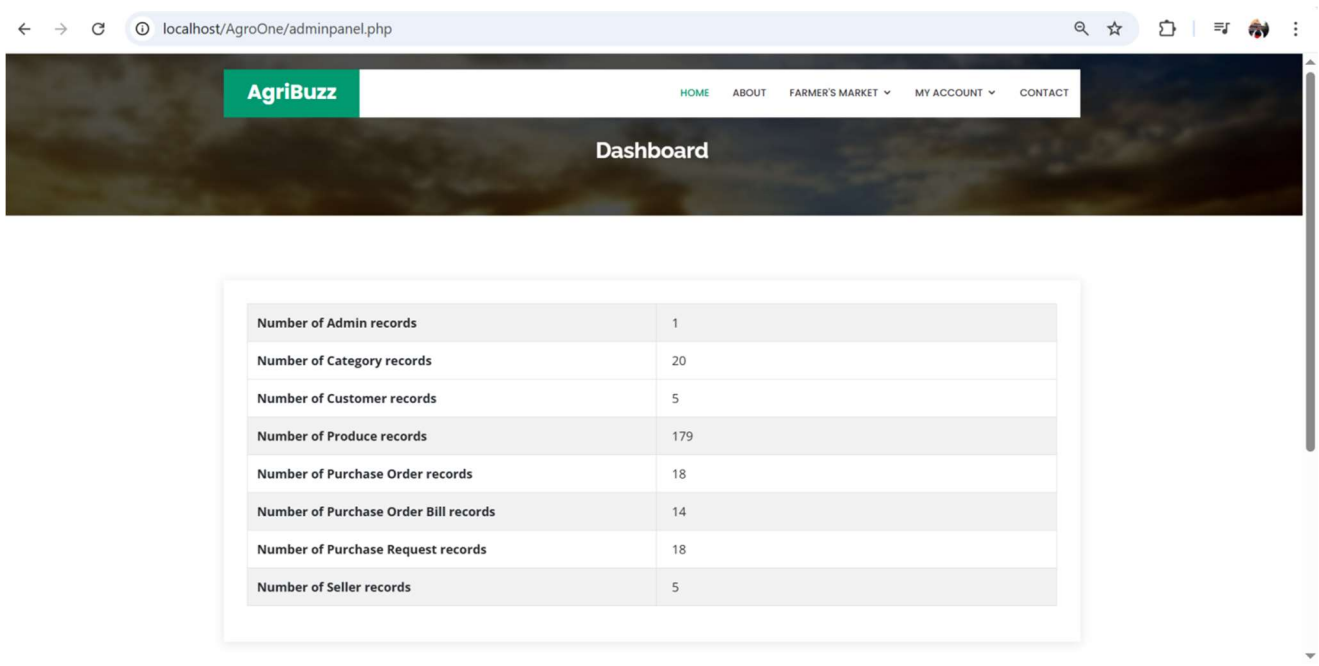
➢ New User SignUp:



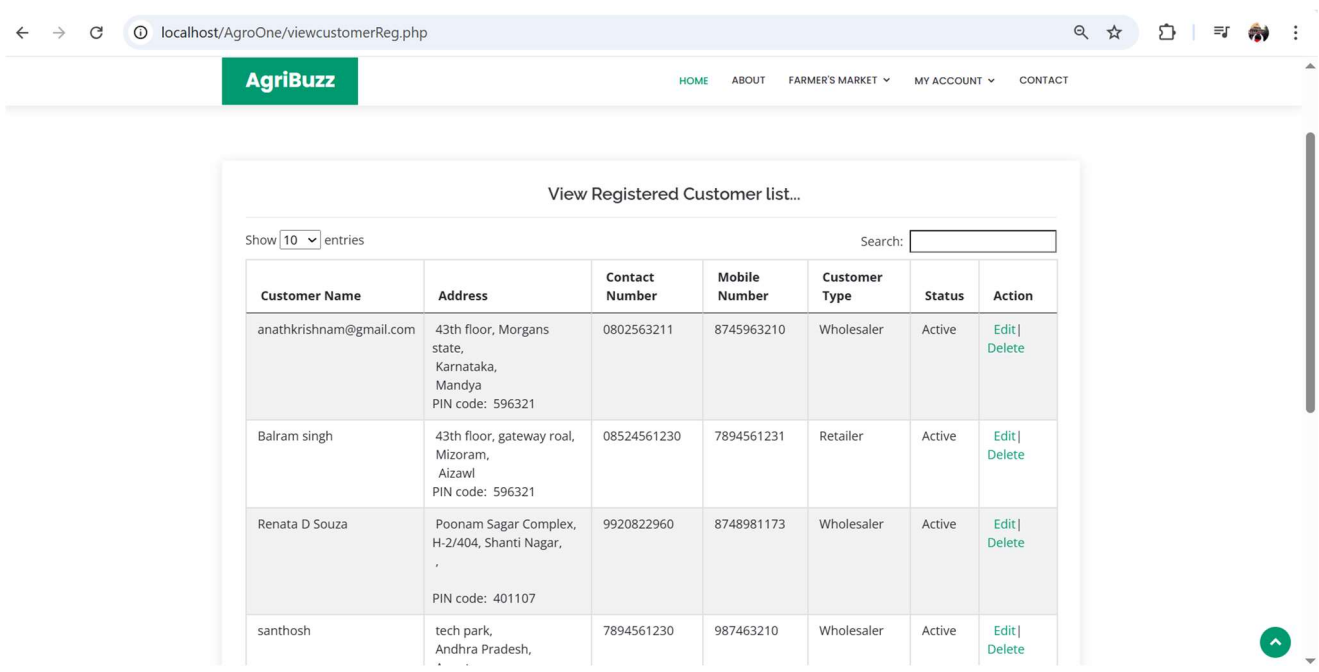
➢ Admin Login:



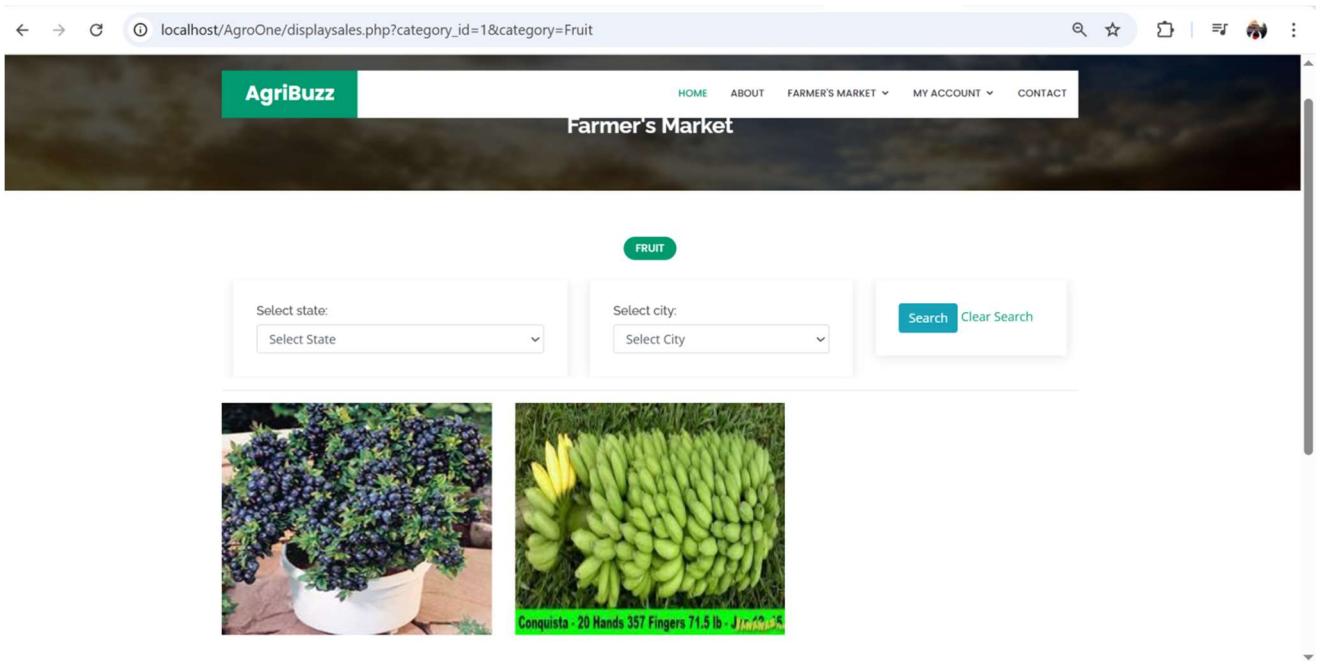
➢ Admin Panel:



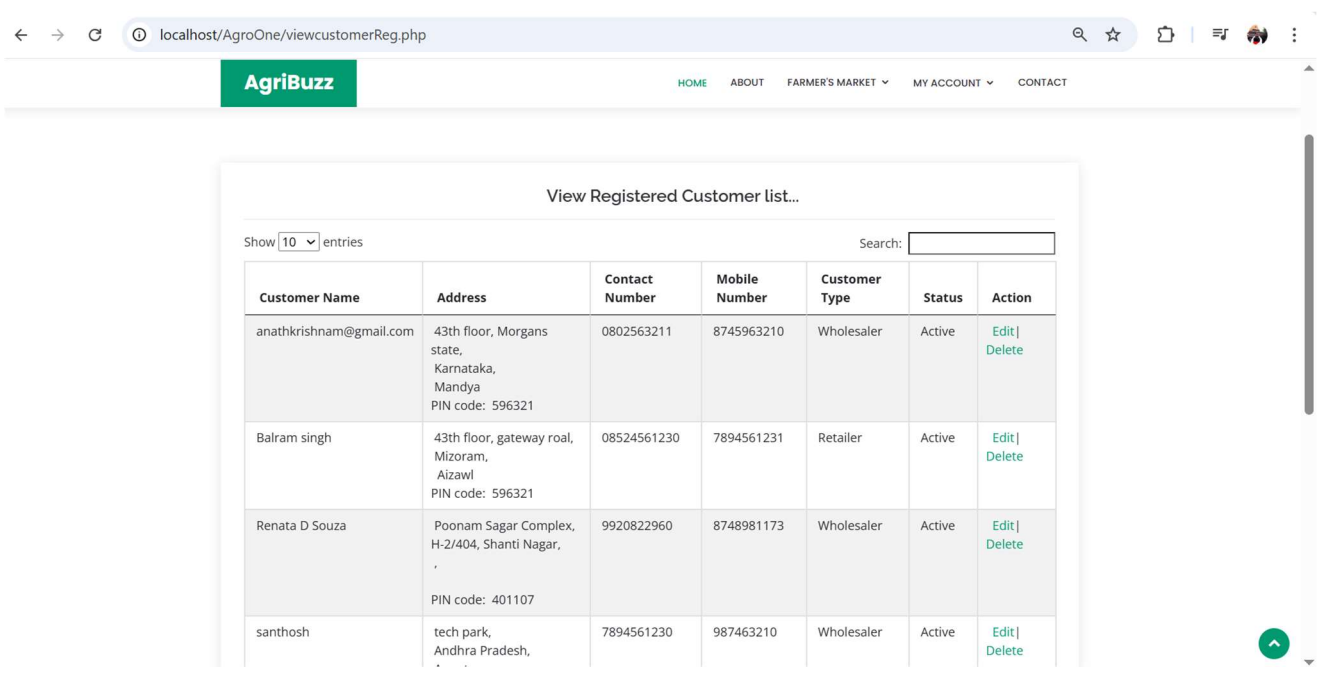
➢ Request Management:



➢ Content Management:



➢ Consumer Report Management:



CHAPTER 6 : CONCLUSION AND FUTURE WORk

6.1: Future enhancement

The current system can be further improved through the following enhancements:

1. Mobile Application Support

- Develop Android and iOS mobile apps for wider accessibility.
- Enable offline access for certain features to support rural users with limited internet.

2. Multilingual Interface

- Add support for regional languages (Hindi, Marathi, Tamil, etc.).
- Improve inclusivity and usability for non-English-speaking farmers.

3. AI and Machine Learning Integration

- Use AI to suggest crops, fertilizers, and best farming practices based on soil, weather, and historical data.
- Provide dynamic pricing insights and market demand forecasts.

4. IoT and Sensor Integration

- Integrate with IoT devices for real-time monitoring of soil, temperature, and crop health.
- Provide smart farming insights based on live data.

5. E-Wallet and UPI Integration

- Implement secure online payments using digital wallets and UPI.
- Allow faster settlements between farmers and buyers.

6. Real-Time Communication Tools

- Introduce chat or video features for farmers and buyers to communicate directly.
- Enable negotiation and clarification during product purchasing.

7. Logistics and Delivery Tracking

- Partner with local logistics services for product pickup and delivery.
- Include tracking systems for transparency and reliability.

8. Advanced Analytics Dashboard

- Visual dashboards for farmers to monitor sales, earnings, and crop performance.
- Admin dashboards for monitoring system health, user activity, and trends.

6.2: Conclusion

The **AgriBuzz – Online Agriculture Management System** provides an effective digital solution to bridge the gap between farmers, consumers, wholesalers, and farm workers. By offering features like online produce sales, agricultural equipment shopping, labor hiring, weather updates, and informative blogs, the platform enhances agricultural productivity and expands market access for farmers. The system empowers all stakeholders in the agriculture ecosystem by promoting transparency, efficiency, and convenience.

With its user-friendly interface and well-defined user roles, AgriBizz contributes toward modernizing traditional farming practices and supports the goal of digital agriculture in India. Overall, the project successfully demonstrates how technology can play a vital role in transforming the agricultural sector and improving the livelihood of farmers.

CHAPTER 7 :BIBLIOGRAPHY AND REFERENCES

7.1 : Bibliography

- https://www.agriculture.gov.in – Ministry of Agriculture & Farmers Welfare, Government of India
- https://www.krishijagran.com – Agricultural news and updates
- https://developer.mozilla.org – HTML, CSS, JavaScript reference
- https://www.w3schools.com – Web development tutorials and documentation
- https://www.php.net – Official PHP documentation
- https://www.mysql.com – MySQL official site and documentation

7.2 References

- Government of India, Ministry of Agriculture & Farmers Welfare – https://www.agriculture.gov.in
- Krishi Jagran – Agricultural News Portal – https://www.krishijagran.com
- MDN Web Docs (Mozilla Developer Network) – HTML, CSS, JavaScript documentation – https://developer.mozilla.org
- W3Schools – Web Development Tutorials – https://www.w3schools.com
- PHP Official Documentation – https://www.php.net
- MySQL Official Documentation – https://dev.mysql.com/doc
- Kogent Learning Solutions Inc., *Web Technologies: HTML, JavaScript, PHP, Java, JSP, ASP.NET, XML and Ajax, Black Book*, Dreamtech Press
- Abraham Silberschatz, Henry F. Korth, S. Sudarshan, *Database System Concepts*, McGraw Hill Education

7.3 : Plagiarism Report