

VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Jnana Sangama", Belgavi-590 018, Karnataka, India



An Internship Report
On

AGRICULTURE MANAGEMENT SYSTEM

Submitted in Partial Fulfillment of the requirement for the award of the degree of

BACHELOR OF ENGINEERING
IN
COMPUTER SCIENCE AND ENGINEERING

Submitted By

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Carried out at

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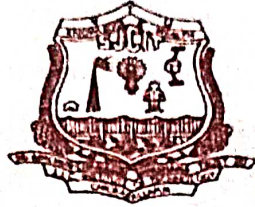


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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
CHIKKABALLAPUR-562101

2021-2022

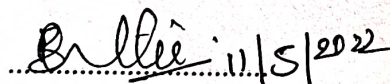
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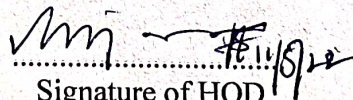


CERTIFICATE

This is to certify that the Internship work entitled **"AGRICULTURE MANAGEMENT SYSTEM"** carried out by **ARPITHA M** bearing USN:1S18CS007 a bonafide student of Sri Jagadguru Chandrashekaranaatha Institute of Technology in partial fulfilment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belgaum during the year 2021-22. It is certificated that all corrections / suggestions indicated for internal assessment have been incorporated in the report deposited in the departmental library. The Internship report has been approved as it satisfies the academic requirements in respect of Internship work prescribed for the said Degree.

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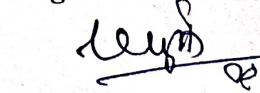
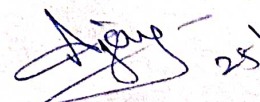


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Name of the Examiners

1. H. Suresh Kumar
2. Ajay

Signature with Date

 25/7/2022
 25/7/22

COMPANY CERTIFICATE



SOOKSHMAS CERTIFICATE

This is to certify that

ARPITHA M

has completed a course titled **FULL STACK DEVELOPMENT TRAINING** of **240 HOURS**
duration and found the candidate's performance to be **GOOD**



Date

05 Oct 2021


RIPIKA
Co-Founder

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DECLARATION

I, **ARPITHA M**, student of VIII semester B.E in Computer science & Engineering at S J C Institute of Technology, Chickballapur, hereby declare that the Internship work entitled “**Agriculture Management System**” has been independently carried out by me under the supervision of KARTHIK M N, Full Stack Developer, and the coordinator **Prof, SWETHA T** Assistant Professor, submitted in partial fulfillment of the course requirement for the award of degree in **Bachelor of Engineering in Computer Science & Engineering** of **Visveswaraya Technological University, Belgavi** during the year 2021-2022. I further declare that the report has not been submitted to any other University for the award of any other degree.

PLACE: Chickballapur
Date: 09/05/2022

ARPITHA M
1SJ18CS007

ABSTRACT

"Agriculture Management System" provides the farmers to upload their products and helps its users or buyers to get the details of the agricultural products. The main objective of this project is building an application which will help the farmers to sell their products by uploading the details of that product in the application.

Agricultural Management System is an online web application where buyers can go through the list of products uploaded by the farmer and can add to their cart or buy the required product directly. Both farmers and buyers need to login separately using their own user id and password. And the buyer can place their items into a cart and can purchase it. This application is developed using PHP, HTML and MYSQL programming language.

The Trends of the crops act so that these will be pretty important to the users who access these via the internet, The main features of the information system includes information retrival facilities for users from anywhere in the form of obtaining statistical information about fertilizer, research institutes and researches.

In addition This provides individual information about Intercrops related to main crops. The system allows the retrieving facilities but also the updating facilities to the authorized persons in the corresponding institutes.

ACKNOWLEDGEMENT

With reverential pranam, we express my sincere gratitude and salutations to the feet of his holiness **Byravaikya Padmabhushana Sri Sri Sri Dr. Balagangadharanatha Maha Swamiji**, & his holiness **Jagadguru Sri Sri Sri Dr. Nirmalanandanatha Swamiji** of Sri Adichunchanagiri Mutt for their unlimited blessings. First and foremost we wish to express my deep sincere feelings of gratitude to our institution, **Sri Jagadguru Chandrashekaranaatha Swamiji Institute of Technology**. For providing me an opportunities for completing my internship work successfully.

I extend deep sense of sincere gratitude to **Dr. G T Raju, Principal, S J C Institute of Technology, Chickballapur**, for providing an opportunity to complete the Internship Work.

I extend special in-depth, heartfelt, and sincere gratitude to our HOD **Dr. Manjunatha Kumar B H, Professor and Head of the Department, Computer Science and Engineering, S J C Institute of Technology, Chickballapur**, for her constant support and valuable guidance of the Internship Work.

I convey our sincere thanks to Internship Internal Guide **Guide Name Dr Bharathi M, Professor, Department of Computer Science and Engineering, S J C Institute of Technology**, for his/her constant support, valuable guidance and suggestions of the Internship Work.

I am thankful to Internship External Guide **Karthik M N, Full Stack Developer, Sookshmas Private Limited, Bangalore** for providing valuable guidance and encouragement of the Internship Work.

I also feel immense pleasure to express deep and profound gratitude to our Internship Coordinator **Prof. Swetha T, Assistant Professor, Department of Computer Science and Engineering, S J C Institute of Technology**, for his guidance and suggestions of the Internship Work.

Finally, I would like to thank all faculty members of Department of Computer Science and Engineering, S J C Institute of Technology, Chickballapur for their support.

I also thank all those who extended their support and co-operation while bringing out this Internship Report.

Arpitha M (1SJ18CS007)

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CHAPTER - 1

COMPANY PROFILE

Sookshmas E-Learning Private Limited is an Indian Non-Government Company. It is a private company and is classified as ‘company limited by shares’.

Company’s authorized capital stands at Rs 10.0 lakhs and has 10.0% paid up capital which is Rs10.0 lakhs.

1.1 History of the Organization

Sookshmas E-learning Private Limited Details	
CIN	U80904KA2017PTC102276
Status	ACTIVE
Company Category	Company Limited by Shares
Company Sub-category	Indian Non-Government Company
Company Class	Private
Business Activity	Community, personal & Social Services
Authorized Capital	10.0 lakhs
Paid-up Capital	1.0 lakhs
Paid-up Capital %	10.0
Registrar Office City	Bangalore
Registered State	Karnataka

1.1.1 Objectives

Sookshmas E learning private limited is majority in community, personal and social services Business and currently company operations are active.

To enlist our objectives we want to:

- Grow exponentially and become the world’s first vanilla we solutions provider and on the same hand providing world class solutions.
- Help students globally by providing them best of tutor support and a qualified teacher as per their desire.

1.1.2 Operation of the Organization

The organizational operations at Sookshmas private limited are filled with values, ideas and perseverance. One can see the same at the time of delivery. From researching on different user interfaces to produce some unique and best in class user experience on the field, to write code and providing fast and smart delivery options along with continuous integration we strive on perfection in our work.

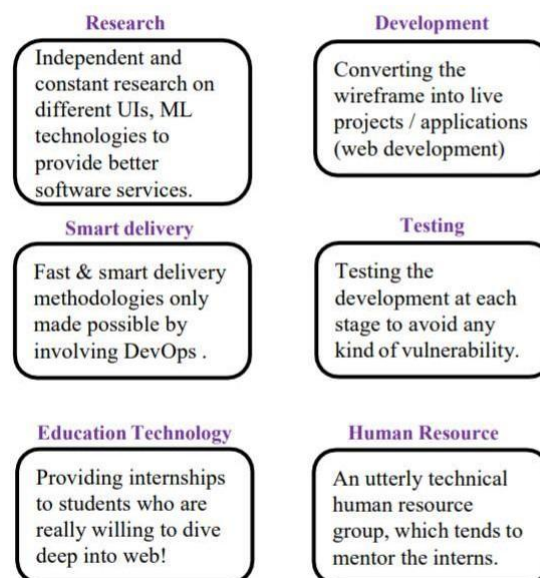


Figure 1.1: Organizational Operations

1.2 Major Milestones

We conducted VKIT-Sookshmas Hackathon 2020 to ignite and test the coding skills of students in order to make them ready for handling and solving the complex issues in real world.

We conducted the Sookshmas Inter College Contest 2019 from 15th Feb to 23rd Feb 2019 for students to strengthen the knowledge in their subjects. Final prize distribution ceremony held on Global Academy Of Technology Bengaluru

1.3 Structure of the Organization

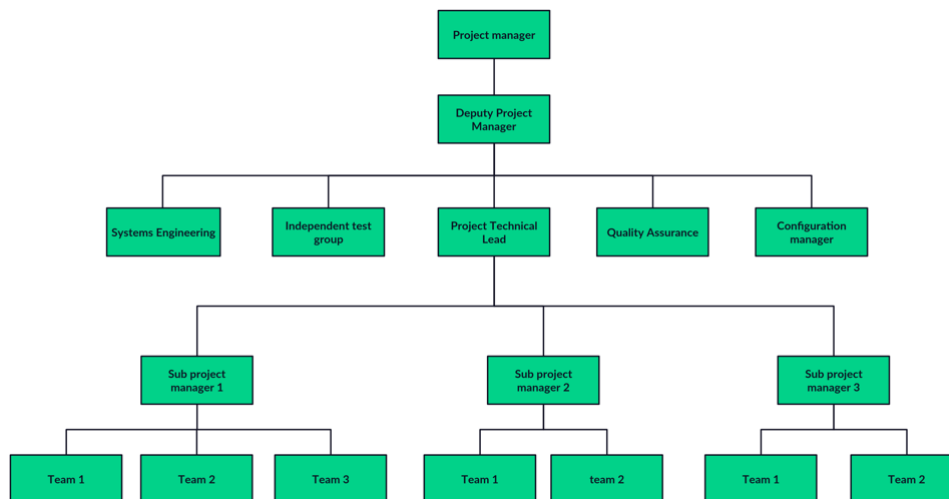


Figure 1.2 Organizational Structure

1.4 Services Offered

Services we offer have grown over the years, as listed below:

- Education
- Software Solutions
- Brand Strategies
- Content Writing
- Advertisement Solutions

CHAPTER – 2

ABOUT THE DEPARTMENT

Full Stack Developers are responsible for designing and developing websites and platforms. They work with design teams to ensure that user interactions on web pages are intuitive and engaging.

2.1 Specific Functionalities of the Department

The IT Department of Sookshmas has evolved and transformed into a highly productive, result oriented department. Special functionalities of IT department includes services like education, software Solutions, brand Strategies, content writing, advertisement solutions. All these processes are backed by scientific and result oriented facilities.

2.2 Process Adopted

SDLC is a process followed for a software project, within a software organization. It consists of a detailed plan describing how to develop, maintain, replace and alter or enhance specific software. A SDLC process as following mentioned steps:

- Planning
- Defining
- Designing
- Building
- Testing
- Deployment

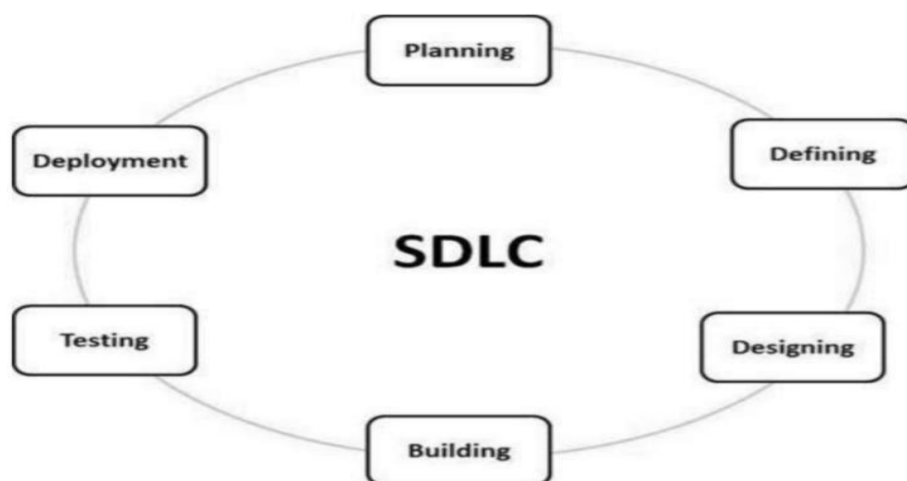


Figure 2.2 Process Adopted-SDLC

2.3 Testing

The various testing techniques used by the department can be summarized as follows:

Functional Testing

Here the system is a black box whose behavior is determined by studying its inputs and related outputs. The key problem is to select the inputs that have a huge probability of being members of a set in many cases; the selection of these test cases is based on the previous studies.

Structural Testing

A great deal can be learnt about the strength and the limitation of the application by examinee the manner in which the system breaks. This type of testing has two limitations. It tests failure behavior of the system circumstances may arise through an unexpected combination of events where the node placed on the system exceeds the maximum anticipated load. The structure of the each module was checked at every step.

Unit Testing

In unit testing the entire individual functions and modules were tested independently. By following this strategy all the error in coding were identified and corrected. This method was applied in combination with the white and black box testing techniques to find the errors in each module. Unit testing is normally considered an adjunct to the coding step.

2.4 Structure of the Department

The structure of the organisation is described in the following figure:

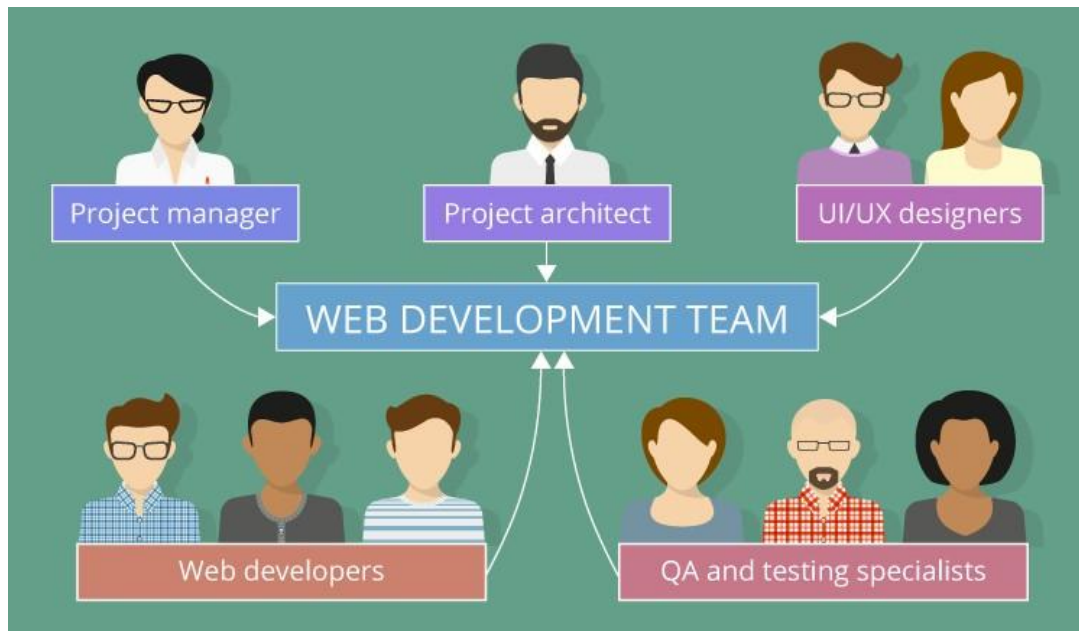


Figure2.4 Department Structure

2.5 Roles and Responsibilities of Individuals

The different roles and responsibilities of individuals are:

1. **Project Manager:** Project Managers play the lead role in planning, executing, monitoring, controlling, and closing projects. They're expected to deliver a project on time, within the budget, and brief while keeping everyone in the know and happy.
2. **Tech Leads:** Technical Lead as the name states is solely responsible for leading a development team. The is not easy. They have to lead a team. Technical Lead is the one who actually creates a technical vision in order to turn it into reality with the help of the team.
3. **HR Manager:** The Human Resource Manager will lead and direct the routine functions of the Human Resources (HR) department including hiring and interviewing staff, administering pay, benefits, and leave, and enforcing company policies and practices.
4. **Senior Developer:** Develops software solutions by studying information needs, conferring with users, studying systems flow, data usage, and work processes; investigating problem areas; and following the software development lifecycle. A senior developer may manage a team of developers and will be expected to encourage creativity and efficiency throughout complex digital projects. Due to the pressurised nature of the role, a robust and organised approach to the work is needed to produce the best solutions.
5. **Junior Developer:** Junior Software Developers are entry-level software developers that assist the development team with all aspects of software design and coding. Their primary role is to learn the codebase, attend design meetings, write basic code, fix bugs, and assist the Development Manager in all design-related tasks.

CHAPTER – 3

TASK PERFORMED

3.1 Introduction

Full Stack Developers are responsible for designing and developing websites and platforms . They work with design teams to ensure that user interactions on web pages are intuitive and engaging.

- Developing front end website architecture.
- Designing user interactions on web pages.
- Developing back-end website applications.
- Creating servers and databases for functionality.
- Ensuring cross-platform optimization for mobile phones.
- Ensuring responsibilities of applications.
- Seeing through a project from conception to finished product.
- Designing and developing APIs.
- Meeting both technical and consumer needs.
- Staying abreast of development in web application and programming languages.

3.2 Technology used

- PHP
- MYSQL
- PHPMY ADMIN
- XAMPP

CHAPTER – 4

REFLECTION NOTES

4.1 Experience

Although internship vary greatly from one organization to the next, the term traditionally refers to real-world work experiences in which students fulfil short-term positions within a company or organization in order to gain hands-on experience and develop career specific skills.

- Communication of the thoughts to the employees, ideas, and information in writing through e-mails and letters.
- The skill of listening to the higher authority and acting according to the situation at the workplace.
- The effective ways of communicating with the co-workers or employees at the company, raising the level of self-confidence.
- The skill of making the right decision for a given problem that occurs while on work in the company.
- Problem solving is a major requirement for any engineer and the internship provide the flow of thoughts to solve a problem in different and effective ways. .

4.2 Technical Outcomes

The outcomes of attending an internship program as per the curriculum are not only in terms of technical knowledge, but also learnt many norms of a corporate office. The outcomes can be summed up as follows:

- The communication of ideas and thoughts regarding a problem with the employees of the company gave interns high confidence and boosted up the decision making capabilities.
- Web Development being one of the top domains in the current scenario, working on such a domain specifically to produce an outcome to the company helped us enhance our knowledge base in this area.
- Derive information from data and implement data into application.
- Implemented basic javascript and created visualizations in accordance with UI/UX theories.
- Find and use code packages based on their documentation to produce working results in a project.

4.2.1 System Requirement Specification

HARDWARE REQUIREMENTS:

Processor : Intel Pentium V +

System bus : 64bits

RAM : 4 GB of RAM

Mouse : 2 button mouse

SOFTWARE REQUIREMENTS:

Front End : HTML,PHP,JAVASCRIPT,CSS

Back End : My SQL

Tool Used : Xampp

Operation System : Windows family

4.3 System Analysis and Design

4.3.1 Existing System

The existing system is very traditional as the Data Management is very complex. Here, buying and selling of products is done manually. All the details of the agricultural product to be sold or purchased are stored manually. Sellers and Buyers are not able to get the complete information about the product.

4.3.2 Disadvantages of the Existing System

- No category-wise classification of Agricultural products.
- Insufficiency in querying details

4.3.3 Proposed System

In the proposed system, buyers or farmers can directly register into the site and sell/buy the product. Farmers can open their site and can sell the agricultural products online.

4.3.4 Advantages of the Proposed System

- Agricultural products are classified on the basis of their category.
- Avoids efforts in maintaining the data.
- Easy and interactive.

4.4 System Architecture

4.4.1 E-R Diagram

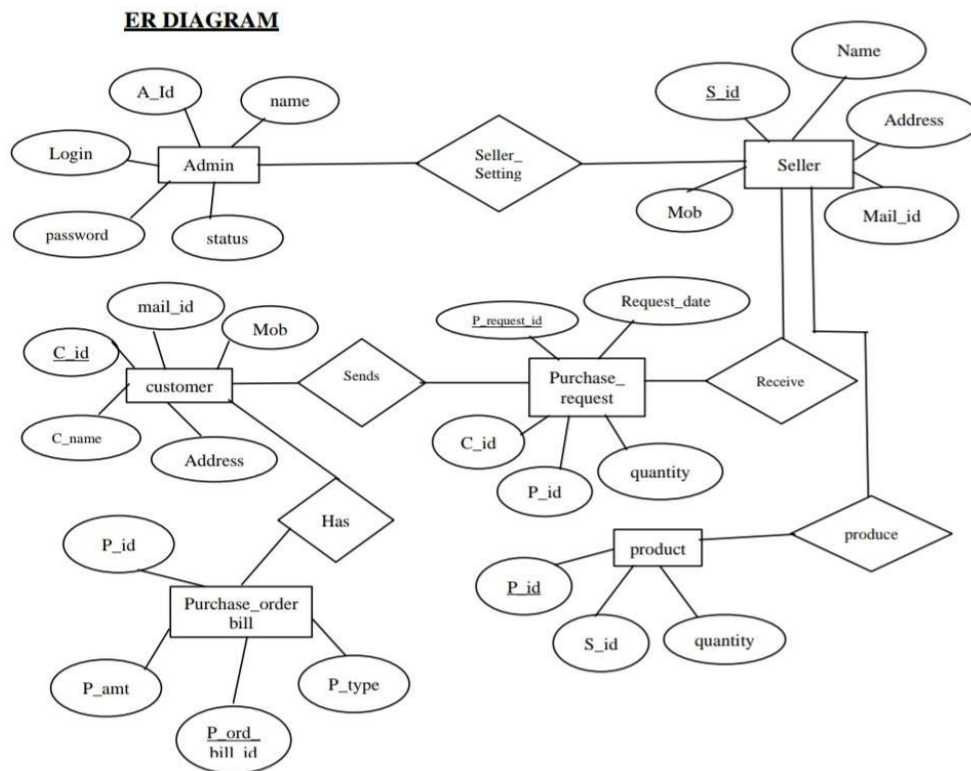


Figure 4.4.1 E-R Diagram

4.4.2 Schema Diagram

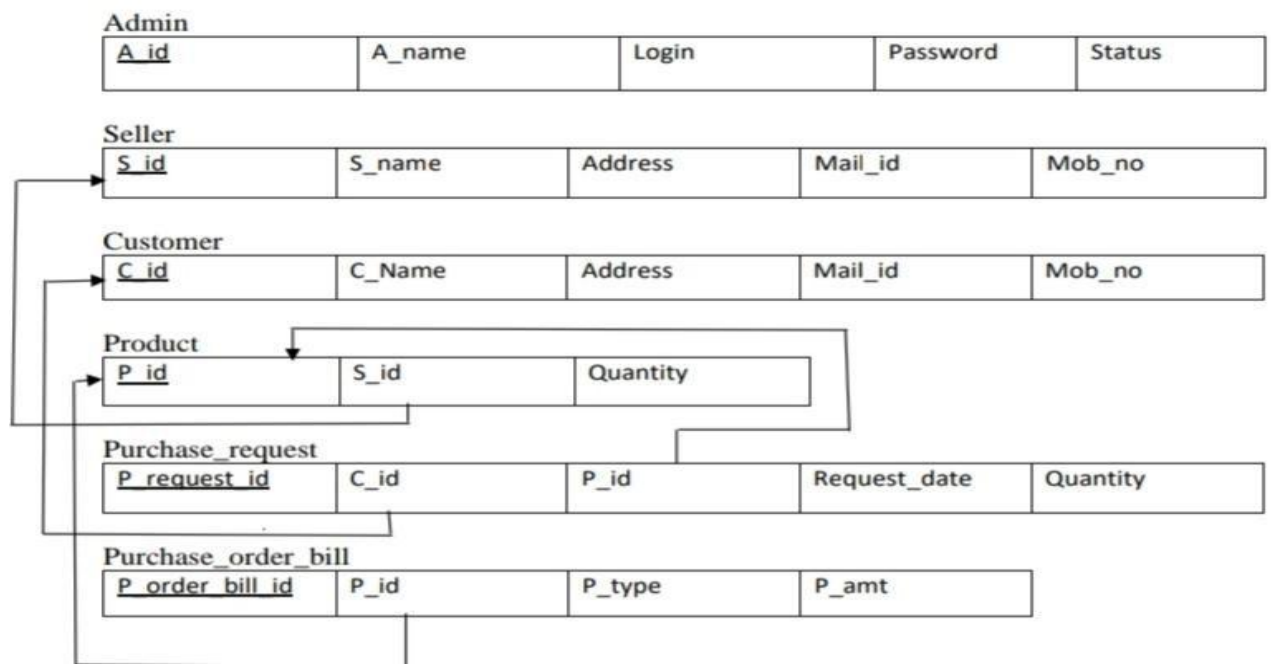


Figure 4..4.2 Schema Diagram

4.5 Implementation

PHP CODE

FARMER LOGIN:

```
<?php

include("header.php");

if(isset($_SESSION['customerid']))

{echo "<script>>window.location='customerpanel.php';</script>";}

if(isset($_SESSION['sellerid']))

{echo "<script>>window.location='sellerpanel.php';</script>";}

if(isset($_SESSION['workerid']))

{echo "<script>>window.location='workerpanel.php';</script>";

}

if(isset($_SESSION['adminid']))

{echo "<script>>window.location='adminpanel.php';</script>";}

?>

<main id="main">

<!-- ===== Breadcrumbs ===== -->

<section id="breadcrumbs" class="breadcrumbs">

<div class="container">

<div class="d-flex justify-content-between align-items-center">

<h2>Farmer Login/Register</h2>
```

```

<ol>

    <li><a href="index.php">Home</a></li>

</ol>

</div>

</div>

</section><!-- End Breadcrumbs -->

<div class="col-md-6 d-flex align-items-stretch">

    <div class="icon-box" data-aos="zoom-in" data-aos-delay="100" style="width:
100%;">

        <div class="icon"><i class="bx bx-lock"></i></div>

        <h4><a href="sellerloginpanel.php">Existing Farmer</a></h4>

        <button      type="button"      class="btn      btn-info      btn-lg      btn-block"
onclick="window.location='sellerloginpanel.php'">Sign In & Get Started</button>

    </div>

</div>

```

CUSTOMER LOGIN:

```

<?php

include("header.php");

if(isset($_SESSION['customerid']))

{echo "<script>window.location='customerpanel.php';</script>";}

if(isset($_SESSION['sellerid']))

{echo "<script>window.location='sellerpanel.php';</script>";}

```

```
if(isset($_SESSION['workerid']))

{echo "<script>window.location='workerpanel.php';</script>";}

if(isset($_SESSION['adminid']))

{echo "<script>window.location='adminpanel.php';</script>";}

?>

<main id="main">

    <!-- ===== Breadcrumbs ===== -->

    <section id="breadcrumbs" class="breadcrumbs">

        <div class="container">

            <div class="d-flex justify-content-between align-items-center">

                <h2>Customer Login/Register</h2>

                <ol>

                    <li><a href="index.php">Home</a></li>

                </ol>

            </div>

        </div>

    </div>

    </section><!-- End Breadcrumbs -->

    <hr>

    <!-- ===== Services Section ===== -->

    <section id="services" class="services section-bg">

        <div class="container">

            <div class="row">

                <div class="col-lg-4">
```

```
<div class="section-title" data-aos="fade-right">

    <h2>Customer Login/Register</h2>

    <p>Login as Customer/Buyer - Buy Vegetable, Fruits, Nuts directly from Farmer...
</b></p>

    <div class="icon"><i class="bx bx-lock"></i></div>

    <h4><a href="customerloginpanel.php">Existing User</a></h4>

    <button    type="button"    class="btn    btn-info    btn-lg    btn-block"
onclick="window.location='customerloginpanel.php'">Sign In & Get Started</button>

</div>

</div>
```

4.5.1 Modules

This project is modularized as the following:

1. Admin
2. Seller
3. Customer
4. Produce
5. Purchase request
6. Purchase order_bill
7. Farmer_Product

4.6 Screen Shots

Backend:

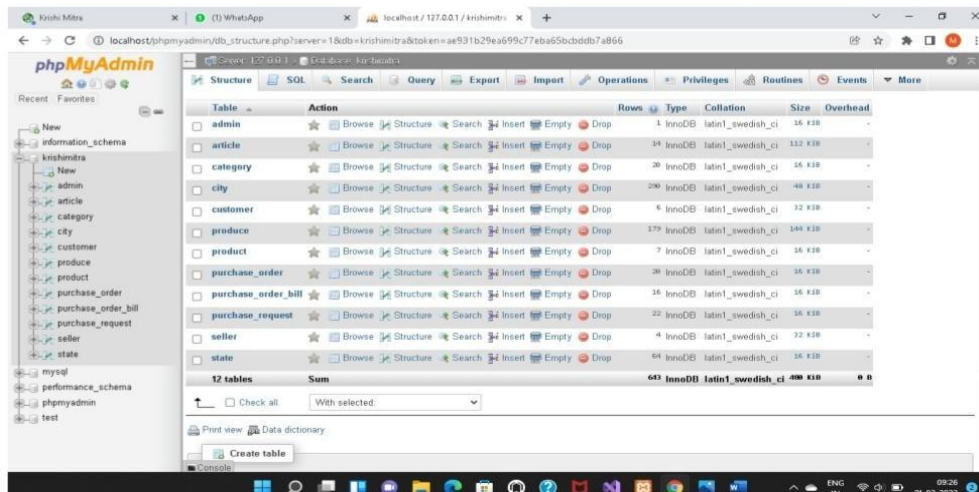


Figure 4.6.1 Backend

Landing page :

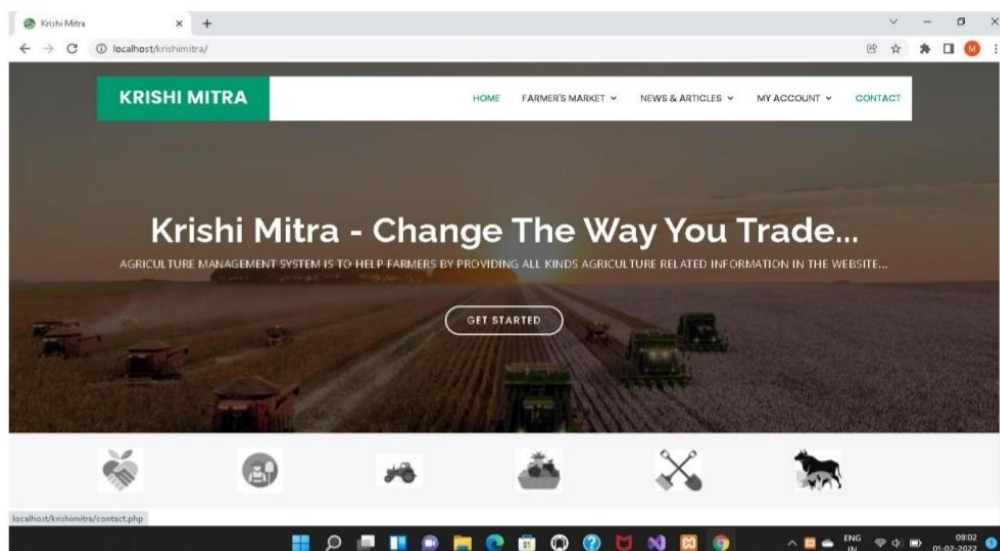
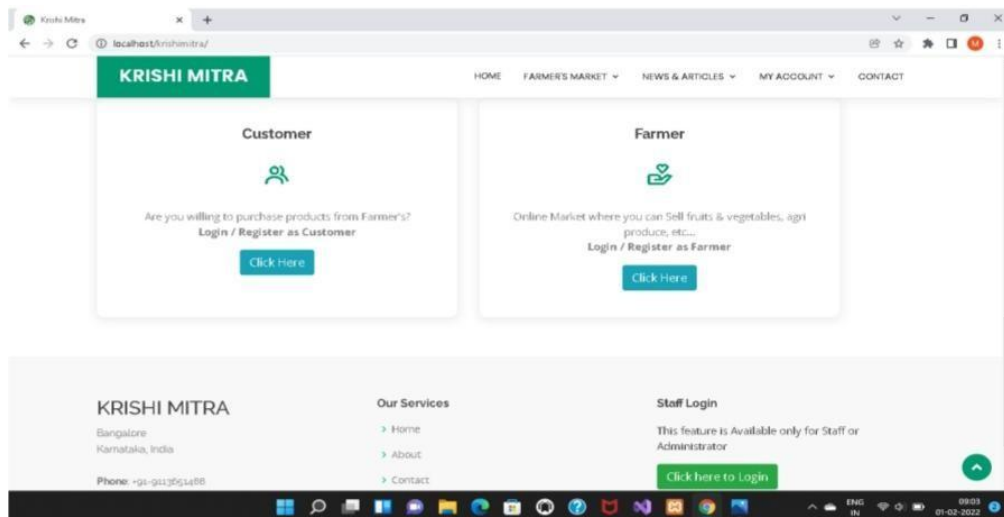
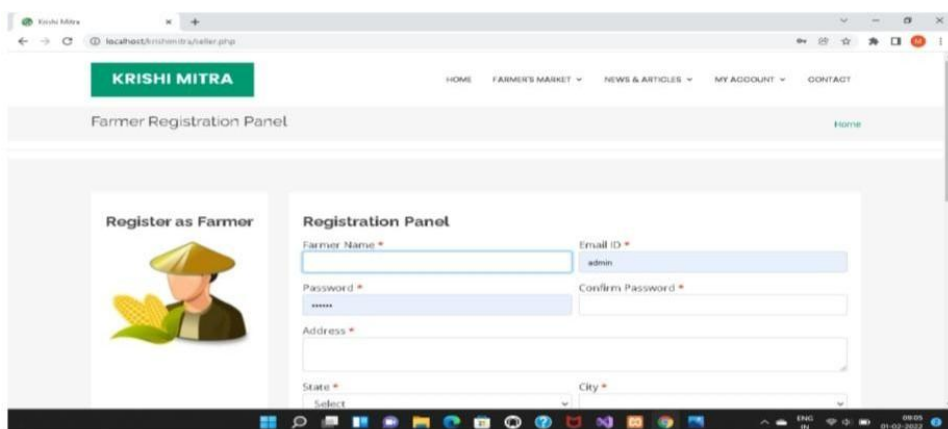
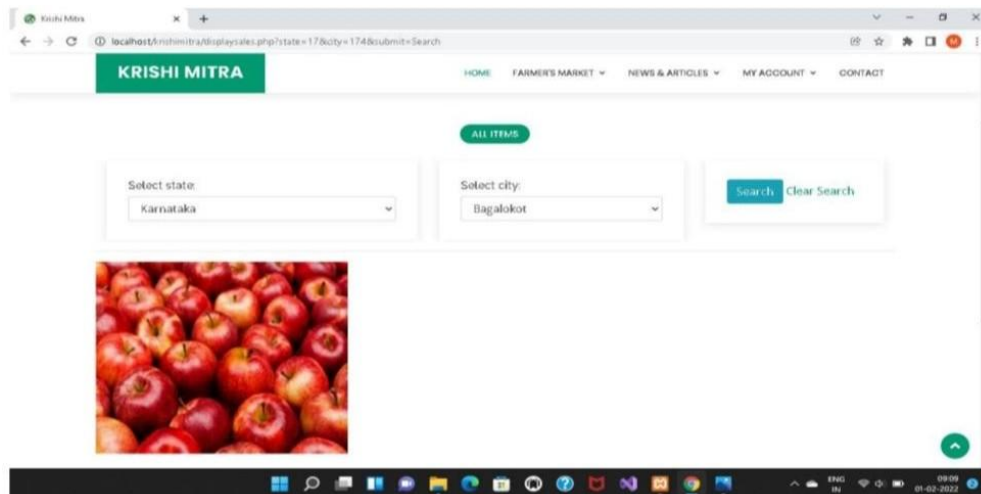
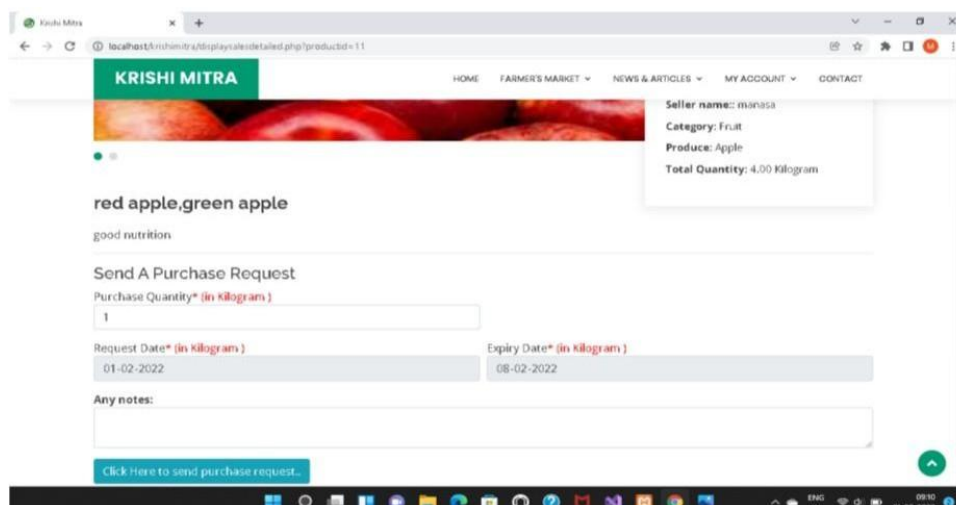


Figure 4.6.2 Landing page

Customer/Farmer (Register/Login),Staff login:**Figure 4.6.3 Customer/Farmer(Register/Login),Staff Login****Farmer Registration panel:****Figure 4.6.4 Farmer Registration panel**

Items: All Items Present in Farmer Market**Figure 4.6.5 All Items****Purchase Request:** Sending Purchase Request to the Farmer**Figure 4.6.6 Purchase Request**

Purchase Order: Sending Purchase Order to the customer

The screenshot shows a web browser window with the URL `localhost/krishimitra/viewpurchaseorderdetail.php?purchaserequestid=33`. The page title is "View Purchase Request Detail...". It features a table with the following data:

Product	Quantity	Request Date	Expiry Date	Note	Status
red apple,green apple	1.00	2022-02-01	2022-02-08		Pending

Below the table, there is a "Sales Price" section with a form:

Quantity: (in Kilogram)

Price:

Figure 4.6.7 Purchase Order**Customer Payment:** This page allows Customer to make payment

The screenshot shows a web browser window with the URL `localhost/krishimitra/purchaseorderpayment.php?purchaseorderid=20`. The page title is "Customer Payment". It contains a form with the following fields:

Payment Type: *

Card Holder Name: *

Card Number: *

Expiry Date: *

CVV Number: *

Payment Amount: *

Figure 4.6.8 Customer payment

CHAPTER – 4

CONCLUSION

With the theoretical inclination of syllabus, it becomes very essential to take the at most advantage of any opportunity of gaining practical experience that comes along. The building blocks of this project “Agriculture Management System” is one of these opportunities. It gave the requisite practical knowledge to supplement the already taught theoretical concepts thus making us more competent as a computer engineer. The project has also helped in understanding the following aspects of project development.

- The planning that goes into implementing a project.
- The importance of proper planning and an organized methodology

Therefore The name Agriculture Management System indicates Intelligent Agriculture. This is a model farmer management website application and site helps the farmers to sell their agricultural produce online and suggest best in practice farming processes. This enables wholesalers and retailers to expand their business.

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APPENDIX

Appendix A: Abbreviation

- PK : Primary Key
- FK: Foreign Key
- CPK: Composite Primary Key
- HTML: Hyper Text Markup Language
- CSS: Cascading Style Sheets.
- API: Application Programable Interface
- R&D: Research and Development
- IT: Information Technology
- SDLC: Software Development Life Cycle
- PHP: Hypertext Preprocessor
- UI: User Interface
- RAM: Random Access Memory