A MINI PROJECT REPORT
On
Farmer Varmer

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Declaration

We hereby declare that the work which is being presented in the Mini Project "**FarmerVarmer",** in partial fulfillment of the requirements for Mini-Project LAB, is an authentic record of our own work carried under the supervision of **Mr. Pankaj Kapoor, Technical Trainer, GLA University, Mathura**.

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CERTIFICATE

This is to certify that the project entitled **"FarmerVarmer"** carried out in Mini Project – II Lab is a bonafide work done by **Anmol Gupta(161500100), Ankit Kumar(161500088), Amit Ojha(161500074) and Amit Kumar Shakya(161500073)**and is submitted in partial fulfillment of the requirements for the award of the degree Bachelor of Technology (Computer Science & Engineering).

Signature of Supervisor:

   Name of Supervisor:
   Mr. Pankaj Kapoor

   Date:

ACKNOWLEDGEMENT

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We also do not like to miss the opportunity to acknowledge the contribution of all faculty members of the department for their kind guidance and cooperation during the development of our project. Last but not the least, we acknowledge our friends for their contribution in the completion of the project.

Anmol Gupta
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Abstract

The Project describes the FarmerVarmer online Site. This report will help you to know in deep the actual work that has been done as a team work. The main objective of this application is to automate the complete operations of the farmer products. Theyneed to maintain hundreds of thousands of records. Also searching should be very faster, so they can find required details instantly.Main objective is to create a system which helps them to complete their work faster in simple way by using computer. Also our project contains updated information and many things else.

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Chapter-1

Introduction

1.1Overview and Motivation:

India is agricultural country. Majority of Indian people live on agricultural. So, Agricultural institutes, research bases agencies and other resources related to agriculture in India is vitally important. Now a day, the farmers have to go to the nearest market to hand over his product to a particular agent where agent sells the product to another agent or a dealer. After a specific time the agent gives the collected cash out of the sold products to the respected farmer but every Agent tries to cuts his commission out of the earned amount. The whole process is not transparent as there is no way for farmer to know about the deal and the exact amount at which their product was sold. No facility is present for the farmers to know the product rates at different markets where they can sell their products for achieving high profits. Our project aims to help farmers to sell their products in a transparent way.

The benefits of this website and Information technology for the improvement and strengthening of agriculture sector in India are-

- Better marketing exposure, awareness & information, pricing, and spontaneous agricultural practices.
- Reduction of agricultural risks and enhanced incomes.
- Improved networking and communication.
- Facility of online trading and e-commerce.
- Management of returned and unused crops units.

1.2Objective:

The main objective of this project is to build a platform for farmers to sell their product and track the sale. This platform is flexible which can maneuver the customer-farmer relationship in an effective manner. Farmer will get unique interface where they can avail everything right from learning to the market information. This website will act as unique and secure way to perform agro-marketing.

Chapter-2

Software Requirement Analysis

2.1Problem Statement:

In present scenario people buy the things from online site. So far it is a time consuming process to go to market and purchase the items. Because it is having lots of manual work and it is waste of time. Therefore, this site is making for all people to less the waste of time.

2.2Modules:

The modules used in this software are as follows:

- **Login:** This module has a drop down list box from where we have to select **ADMIN or USER**. The **ADMIN** has all the rights in the software including updating the status of his site. The other fields in login **are** username and password. If the username and password are correct then it is directed to next page.

- **New user:** This module is for the users who do not have their account. Here user is allowed to create an account to login. The account creation is done by filling the registration form with user details such as name, phone, email etc.

- **Item:** This module has information regarding the Items such as its name, model, color, price information, its features etc. The Admin has the authority to Add, Delete, Update etc. The **USER** can only view the Products, add to cart only those in the stock etc.

- **Cart:** User can select any number of items and add to the cart. He can also remove from the cart if he dislikes it late.

- **Payment:** This module describes the payment done by the customer. The payment information can include information like the model purchased, quantity, mode of payment(cash,loan)etc.

1. Introduction:

Purpose: The main purpose for preparing this document is to give a general insight into the analysis and requirements of the existing system or situation and for determining the operating characteristics of the system.

Scope: This Document plays a vital role in the development life cycle (SDLC) and it describes the complete requirement of the system. It is meant for use by the developers and will be the basic during testing phase. Any changes made to the requirements in the future will have to go through formal change approval process.

2. General Description:

Through this section a description is given about the characteristics about the entire system.

2.1 Product Perspective:

Online website-based FarmerVarmer is an outstanding way of bringing Sellers and customers on an online platform to make purchase in a secured and efficient manner irrespective of distance between the two. The product shall be a one stop for all products online. It will offer daily recommendations for discounts and offers on products based on their category.

2.2 Product Function:

- Provide a simple interface and platform to ease the process of buying as well as selling products online
- Include smooth functionality and efficiency that adds to buyers' confidence.
- Appropriate space is dedicated to its Offers zone and deal of the day that fetches adequate attention of users.
- It will keep a constant focus on new category creation and expansion of products.
- Ads and promotion activities motivate shoppers to buy online.
- Tracking feature of orders and pending deliveries for both sellers and buyers.
- Notifying order and delivery reports to customers and sellers.

2.3 User Classes and Characteristics:

2.3.1 Customer - He or she is a verified user of website who is intended to buy a product from the platform. The customer must have a username and password to make a purchase. The person is regularly updated and fed with latest offers

2.3.2 Seller - He or she is a verified person who is allowed to sell items over the platform. Seller's details are stored on database and all the products are listed under him that he or she is ready to sell or are available. He is responsible to set products details, price, and quantity.

2.3.3 Administrator - He or she is responsible for monitoring functions and procedures on platform. Administrator is responsible to provide valid information of a purchase to the concerned authority in case of any dispute between the customer and seller or in case of exchange.

2.4 User Documentation:
The following actions will be provided on the site
* Notifications
* Contact Us
* User Agreement
* Make A Payment
* Payment Security
* Privacy Policy

2.5 Design Implementation:
The user interface shall be implemented using HTML& CSS. Client-side Programming Language will be using JavaScript (it is a lightweight, object-oriented, cross-platform scripting language, mainly used within web pages). HTML5 (it is the fifth revision of the HTML standard). CSS (Cascading Style Sheets define style rules in a separate CSS files).

Recommended browsers are Chrome, Firefox, Safari and Internet Explorer 8 or higher, Opera, etc.

2.6 Assumptions and Dependencies:

The customer and seller must have basic knowledge of computers and English language.

Each User must have a User ID and password.

Each Seller must have Seller ID and password.

There must be an Administrator.

Internet connection is a must.

Proper browsers should be installed in the user's system.

3. Specific Requirements:

3.1 Functional requirements:

This subsection contains the requirements for the e-store. These requirements are organized by the features discussed in the product functions. Features from there, they are then refined into use case diagrams and to sequence diagram to best capture the functional requirements of the system.

3.1.1 Displaying Related Items:
* Including results for related items to the items already bought.
* This can incentivize the customer to purchase more.
* By tracking the buying pattern of the user who is logged in, system recommends similar items for the user
* Display similar products with high ratings newly in-stock or are featured at special discount prices.
* Displaying all related items that other users purchased in addition to that product.
* This exposes the user to a larger variety of items of his interest,

3.1.2 Create Sellable items on website:
* Provide an interface to all the sellers to add product description and price through their account.
* List all the sellers for a common product they offer to sell and prioritize them based on percent of discount.

3.1.3 Provide personalized profile:
* The seller's and customer's profile contain all details of seller and customer respectively like contact, location, address and seller's license.
* To display both the active and completed order history in the customer profile.
* To allow user to select the order from the order history and detailed information.
* To display the most frequently searched items by the user in the profile.
* To help seller keep list of products and its information in its profile.

3.1.4 Move transaction money and details to Profile:
* Safe transfer of money into seller's bank account after successful transaction of money.
* Add details of transfer of money to company's selling and purchasing events logs and database.
* Send an order confirmation to the user and seller about the purchase through email or SMS.

3.1.5 Provide shopping cart facility:
- The system shall provide shopping cart during online purchase.
- The system shall allow user to add/remove products in the shopping cart.
- Later customer can confirm orders for purchase.

3.2 Non-Functional Requirements:

3.2.1 Performance:
- The product shall be based on web and has to be run from a web server.
- The product shall take initial load time depending on internet connection strength which also depends on the media from which the product is run.
- The performance shall depend upon hardware components of the client/customer.

3.2.2 Security:
3.2.2.1 Data Storage:
- The customer's web browser shall never display a customer's password. It shall always be echoed with special characters representing typed characters.
- The customer's web browser shall never display a customer's credit card number after retrieving from the database. It shall always be shown with just the last 4 digits of the credit card number.
- The system's back-end servers shall never display a customer's password. The customer's password may be reset but never shown.
- The system's back-end servers shall only be accessible to authenticated administrators.
- The system's back-end databases shall be encrypted and within company's perimeter.

3.2.3 Reliability:
- The system provides storage of all databases on redundant computers with automatic switchover.
- The reliability of the overall program depends on the reliability of the separate components.
- The main pillar of reliability of the system is the backup of the database which is continuously maintained and updated to reflect the most recent changes.

3.2.4 Safety:

- It is the state of being "safe", the condition of being protected against physical, social, spiritual, financial, political, emotional, occupational, psychological, educational or other types or consequences of failure, damage, error, accidents, harm or any other event which could be considered non-desirable.
- This can take the form of being protected from the event or from exposure to something that causes health or economical losses.
- It can include protection of people or of possessions.

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3.2.5 Maintainability:

- A commercial database is used for maintaining the database and the application server takes care of the site.
- In case of a failure, a re-initialization of the program will be done.
- Also the software design is being done with modularity in mind so that maintainability can be done efficiently
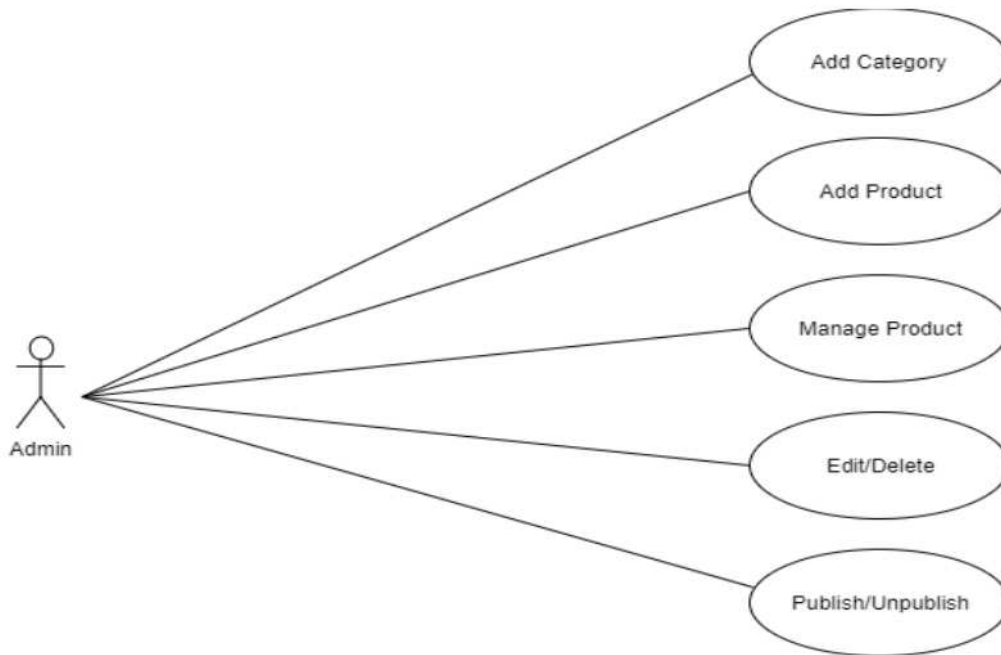
Chapter-3

Software Design

This Section Shows the Use Case Diagram, DFD'S , Sequence Diagram and ER Diagram Of the project.

3.1.1 Use case Diagram for Administrative Management:
The use case Diagram for Administrative Management is shown below in figure 3.1

Figure 3.1: Use case Diagram for Admin

According to figure, Admin can perform following function:

➢ **Login:** Admin needs login to perform all administrative works from admin panel.

➢ **Add category:** Admin can add category of products in the system. To perform this action admin need to login to the system.

➢ **Add Product:** Admin can add product and a detail description of the product. Admin can also approve a product that has been added by a farmer.

➢ **Manage Product:** The description price and manufacturer of the product can be changed by admin at anytime. He/she has the capability to publish or unpublished of product.

3.1.2Use case Diagram for Farmer Management:
The Use case Diagram for Farmer Management is shown below in figure 3.2
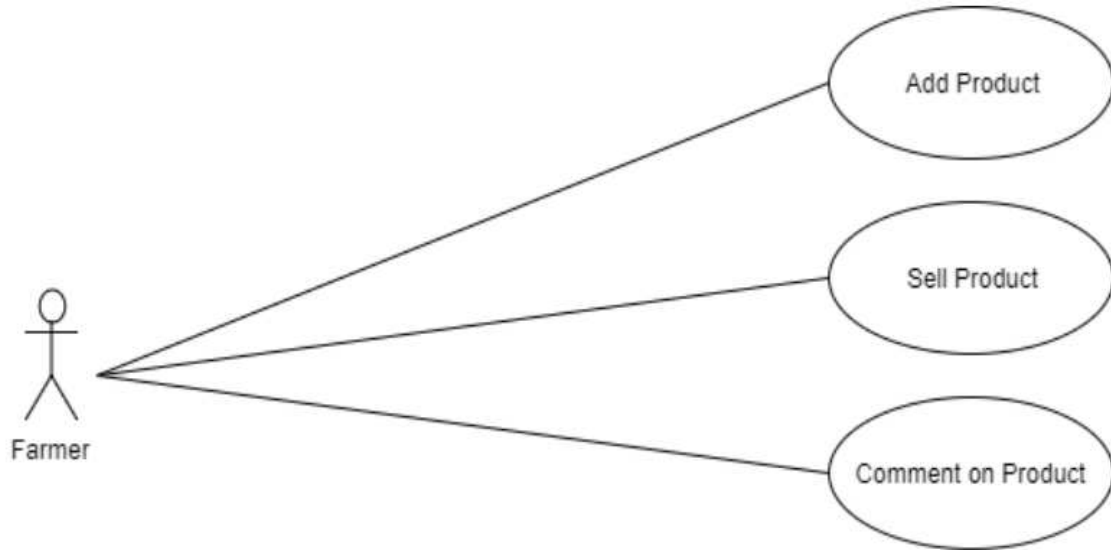
Figure 3.2: Use case Diagram for Farmer

According to figure, Farmer can perform following function:

➢ **Register:** The farmer can perform the general registration to access as registered farmer.

➢ **Login:** After completing registration farmer needs to login part to perform the necessary¬ actions.

➢ **Add Product and Farming Comments:** Farmer can add product add manufacturer of the product. Farmer can also comment about each product.

➢ **Edit Farmer's Profile:** The farmer can edit his profile. The farmer can update their name, and contact details.

➢ **Sell Product:** The farmer can sell all the products online which he added.

3.2 ER Diagram:
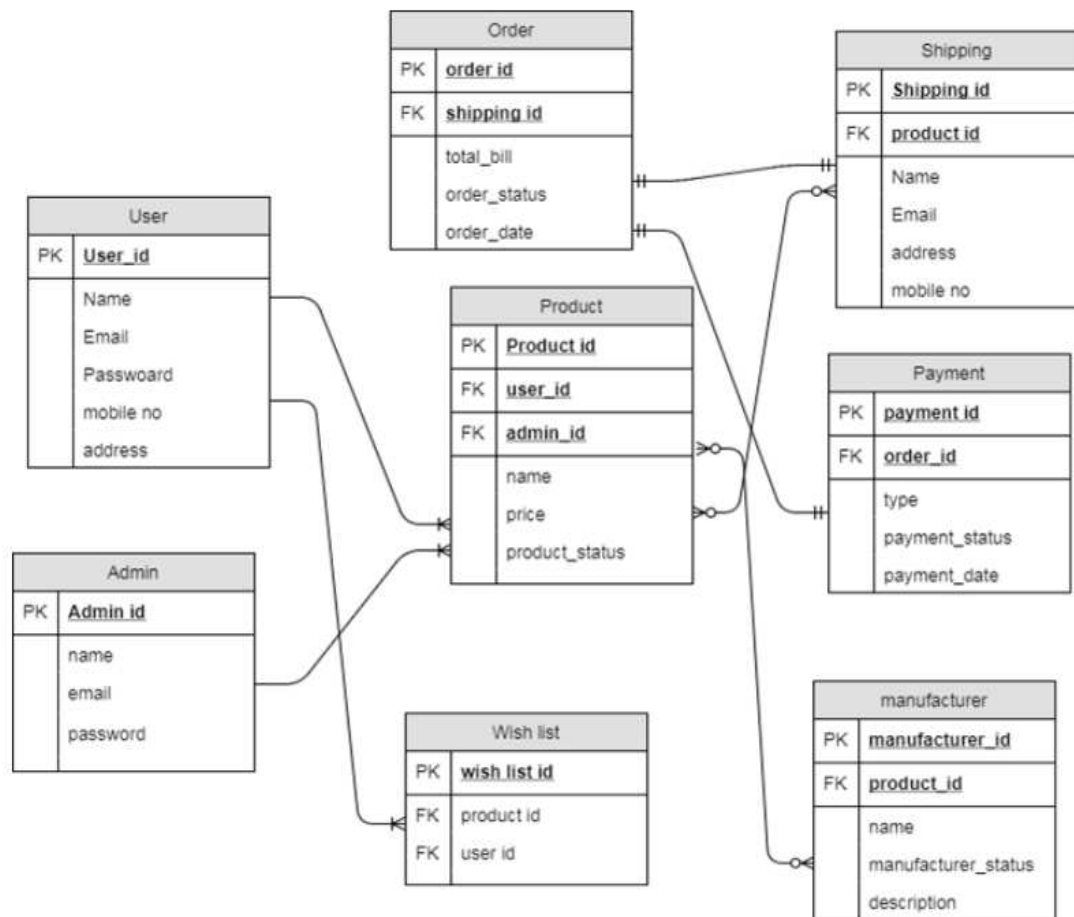
An entity-relationship diagram (ERD) is a graphical representation of an information system that shows the relationship between people, objects, places, concepts or events within that system. In software engineering an ER model is commonly formed to represent things that a business needs to remember in order to perform business processes. Consequently, the ER model becomes an abstract data model that defines a data or information structure that can be implemented in a database, typically a relational database. User (id, name, email, password, mobile_no) Admin (id, name, email, password) Product (id, name, price, status) Wish list (id, product_id, user_id) Shipping (id, name, email, address, mobile_no) Order (id, total, status, date, comments) Payment (id, type, status, date).

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Testing

Software testing is a critical element of software quality assurance and represents the ultimate review of specification, design and coding. In fact, testing is the one step in the software engineering process that could be viewed as destructive rather than constructive.

A strategy for software testing integrates software test case design methods into a well-planned series of steps that result in the successful construction of software. Testing is the set of activities that can be planned in advance and conducted systematically. The underlying motivation of program testing is to affirm software quality with methods that can economically and effectively apply to both strategic to both large and small-scale systems.

STRATEGIC APPROACH TO SOFTWARE TESTING:

The software engineering process can be viewed as a spiral. Initially system engineering defines the role of software and leads to software requirement analysis where the information domain, functions, behavior, performance, constraints and validation criteria for software are established. Moving inward along the spiral, we come to design and finally to coding. To develop computer software we spiral inalong streamlines that decrease the level of abstraction on each turn.

Testing of login session:

Test ID	Test Case Title	Description	Expected Outcome	Result
1.	Successful user verification	The login to the system should be tried by admin with correct username and password	Login should be successful and user should enter into the system	Success
2.	Unsuccessful Verification due to the wrong password	Login to a system with wrong password	Login should fail and user will face again login page	Success
3.	Unsuccessful Verification Due to invalid username	Login to a system with invalid user name	Login should fail and user will face again login page	Success

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Implementation and User Interface

User Interface-Here are some screenshots of the project.

Main page of the Site:

Screenshot 1

Signupinterface:

On this page user will register himself/ herself as a donor and user will be provided a username and password.

Screenshot 2

Logininterface:

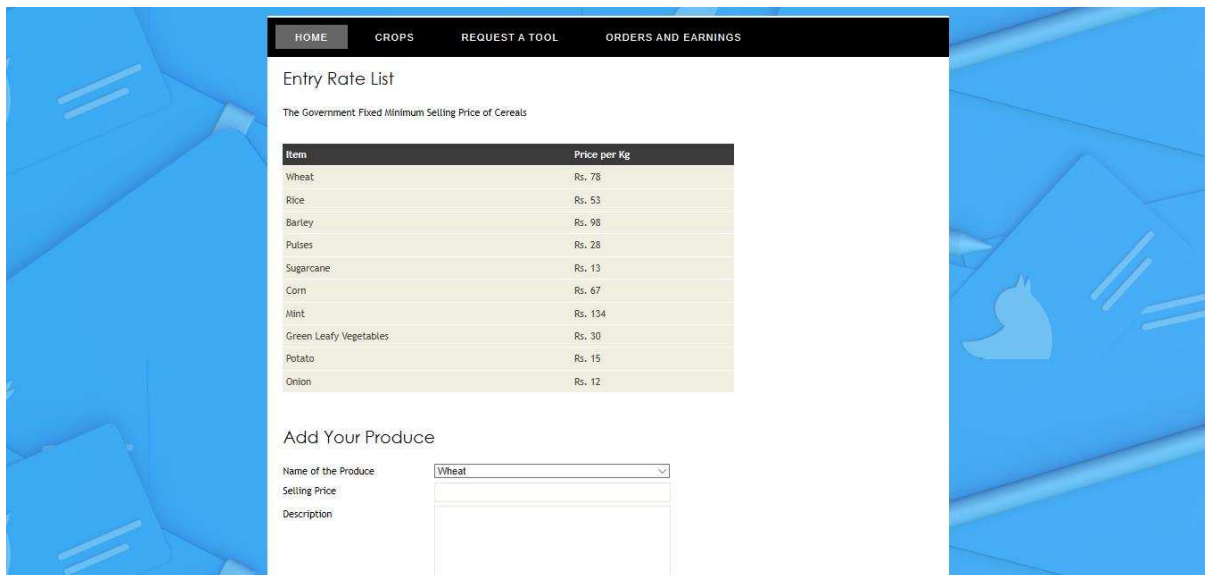User will login himself/herself to enter the website.

Screenshot 3

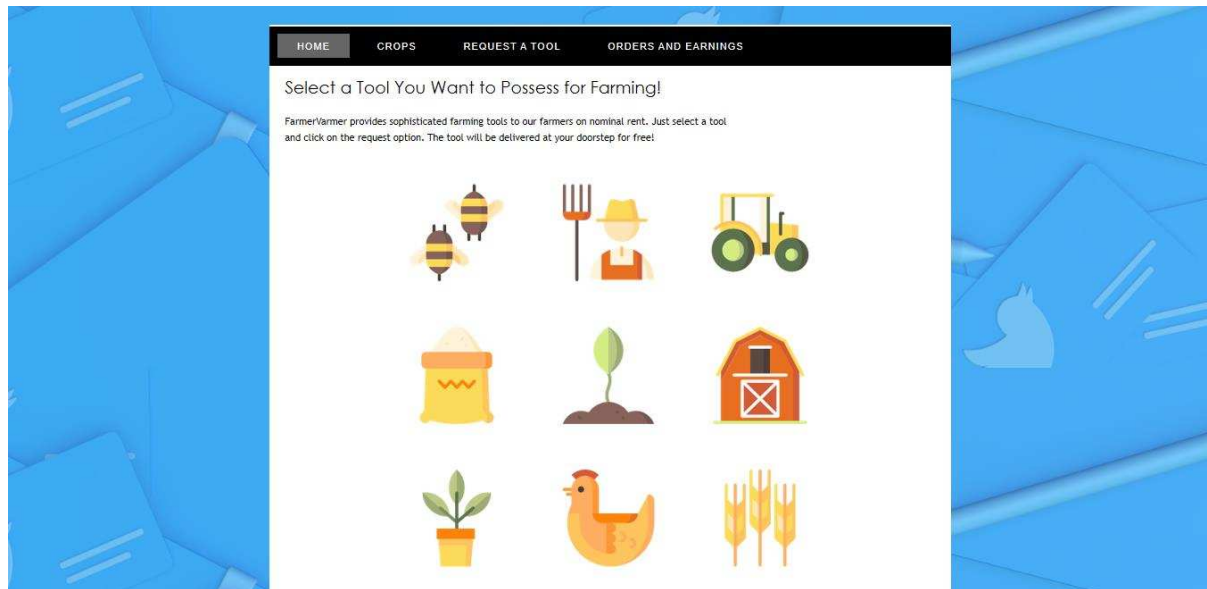## **AfterLogin:** This is the website
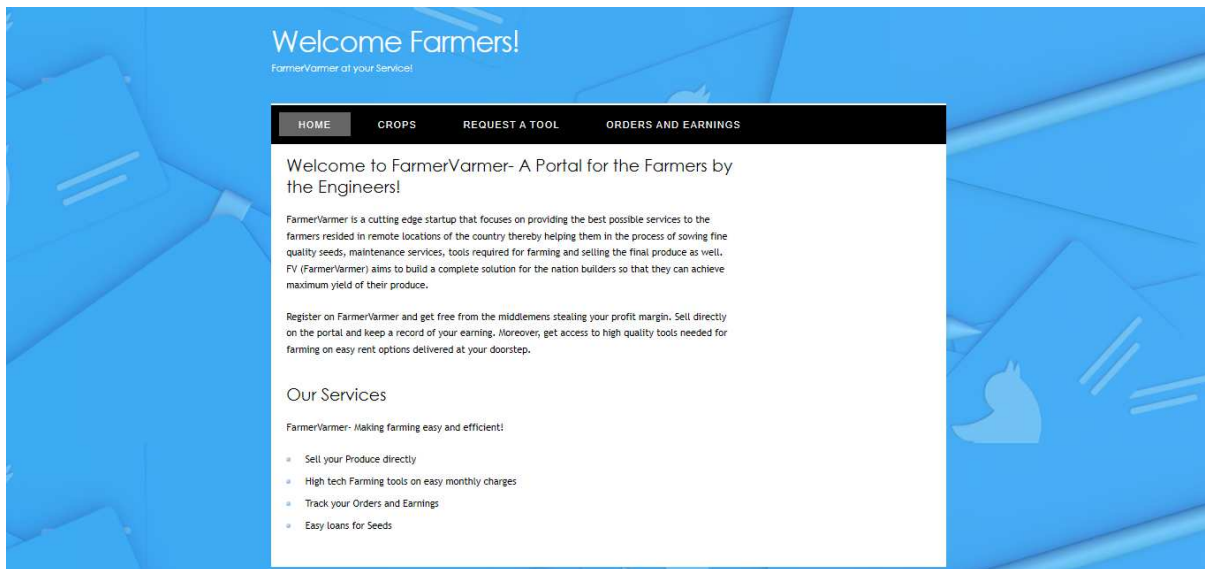
Screenshot 4

Other web pages: Here are some other web pages of website.

Screenshot 5

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Screenshot 6

Order earning

Screenshot 7

Chapter-6

References

- https://www.youtube.com

- https://www.wikipedia.org/

- http://www.w3school.com

- https://stackoverflow.com/

Chapter-7

Appendices

Coding /Code Templates

1. Main page.html

```html
<!DOCTYPE html>
<!--To change this license header, choose License Headers in Project Properties.
To change this template file, choose Tools | Templates
and open the template in the editor.-->
<html>
<head>
<title>Project Farmer</title>
<meta charset="UTF-8">
<meta name="viewport" content="width=device-width, initial-scale=1.0">
<link rel="stylesheet" type="text/css" href="newcss.css">
<style>
div.container {
width: 100%;
border: 1px solid gray;
height: 100%;
}
header, footer {
padding: 1em;
color: white;
background-color: cadetblue;
clear: left;
text-align: center;
}
nav {
float: left;
```

```
max-width: 260px;
margin: 0;
padding: 1em;}
nav ul {
list-style-type: none;
padding: 0;
}
nav ul a {
text-decoration: none;
}
article {
margin-left: 170px;
border-left: 1px solid gray;
padding: 1em;
overflow: hidden;
}
</style>
</head>
<body>
<div class="container">
<header>
<h1>Farmer Varmer</h1>
</header>
<nav>
<ul>
<li><a href="register.html">Register on our Portal</a></li>
<li><a href="login.html">Already registered? Login Here!</a></li>
<li><a href="contact.html">Contact us</a></li>
<li><a href="about.html">About us</a></li>
</ul>
</nav>
```

```html
<article>
<h1>Welcome Visitor!</h1>
<h1>Welcome to FarmerVarmer- A Portal for the Farmers by the Engineers!</h1>
<p>FarmerVarmer is a cutting edge startup that focuses on providing the best
possible services to the farmers resided in remote locations of the country
thereby helping them in the process of sowing fine quality seeds, maintenance
services, tools required for farming and selling the final produce as well.
FV (FarmerVarmer) aims to build a complete solution for the nation builders so that
they can achieve maximum yield of their produce.
</p>
<p>Register on FarmerVarmer and get free from the middlemens stealing your profit
margin. Sell directly on the portal and keep a record of your earning.
Moreover, get access to high quality tools needed for farming on easy rent options
delivered at your doorstep.
</p>
<h2>Our Services</h2>
<p>FarmerVarmer- Making farming easy and efficient!</p>
<ul>
<li>Sell your Produce directly</li>
<li>High tech Farming tools on easy monthly charges</li>
<li>Track your Orders and Earnings</li>
<li>Easy loans for Seeds</li>
</ul>
<marquee>
<h1>
Farmers are Nation Builders!
</h1>
</marquee>
<br><br><br><br>
</article>
</div>
```

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    </body>

    </html>

2. login.html:

```html
<!DOCTYPE html>
<html>
<head>
<meta name="viewport" content="width=device-width, initial-scale=1">
<style>
body {font-family: Arial, Helvetica, sans-serif;
background-image: url("agri.jpg");
}
input[type=text], input[type=password] {
width: 100%;
padding: 12px 20px;
margin: 8px 0;
display: inline-block;
border: 1px solid #ccc;
box-sizing: border-box;
}
button {
background-color: #4CAF50;
color: white;
padding: 14px 20px;
margin: 8px 0;
border: none;
cursor: pointer;
width: 100%;
}
button:hover {
opacity: 0.8;
```

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```css
}
.cancelbtn {
width: auto;
padding: 10px 18px;
background-color: #f44336;
}
.imgcontainer {
text-align: center;
margin: 24px 0 12px 0;
position: relative;
}
img.avatar {
width: 40%;
border-radius: 50%;
}
.container {
padding: 16px;
}
span.psw {
float: right;
padding-top: 16px;
}
.modal {
display: none; /* Hidden by default */
position: fixed; /* Stay in place */
z-index: 1; /* Sit on top */
left: 0;
top: 0;
width: 100%; /* Full width */
height: 100%; /* Full height */
overflow: auto; /* Enable scroll if needed */
```

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```css
background-color: rgb(0,0,0); /* Fallback color */
background-color: rgba(0,0,0,0.4); /* Black w/ opacity */
padding-top: 60px;
}
.modal-content {
background-color: #fefefe;
margin: 5% auto 15% auto; /* 5% from the top, 15% from the bottom and centered */
border: 1px solid #888;
width: 80%; /* Could be more or less, depending on screen size */
}
.close {
position: absolute;
right: 25px;
top: 0;
color: #000;
font-size: 35px;
font-weight: bold;
}
.close:hover,
.close:focus {
color: red;
cursor: pointer;
}
.animate {
-webkit-animation: animatezoom 0.6s;
animation: animatezoom 0.6s
}
@-webkit-keyframes animatezoom {
from {-webkit-transform: scale(0)}
to {-webkit-transform: scale(1)}
}
```

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```
@keyframes animatezoom {
from {transform: scale(0)}
to {transform: scale(1)}
}
@media screen and (max-width: 300px) {
span.psw {
display: block;
float: none;
}
.cancelbtn {
width: 100%;
}
}
</style>
</head>
<body>
<h2>Click Here To Prove You're Not A Robot</h2>
<button onclick="document.getElementById('id01').style.display='block'"
style="width:auto;">Login</button>
<div id="id01" class="modal">
<form class="modal-content animate" action="loginuser.jsp">
<div class="imgcontainer">
<span onclick="document.getElementById('id01').style.display='none'" class="close"
title="Close Modal">&times;</span>
<img src="img_avatar.png" alt="Avatar" class="avatar">
</div>
<div class="container">
<label for="email"><b>Email</b></label>
<input type="text" placeholder="Enter Email" name="email" required>
<label for="psw"><b>Password</b></label>
<input type="password" placeholder="Enter Password" name="psw" required>
```

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```html
<button type="submit">Login</button>
<label>
<input type="checkbox" checked="checked" name="remember"> Remember me
</label>
</div>
<div class="container" style="background-color:#f1f1f1">
<button type="button" onclick="document.getElementById('id01').style.display='none'"
class="cancelbtn">Cancel</button>
<span class="psw">Forgot <a href="#">password?</a></span>
</div>
</form>
</div>
<script>
var modal = document.getElementById('id01');
// When the user clicks anywhere outside of the modal, close it
window.onclick = function(event) {
if (event.target == modal) {
modal.style.display = "none";
}
}
</script>
</body>
</html>
```