

1. Introduction

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Present Scenario:

A Nursery is a place Where plants are propagated and grown to desire age. They include retail nurseries which sell to the general public, wholesale nurseries which sell only to businesses such as other nurseries and to commercial gardens and private nurseries which supply the need of institutes or private estates.

We can generate a barcode for scanning the information of individual tray. In that Stores the information of the product name, variety date, soy date, lot number, quantity of the tray, etc.

This project is mainly developed for the admin which is the owner of a nursery. On the basis of their requirements, we create this module for their smart work. In this module admin gets entered in this system by using logging this account with the help of username and password.

No one can handle this software without admin this makes for the security purpose. At the time of product delivery workers scan the barcode on each tray and then pack it into the motor which is used for transporting this product. By using this module admin can get the information about correctness of the products which are delivered.

This project is mainly used for giving the correct delivery of product to the customer. This application is useful for owner of the firm. And no ambiguity creates between customer and owner.

Need of Work –

- For getting the accuracy of the delivering the plants for nurseries.
- Also checking for how many crops are available in the nursery for the selling.
- Owner of that nursery can add the crops, edit the crops, and view the crops, etc.
- After that owner can add the transport charges in it is beneficial for owner.
- One the module is there that is purchase. In that the how many materials are used for making those plants with their cost is mentioned in this module.
- It is the biggest benefit for owner for checking the profit and loss in this system.
- Mainly this is used for the scanning the barcodes which are stucked on the trays.
- This is the main purpose of our system because at the time of delivery, to check customers have their ordered crops.

Overview -

This project is able to show whether the order of crops are delivered Properly to customer. This is the main goal of our project. Also add, view and edit the database it is useful for owner. When any customer comes to the owner for purchasing any crop/plant at that time is easy to give the information about available plants to the customer.

This system is designed for only the admin who is the Owner of Vasundhara Seedlings.

The owner of the nursery can check the profit or loss monthly in this system also. For this benefit we use a purchase module in that how many materials are used to make the plants is displayed in this module.

Aim-

1. Getting Correct Delivery to the Customer.
2. Checking Profit or Loss.
3. All delivered plants details are stored in database.
4. Gives total bill with adding Transport Charges.

Limitations –

1. Time Consuming.
2. Wrong inputs will affect the project outputs.
3. Internet connection is mandatory.

Background:

Be it a cozy studio apartment, a sprawling mansion, or an office filled with rows of cubicles-plant tend to brighten and liven up any room.

However, while some plants can survive even with minimal care, others demand much more attention.

Whether you are a seasoned plant parents or a beginner tending to your first potted plant, visiting multiple nurseries to find the right plant to suit your needs can get tedious and end up your entire weekend.

Problem Statement:

In previous days, we use manual methods for adding crops, view crops, edit crops, etc. And also mark the many trays are delivered but in manual system some problems are occurred. To overcome this problem we use this system.

Objectives:

1. To develop a system for nursery to save human efforts.
2. Nursery saves the considerable time for the raising of the next crop.
3. Avoid the Ambiguity of the deliverable products from owner to the customer.

2.Literature Review

2. Literature Review:

Sr No.	Year	Paper Title	Author Name	Abstract
1.	2015	Barcode based Student Attendance System	K.Lakshmi Sudha , Shirish Shinde, Titus Thomas, Aris Abdugani	Student attendance play significant role in order to justify academic outcome of a student and college as overall. Unfortunately, there is no automated attendance record keeping application available in colleges. There is a need for a tool to systematically keep the students attendance record due to increasing number of college students
2.	2017	Design and Application Data-Based Employee Eat Barcode Scanner	Ninik Sri Lestari ¹ , Sukirno , Hetty Fadriani ¹ , Ahmad Sujana , Yudi Herdiana and Rahmad Hidayat	The process of managing data and eating employees is underway now in the process of counting the number of employees who take servings still use conventional methods.

3.	2019	Reading Analysis for Barcode Scanner with Interference from LED-Based Lighting	Jean-Paul M. G. Linnartz, Xi Long, Guofu Zho	This paper addresses reading failure of a barcode scanner interferred by light emitting diode lamps. It quantifies the reading performance in terms of timing signal-to-interference ratio.
4.	2013	Automated Laboratory Item-Inventory System with Barcode	Winston Rey S. Aguirre , Jayson P. Bartolome , John Erik T. De Torres , Mark Joseph P. Fajilan , Erwin Z. Mendoza , Jake M. Laguador	This design project aimed to develop a laboratory – inventory system for the College of Engineering. This study is a software development project wherein the proponents developed an automated laboratory item inventory with Barcode reader. Results showed that this inventory system is efficient and user friendly to lessen the process in laboratory usage. procedure ensuring each of the steps is successfully done..

3.Requirement Analysis

1. Requirement Analysis:

Database Requirements

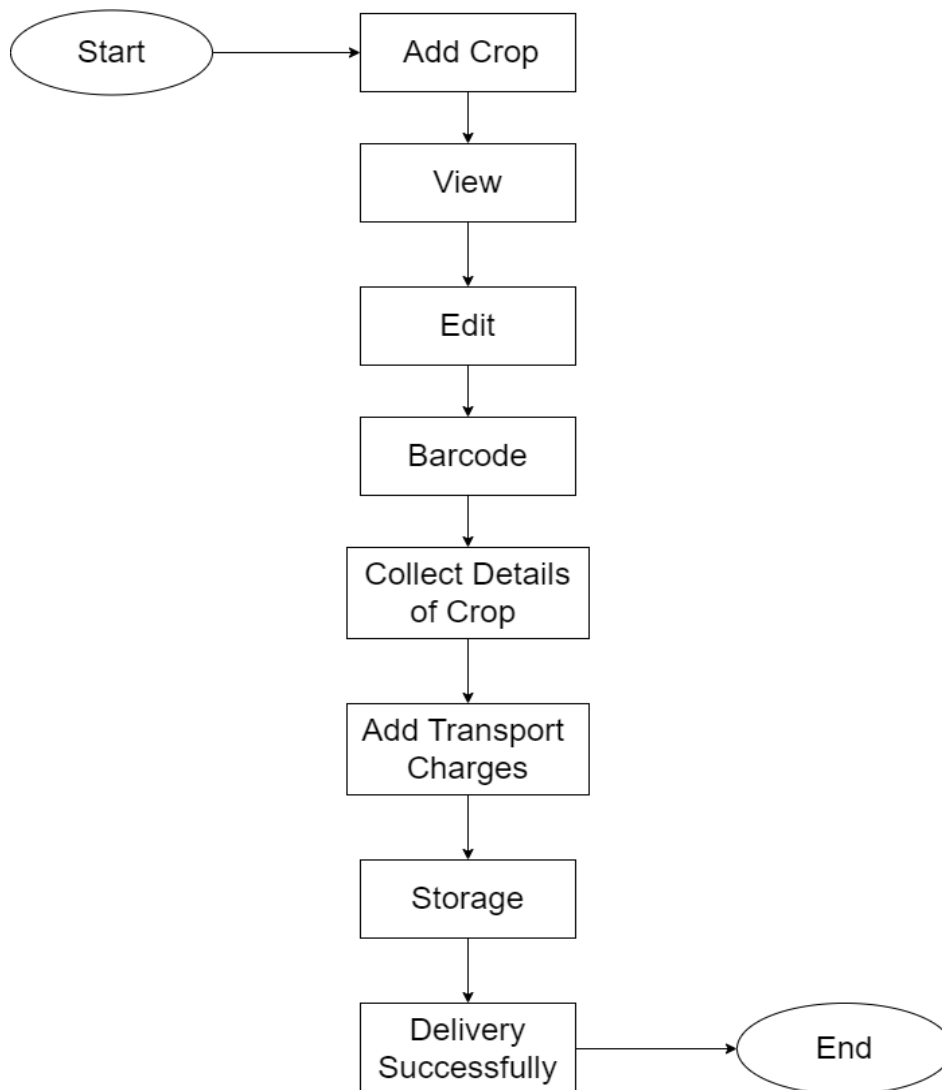
The database must be designed in such a way that it facilitates efficient storage, retrieval and manipulation of the data associated. All the data related to the specific category user must be uniform for all the users. The database must be secure and the data stored must be confidential and must be accessible to authorized and relevant entities only. Database must be configured in such a way that it provides timely and accurate responses when requested by the user.

MySQL supports deployment in virtualized environments, subject to Oracle VM. Microsoft Windows 10, X86 X64

4. Basic System Architecture

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Proposed System Architecture Diagram:



Components of the System:

Add Crop:

Owner of the nursery is adding the crops which are available in the nursery

View crop:

Owner can view's the stock in the database. In this module they can't add any plant.

Edit crop:

Owner views the stock and if he wants then edit the database for some crops are destroyed because of natural disaster then owner can delete those plants name from the database.

Barcode Scan:

When plants are sold by the owner at that time every tray which are given to the customer they are first scanned and then that information like crop details, soy date, etc. is saved in database.

Collect Details of crop:

Check the Scanned details of the crops are properly Saved in the Database.

Add transport charges:

After that in text box they add the transport charges and total bill is displayed on their screen.

Storage:

All the data is Safely saved in the database.

Delivery Successfully:

After that delivery Successful and for confirmation call from Customer.

5.Development

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5.1 Methodology



5.2 Software Development Life Cycle:

The sequential phases in Waterfall model are –

- **Requirement Gathering and analysis** – All possible requirements of the system to be developed are captured in this phase and documented in a requirement specification document.
- **System Design** – The requirement specifications from first phase are studied in this phase and the system design is prepared. This system design helps in specifying hardware and system requirements and helps in defining the overall system architecture.
- **Implementation** – With inputs from the system design, the system is first developed in small programs called units, which are integrated in the next phase. Each unit is developed and tested for its functionality, which is referred to as Unit Testing.
- **Integration and Testing** – All the units developed in the implementation phase are integrated into a system after testing of each unit. Post integration the entire system is tested for any faults and failures.
- **Deployment of system** – Once the functional and non-functional testing is done; the product is deployed in the customer environment or released into the market.
- **Maintenance** – There are some issues which come up in the client environment. To fix those issues, patches are released. To enhance the product some better versions are released. Maintenance is done to deliver these changes in the customer environment.

5.3 Requirement Details

Software Requirement Details

Front-End Language's:

- HTML
- Java script

Back end:

- MySQL's
- PHP

Hardware Requirement Details

Minimum Hardware Requirement's:

- Processor is: 1.60 GHz
- RAM: 512MB
- Hard Disk: 40GB
- Memory (RAM): 512 MB
- Barcode scanner: CCD

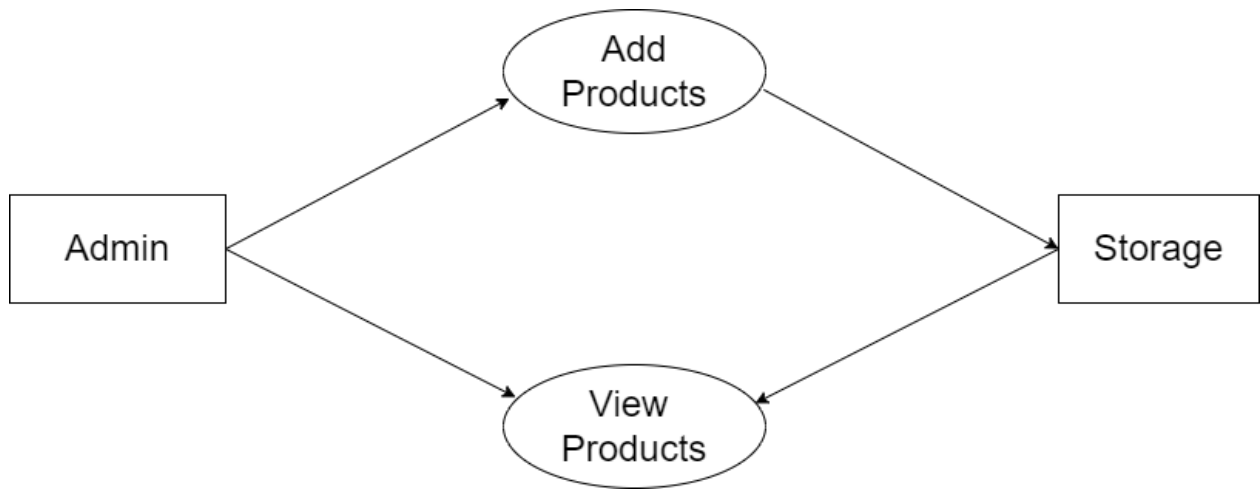
5.4 Data Flow Diagrams

A data flow diagram is a graphical representation of the “flow” of data through an information system, modelling its process aspects.

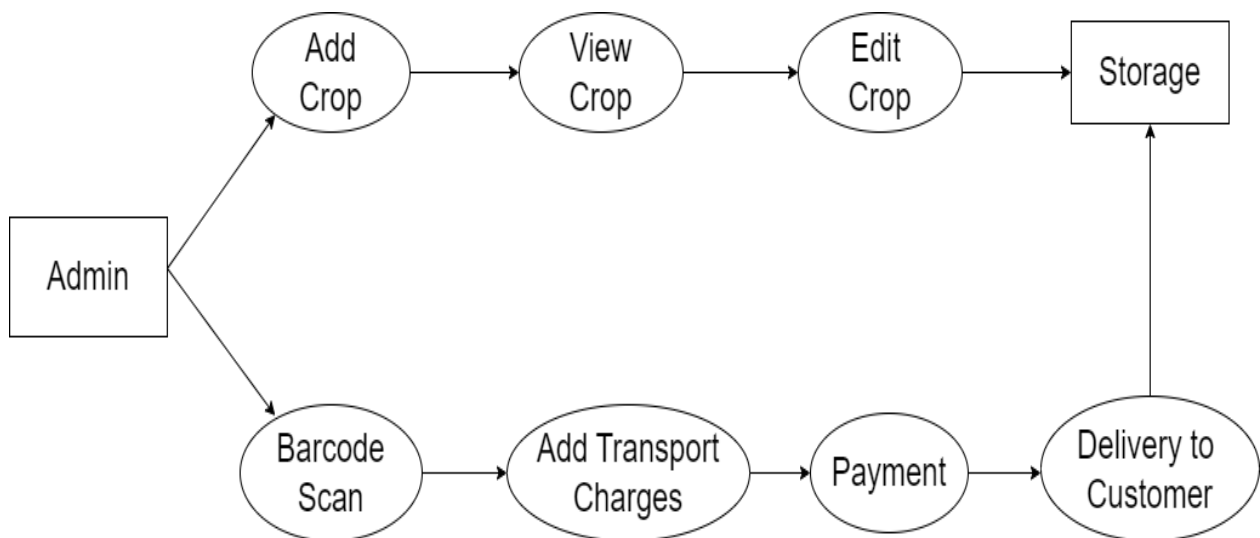
1.DFD level 0 -



2.DFD level 1-

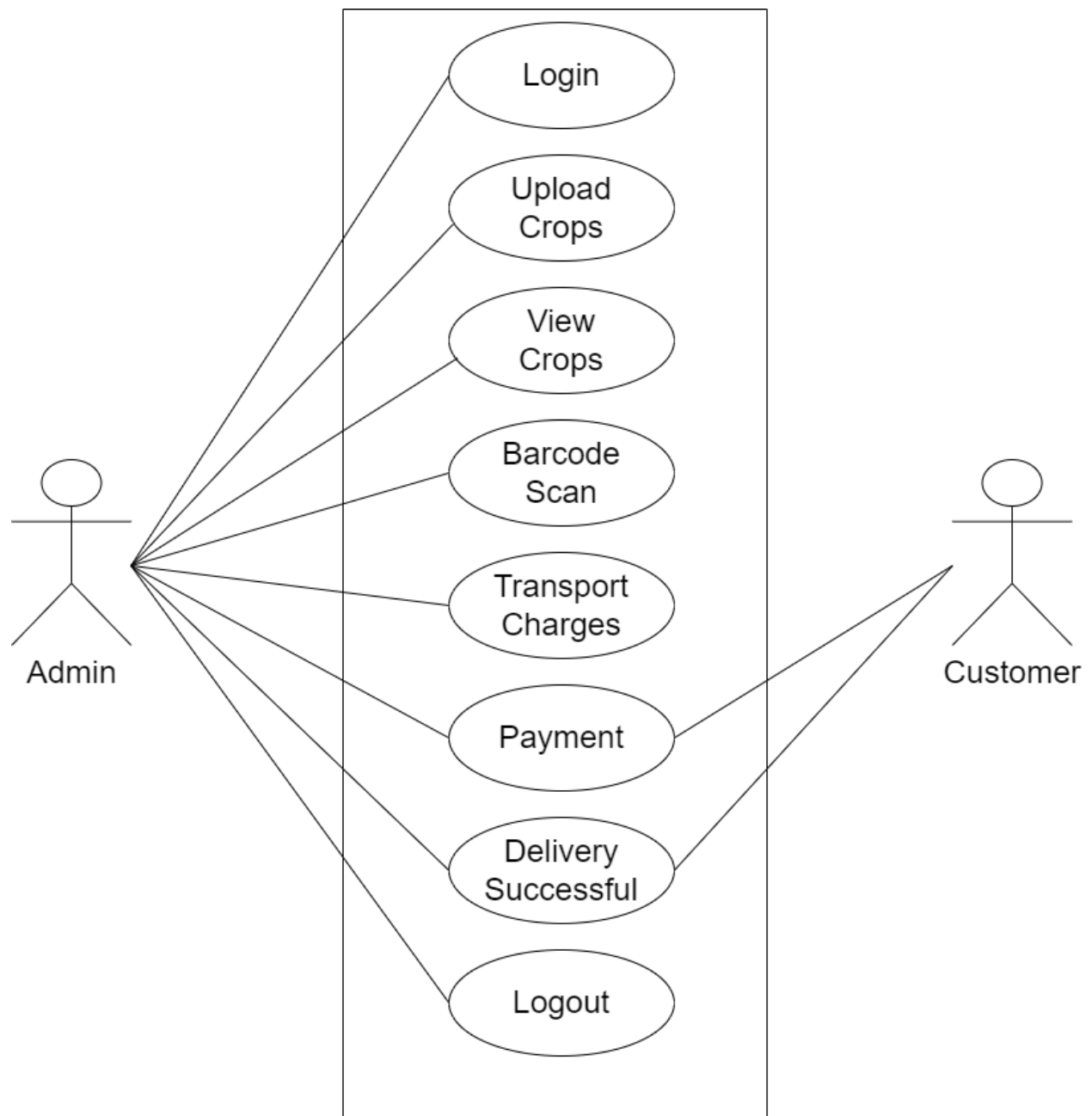


3.DFD level 2 –



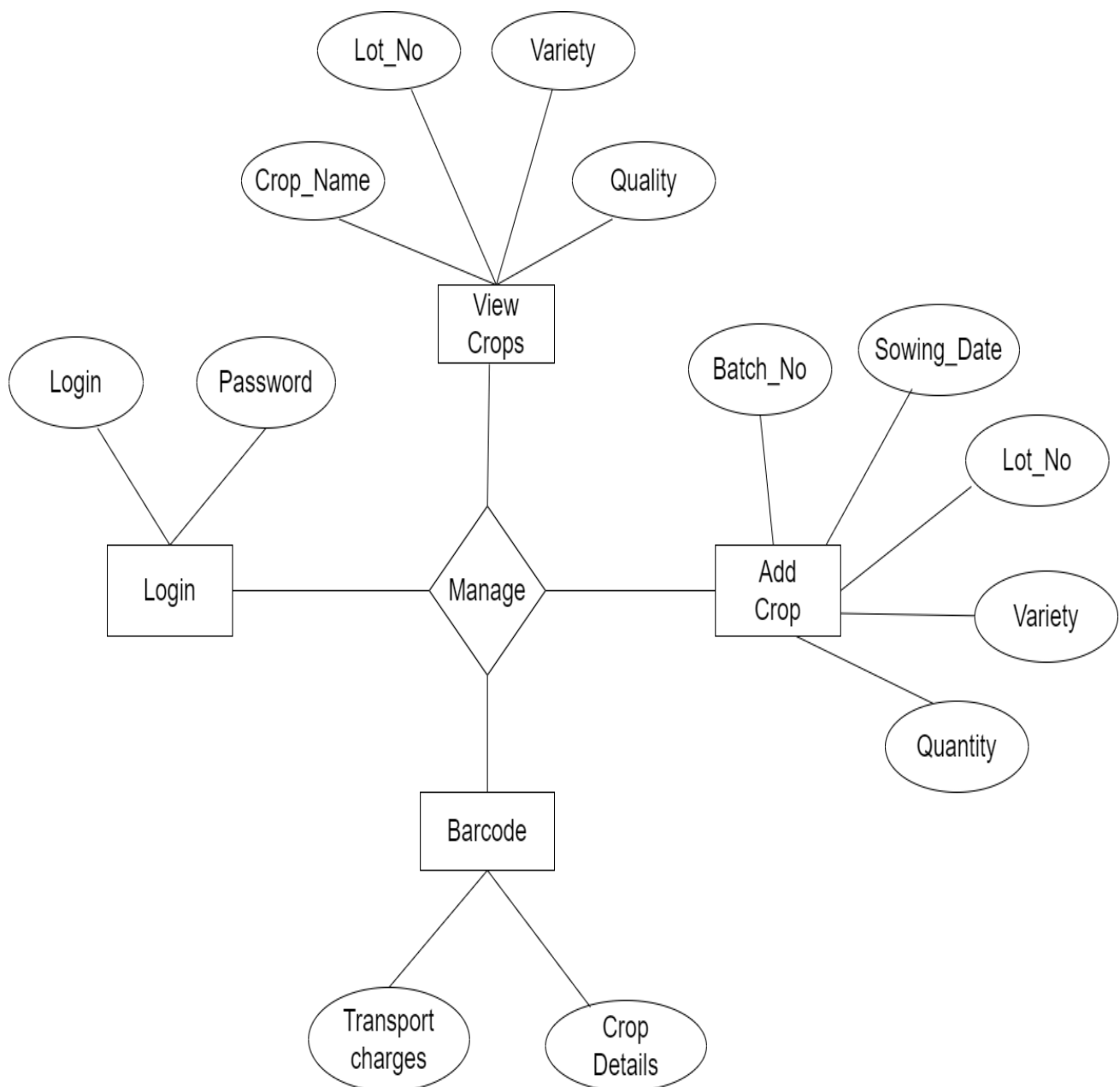
5.5. Use Case Diagram

A use case diagram at its simplest is a representation of a user's interaction with the system depicting the specifications of a use case.



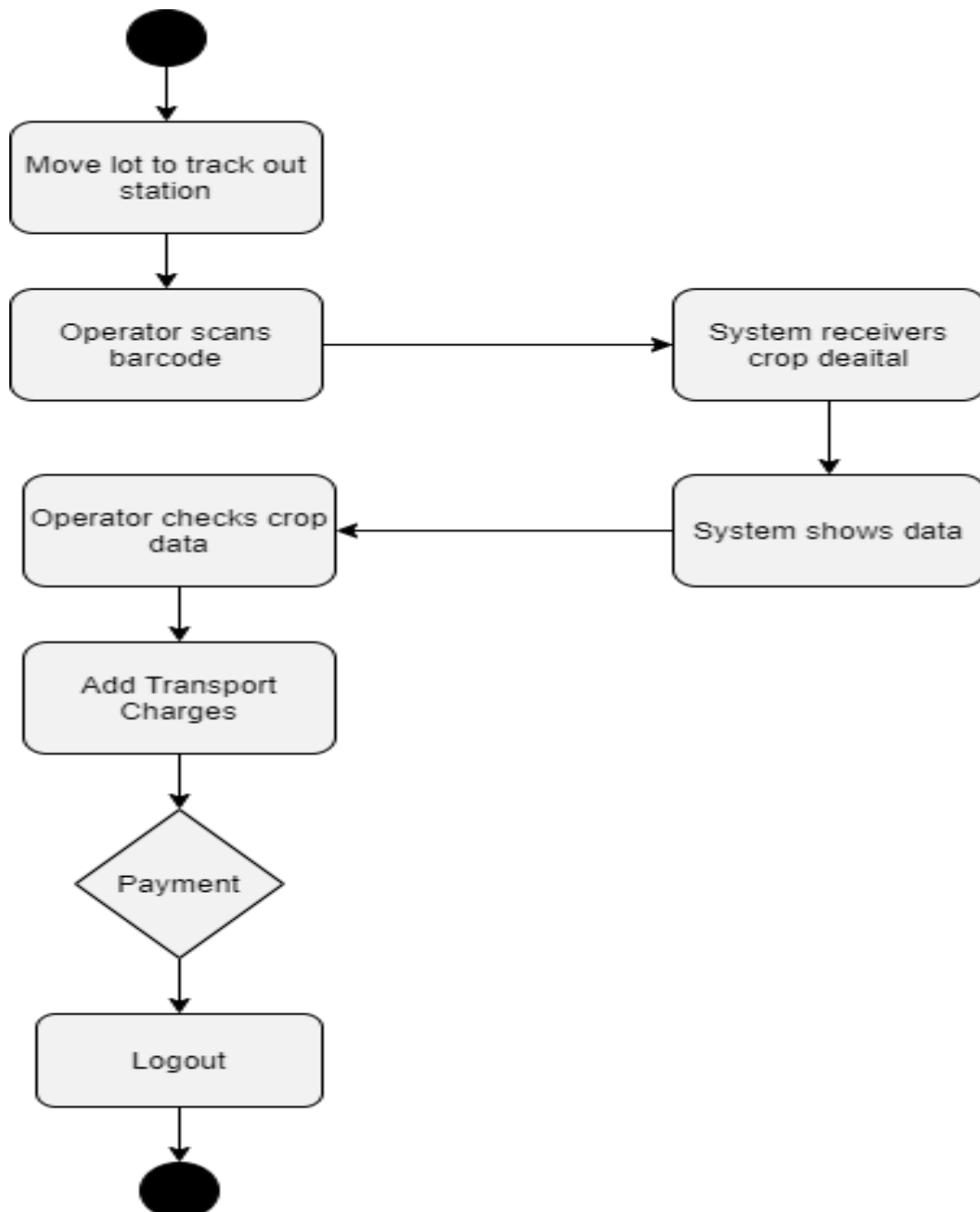
5.6 ER- Diagram

ER Diagrams are most often used to design or debug relational databases in the fields of software engineering, business information systems, education and research.



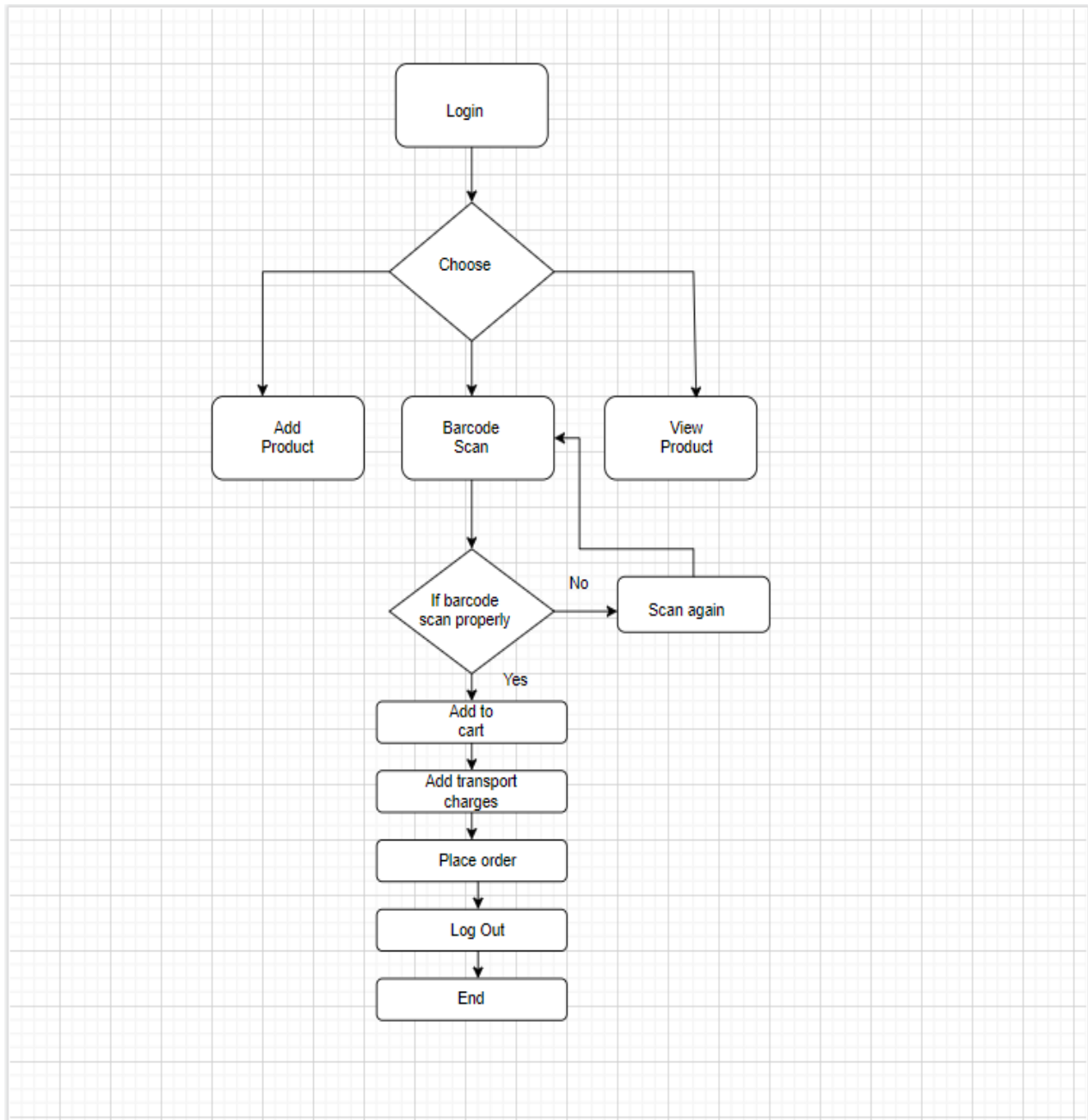
5.7 Activity Diagram

An activity diagram is mainly used to show the flow from activity to activity within a system

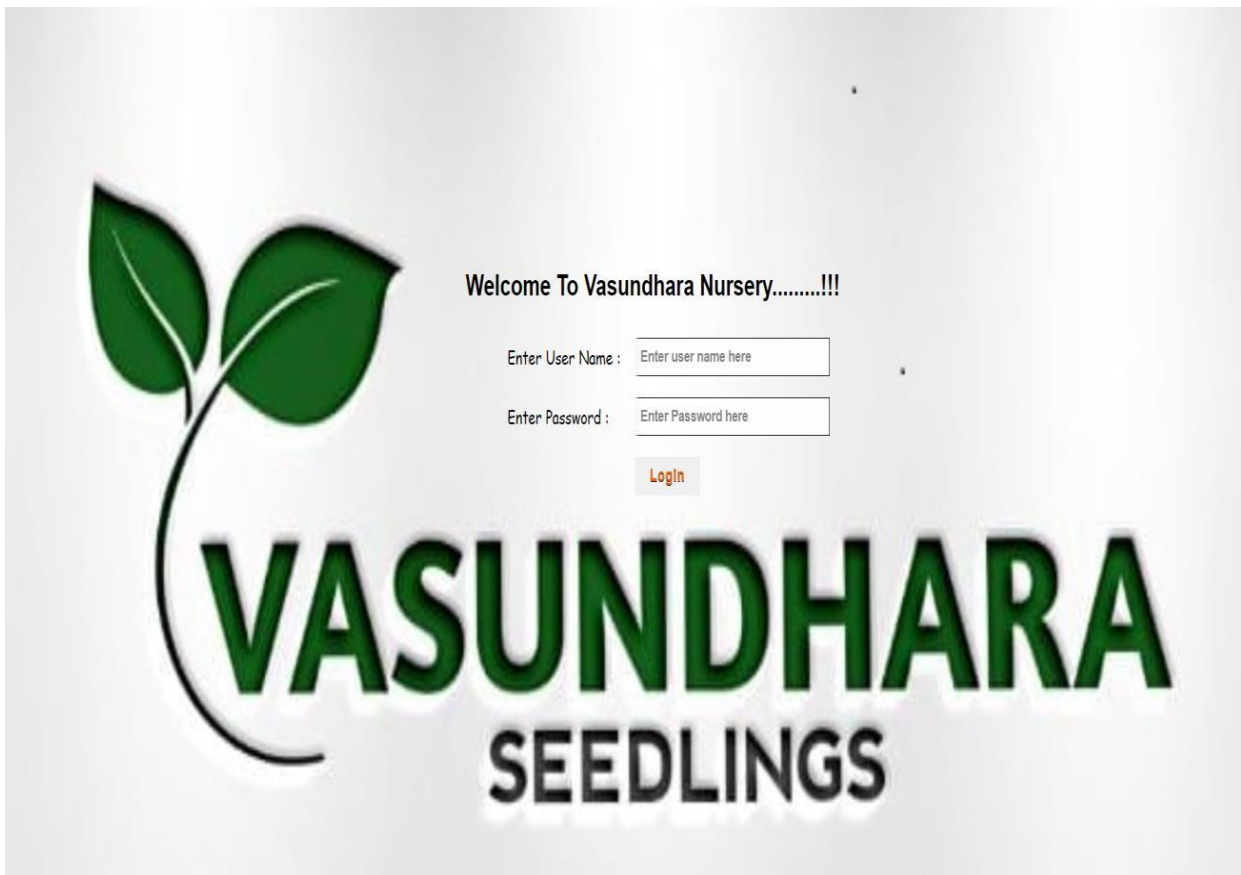


5.8 Project Flow Diagram

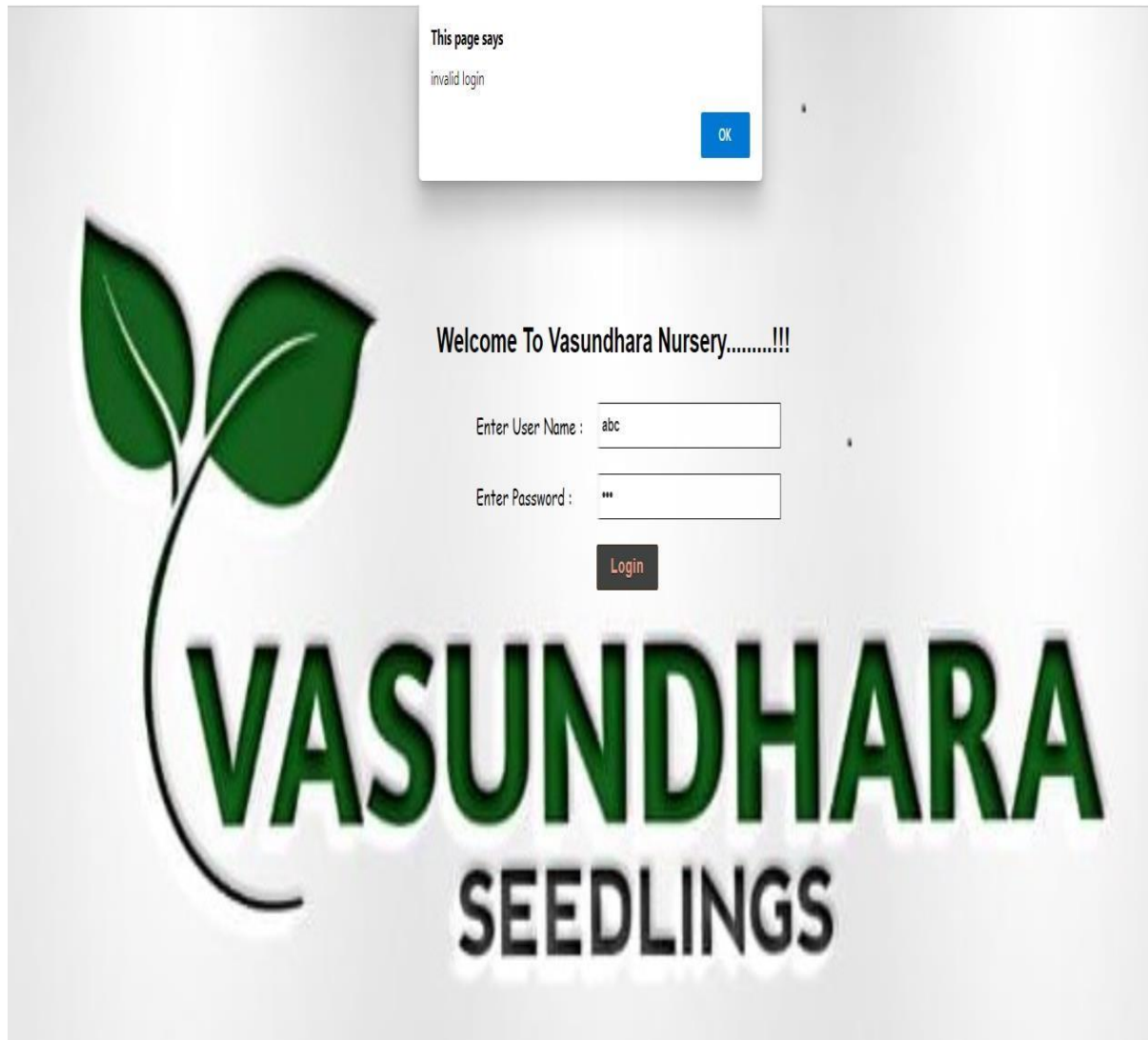
A flowchart is a picture of the separate steps of a process in sequential order. It is a generic tool that can be adapted for a wide variety of purposes, and can be used to describe various processes, such as a manufacturing process, an administrative or service process, or a project plan.



Snapshots:



Dashboard:



The image shows a login page for 'Vasundhara Seedlings'. On the left is a logo featuring a green plant with two leaves and a curved stem. The text 'VASUNDHARA SEEDLINGS' is displayed in large, bold, green capital letters. Above the logo, a white error message box is visible, stating 'This page says invalid login' with an 'OK' button. Below the logo, the text 'Welcome To Vasundhara Nursery.....!!!' is centered. Underneath this, there are two input fields: 'Enter User Name : abc' and 'Enter Password : ***'. A 'Login' button is positioned below the password field.

This page says
invalid login

OK

Welcome To Vasundhara Nursery.....!!!

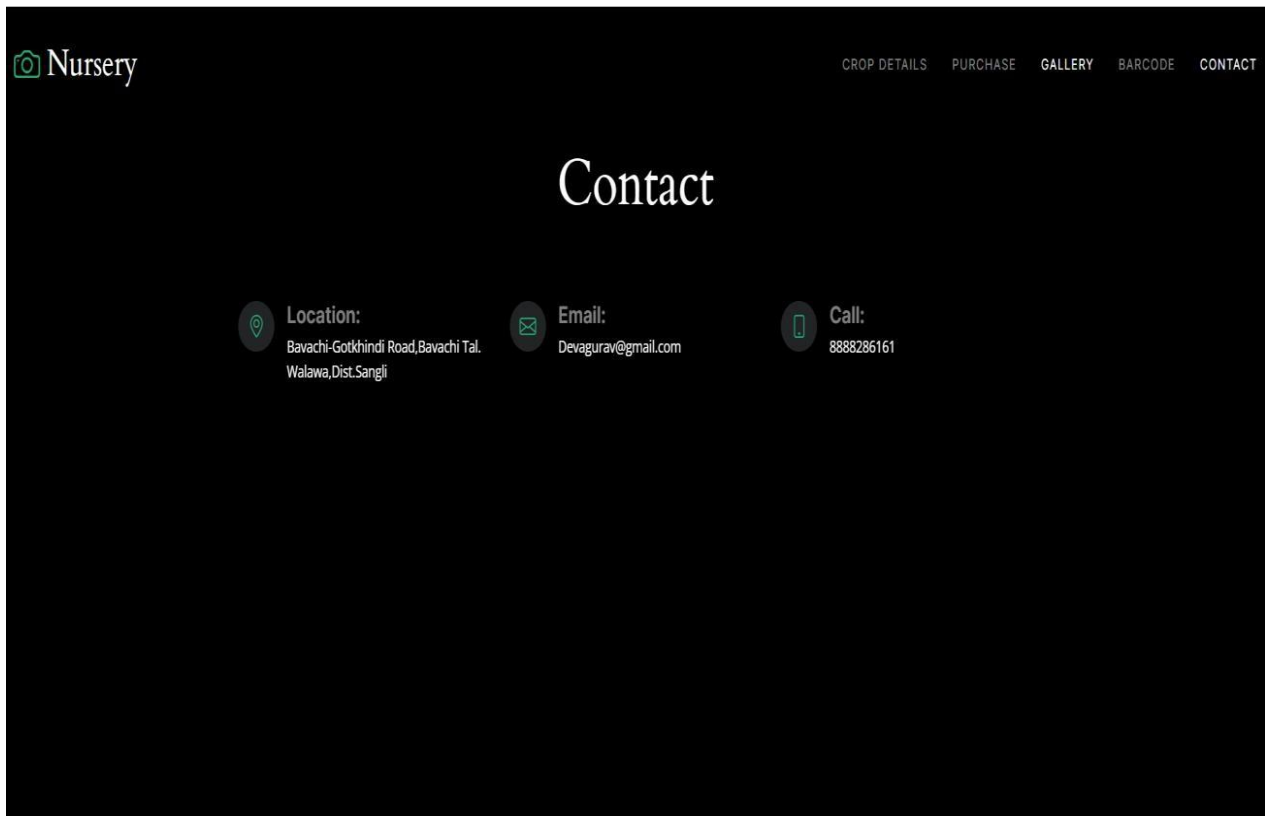
Enter User Name : abc

Enter Password : ***

Login

VASUNDHARA
SEEDLINGS

Linking Page



Page: Linking



6. Testing and Results

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Test Case 1:

Name: Login

Objective: Test case passed.

Input: Login the page with valid username & Password

Output: Login Successfully

Snap:



Test Case 2:

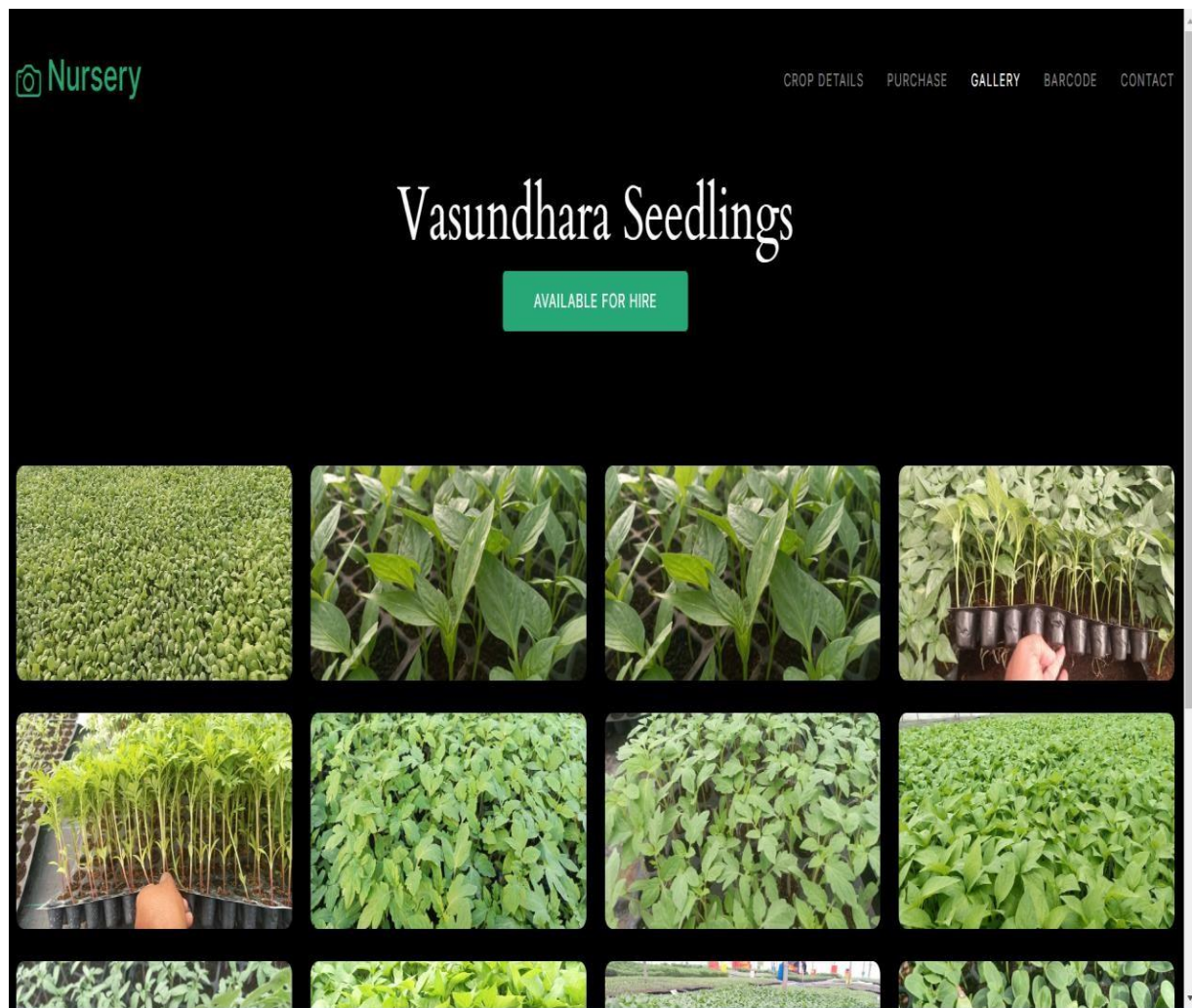
Name: Linking Page

Objective: Test case Passed.

Input: Page logged Successfully go to next page.

Output: Another page Opened Successfully.

Snapshot:



Test Case Summary:

Sr. No.	Test Case	Objective	Result
1.	Login Page	Test case passed	Logged in Successfully
2.	Validation For Login Page	Test case Passed	Validation Successfully
3.	Page linking after login	Test case Passed	Page linking Successful
4.	Another Page Linking	Test case Passed	Page linking Successful

7. Conclusion and Future Works

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7.1 Conclusion:

From this project we can Scans the Barcodes on the trays and can mark their details automatically in real time background without human intervention. This is secure enough, reliable and available for use.

7.2 Future Works

- Add GPS location to that motor which is delivering the crops.
- By using this owner can get the information about how much time requires to delivering the products.

8. Bibliography

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Reference's:

❖ Papers :

Title of Paper: Bar code tracking system

Authors: Jasen Neese

Journal/Conference Details: 2002

❖ WEBSITES :

1. <https://www.w3schools.com/MySQL/default.asp>
2. <https://www.javatpoint.com/mysql-tutorial>
3. <https://www.nurserymanagement.com.au/barcoding/>
4. <https://blog.barcodefactory.com/blog/nursery-plant-tag-systems>

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