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CHRIST
(DEEMED TO BE UNIVERSITY)
BANGALORE · INDIA

MCA381
3rd Trimester Project

FARMGUIDE

Project Lab record submitted in partial fulfilment of the requirements of III semester MCA,
CHRIST (Deemed to be University)
May-2022

Under the Guidance of

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Faculty|Central Campus

COMPUTER SCIENCE

Christ University

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Vignesh Saminathan :2147235

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CERTIFICATE

*This is to certify that the report titled **FarmGUide** is a bona fide record of work done by **Rakesh,Sanchit and Vignesh** of CHRIST (Deemed to be University), Bangalore, in partial fulfilment of the requirements of III semester MCA during the year 2022.*

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Date :

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1. INTRODUCTION

1.1 OVERVIEW

The "FarmGuide" web application system has been developed to override the problems prevailing In practising manual systems. This application is supposed to eliminate the hardships faced by farmers or any other common man who wishes to start farming.

This application assists the user to know what type of farming he/she can practice based on data he provides (type of farming, geographical condition, water availability, etc.) to the application. The application will generate a list of all possible suggestions based on user inputs.

The application is reduced as much as possible to avoid errors while entering the data. It also prompts relevant messages on invalid data/input (if entered by the user) or if no suggestions are found.

No formal knowledge is needed for the use of this system. Thus all it provides is a user friendly application.

Every farm has different needs. Therefore we design exclusive equipment selling systems that are specifically needed for farming. We also have an e-commerce platform where we sell essential farming products/equipment like pesticides, fertilizers, seeds, and other valuable items required for farming.

The project is built at the administrative end, and thus only the administrative company/organization is guaranteed access. The project aims to build an application program to help people know what type of farming he/she can start and provides all materials required to start farming, be it in rural or urban places.

1.2 EXISTING SYSTEM :

All farm management systems mainly focus on managing the workforce and keeping track of stocks [inventory management], suppliers, and buyers of farm goods [e-commerce platform for agriculture produce], crop management.

Disadvantages:
Many farmers opt for a specific crop without realizing whether the climatic conditions at that time will suit the crop or not. Sometimes, the farmers cannot determine the soil conditions in advance whether the crop will thrive or not. For this reason, farmers sometimes have to bear losses in their farming, which dramatically affects our society. Most farm management systems lack this module.

1.3 PROPOSED SYSTEM :

The main objective is to provide an exclusive platform only for selling all types of requirements and manual equipment required for agriculture and farming.
We also provide a **FARM SUGGESTION** module where anyone can know how / what type of farming he/she can start as suggested by the application based on user input data.

1.4 FUNCTIONALITIES

Provides searching facilities based on equipment, insecticides, pesticides, and fertilizers based on various factors.
Provides suggestions for crops.
Shows the information of funds available, funds collected and funds used
adding and updating blogs.
Manages information of stocks, funds, blogs.

1.5 OBJECTIVES OF THE PROJECT

The specific objectives of the project include:
To provide qualitative seeds , fetilizers , farming equipments to the buyers.
Implementing an exclusive Ecommerce
To provide an automated suggestion platform related to plantation and seeds

1.6 SCOPE OF THE PROJECT

It is focused on studying the existing system of E-commerce and to make sure that the peoples are getting quality goods.
This is also will produce:
Less effort in knowing how a common people can start farming [small-scale / large-scale]without prior knowledge of farming
.Increasing number of buyers as individuals will find it easier and more convenient to buy goods.
Easy management.

1.7 METHODOLOGY/PROCEDURE

Crop Suggestion :
For the development of project the designing of database was done on PHPMYADMIN, back end was coded in basic PHP and for front-end we used the same basic PHP codes , bootstrapping , html5 .

Blogging System :
For the front-end :Html5 , bootstrap
For the backed : Python Django Framework

E-commerce System :
For the front-end :Html5 , bootstrap , REACT Framework [JAM STACK]
For the Back-end : Apollo GraphQl , STRAPI CMS
For the Payment : Paypal Sandbox , STRIPE JS

Software methodologies are concerned with the process of creating software – not so much the technical side but the organizational aspects. Several software development approaches have been used since the origin of information technology.

1.8 PROJECT FRAMEWORK

A framework is a standardized set of concepts, practices, and criteria for dealing with a common type of problem, which can be used as a reference to help us approach and resolve new problems of a similar nature. The aim of framework is to provide a common structure so that developers don't have to redo it from scratch and can reuse the code provided. In this way, frameworks allows us to cut out much of the work and save a lot of time

Iterative Model Model Project Methodology :

In this Model, you can start with some of the software specifications and develop the first version of the software. After the first version if there is a need to change the software, then a new version of the software is created with a new iteration. Every release of the Iterative Model finishes in an exact and fixed period that is called iteration.The Iterative Model allows the accessing earlier phases, in which the variations made respectively. The final output of the project renewed at the end of the Software Development Life Cycle (SDLC) process.s

The various phases of Iterative model are as follows:

1. Requirement gathering & analysis:
In this phase, requirements are gathered from customers and check by an analyst whether requirements will fulfil or not. Analyst checks that need will achieve within budget or not. After all of this, the software team skips to the next phase.

2. Design:
In the design phase, team design the software by the different diagrams like Data Flow diagram, activity diagram, class diagram, state transition diagram, etc.

3 .Implementation:
In the implementation, requirements are written in the coding language and transformed into computer programmes which are called Software.

4. Testing:
After completing the coding phase, software testing starts using different test methods. There are many test methods, but the most common are white box, black box, and grey box test methods.

5. Deployment:
After completing all the phases, software is deployed to its work environment.

6. **Review**:
In this phase, after the product deployment, review phase is performed to check the behaviour and validity of the developed product. And if there are any error found then the process starts again from the requirement gathering.

7. **Maintenance**:
In the maintenance phase, after deployment of the software in the working environment there may be some bugs, some errors or new updates are required. Maintenance involves debugging and new addition options

When to use the Iterative Model?
When requirements are defined clearly and easy to understand.
When the software application is large.
When there is a requirement of changes in future.

Advantage(Pros) of Iterative Model:
Testing and debugging during smaller iteration is easy.
A Parallel development can plan.
It is easily acceptable to ever-changing needs of the project.
Risks are identified and resolved during iteration.
Limited time spent on documentation and extra time on designing.

Disadvantage(Cons) of Iterative Model:
It is not suitable for smaller projects.
More Resources may be required.
Design can be changed again and again because of imperfect requirements.
Requirement changes can cause over budget.
Project completion date not confirmed because of changing requirements.

1.8 Data and Information
Data collection plays an important role in a projects succession and also it plays an inevitable role in the timely completion of the project. The data in the project includes contact information of the clients and their respective feedbacks/complaints which is stored in a database. To assure safety, only the admin has proper access to the information provided by the clients.

1.9 TOOLS USED

Xampp:
Apache:
(Application Server) Apache , often referred to as Server, is an open-source Java Servlet Container developed by the Apache Software Foundation.

MySqlServer:
It handles larege databases much faster than existing solutions.
It consists of multi-threaded SQL server that supports different back ends, several different client programs and libraries, administrative tools, and application programming interfaces (APIs)
Its connectivity, speed, and security make MySQL Server highly suited for accessing databases on the Internet.

Sublime Text 3.1.1- Sublime Text is a sophisticated text editor for code, markup and prose. You'll love the slick user interface, extraordinary features and amazing performance.

Web browsers: Google Chrome,Mozilla Firefox, Opera and Internet Explorer.

Git Hub: GitHub Inc. is a web-based hosting service for version control using Git. It is mostly used for computer code. It offers all of the distributed version control and source code management functionality of Git as well as adding its own features.

REACT JS : React.js is an open-source JavaScript library that is used for building user interfaces specifically for single-page applications. It's used for handling the view layer for web and mobile apps. React also allows us to create reusable UI components.

Apollo Client :It is a comprehensive state management library for JavaScript that enables you to manage both local and remote data with GraphQL. Use it to fetch, cache, and modify application data, all while automatically updating your UI.Apollo Client helps you structure code in an economical, predictable, and declarative way that's consistent with modern development practices.

GraphQL: GraphQL is a query language for APIs and a runtime for fulfilling those queries with your existing data. GraphQL provides a complete and understandable description of the data in your API, gives clients the power to ask for exactly what they need and nothing more, makes it easier to evolve APIs over time, and enables powerful developer tools.

2. REQUIREMENT SPECIFICATION

2.1 REQUIREMENT DESCRIPTION

FARMING SUGGESTION:
The system should accept input from the users(farmers). The inputs can be geographical location, availability of water, type of farming, etc. Based on these inputs, the system should be able to suggest to the user what type of crops he should produce.
If there are no suggestions from the system, then the system should be able to show the appropriate error message.

FUND RAISING:

The system should keep track of the funds collected. The system should be able to collect payments from the users/viewers/readers. All transactions should be able to be managed by the system (from where the funds are collected to where they are spent).

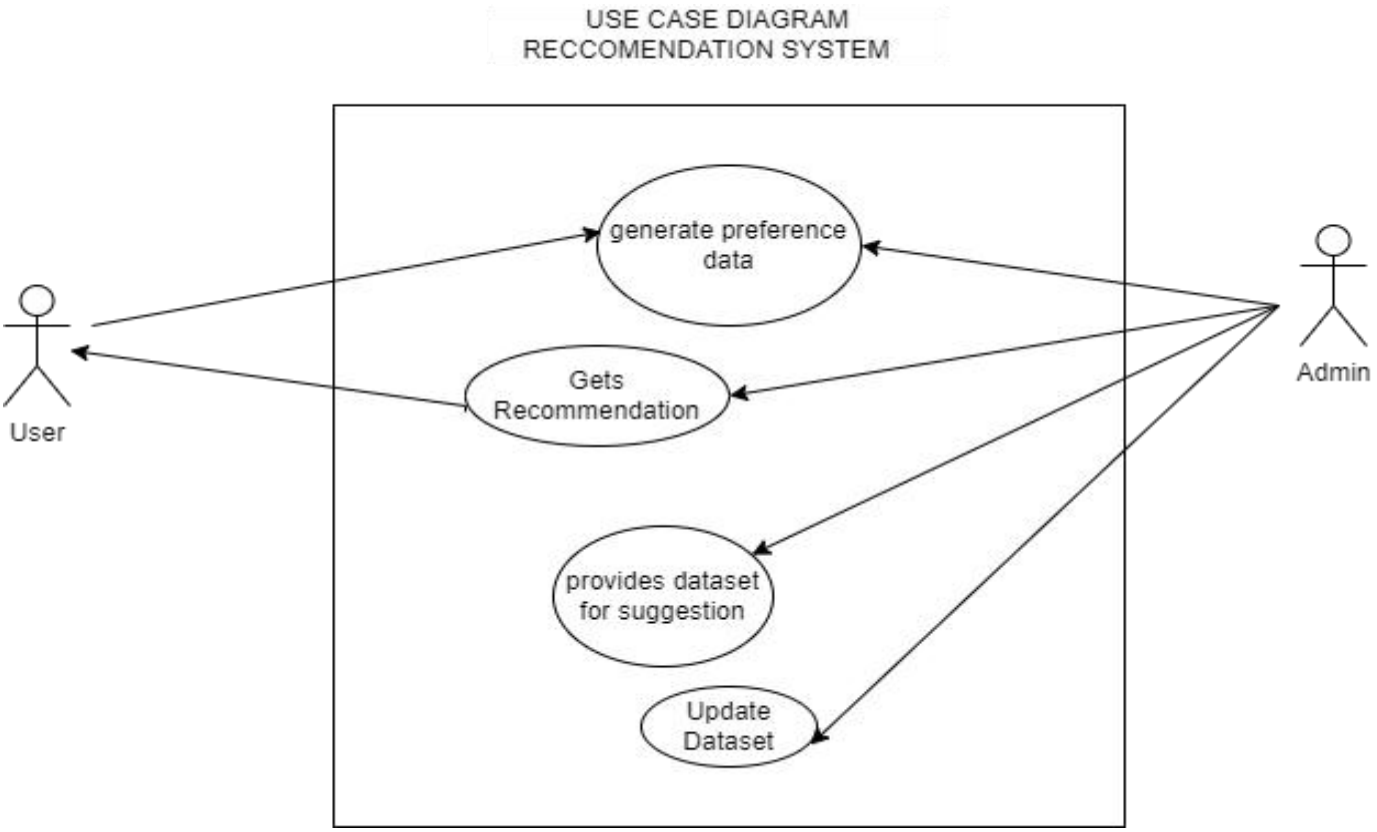
INNOVATION BLOG:
The system should allow the author to add/delete/modify a post. The author can reply to questions or comments posted by any user.
The system should be able to present the blogs to the readers and should not allow readers to make modifications in the post. The system should allow readers to share the content to different social media platforms.

E-COMMERCE:
The System should allow the owner to add/delete/modify the stocks.
The system should be able to display the items categorized as:
Seeds , fertilizers , pesticides ,plantations ,Hardware tools for farming
The system should be able to maintain the items in the cart for each user and should be able to calculate the total amount to be paid during checkout.
The user will be able to make payment online; else, COD will also be available.
The system should be able to display appropriate error messages if it occurs during payment.

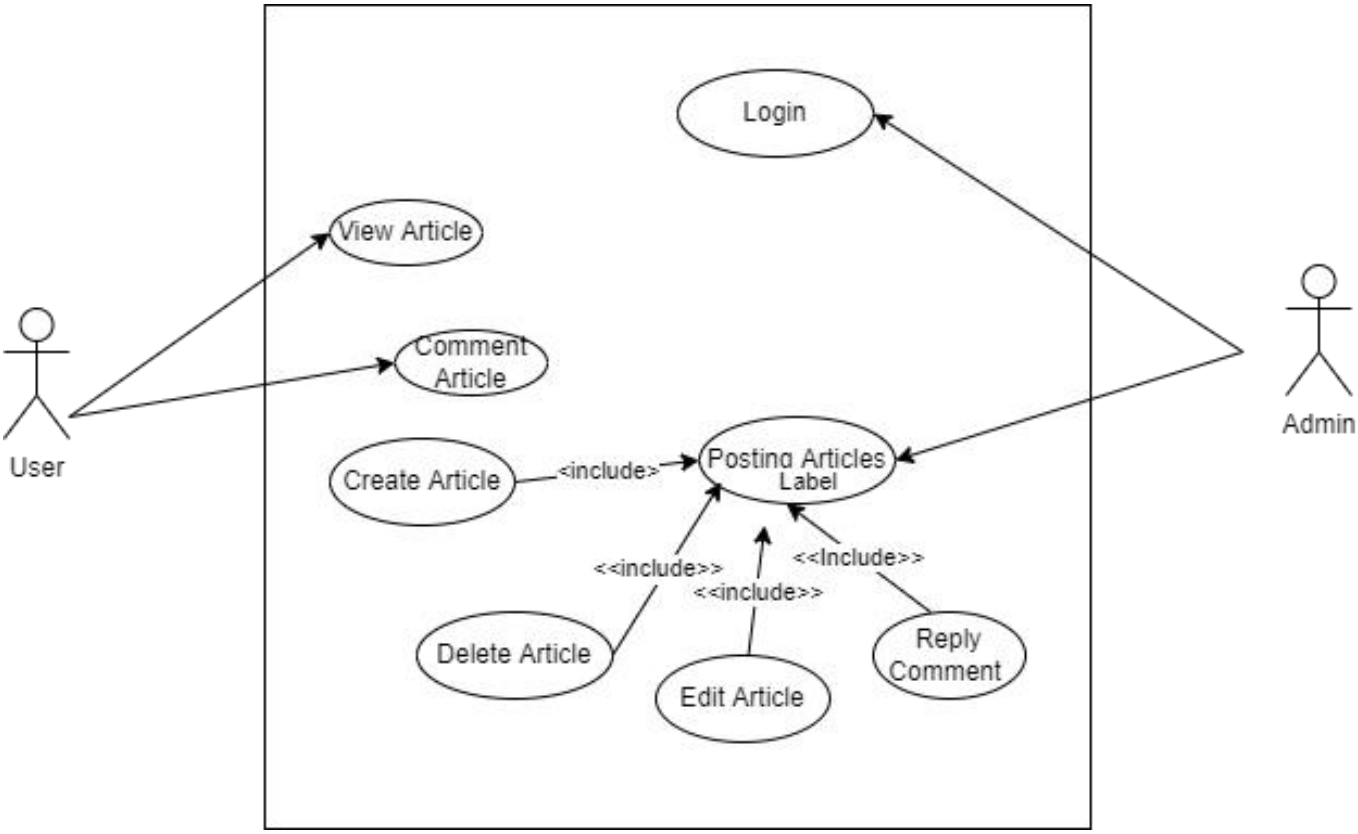
2.2 ANALYSIS MODELLING

Use Case:
A **UML** use case diagram is the primary form of system/software requirements for a new software program underdeveloped. Use cases specify the expected behavior (what), and not the exact method of making it happen (how). Use cases once specified can be denoted both textual and visual representation (i.e. use case diagram). A key concept of use case modeling is that it helps us design a system from the end user's perspective. It is an effective technique for communicating system behavior in the user's terms by specifying all externally visible system behavior

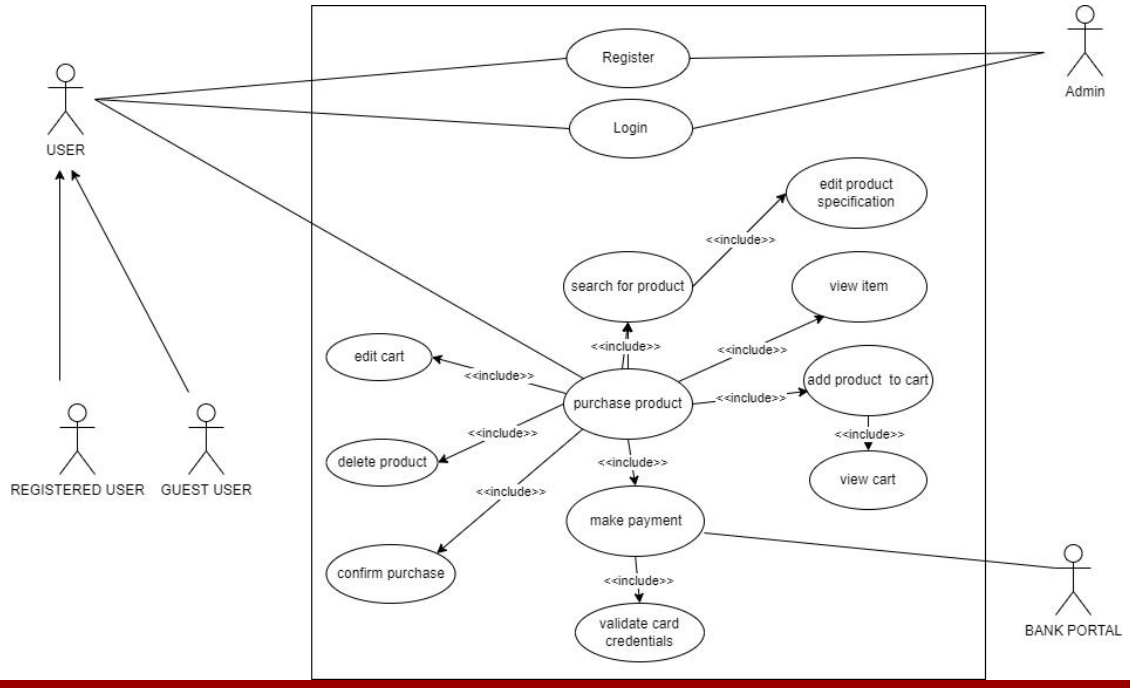
Use case for Crop Suggestion Module



Use Case for Blogging Module



Use Case for E-commerce Module

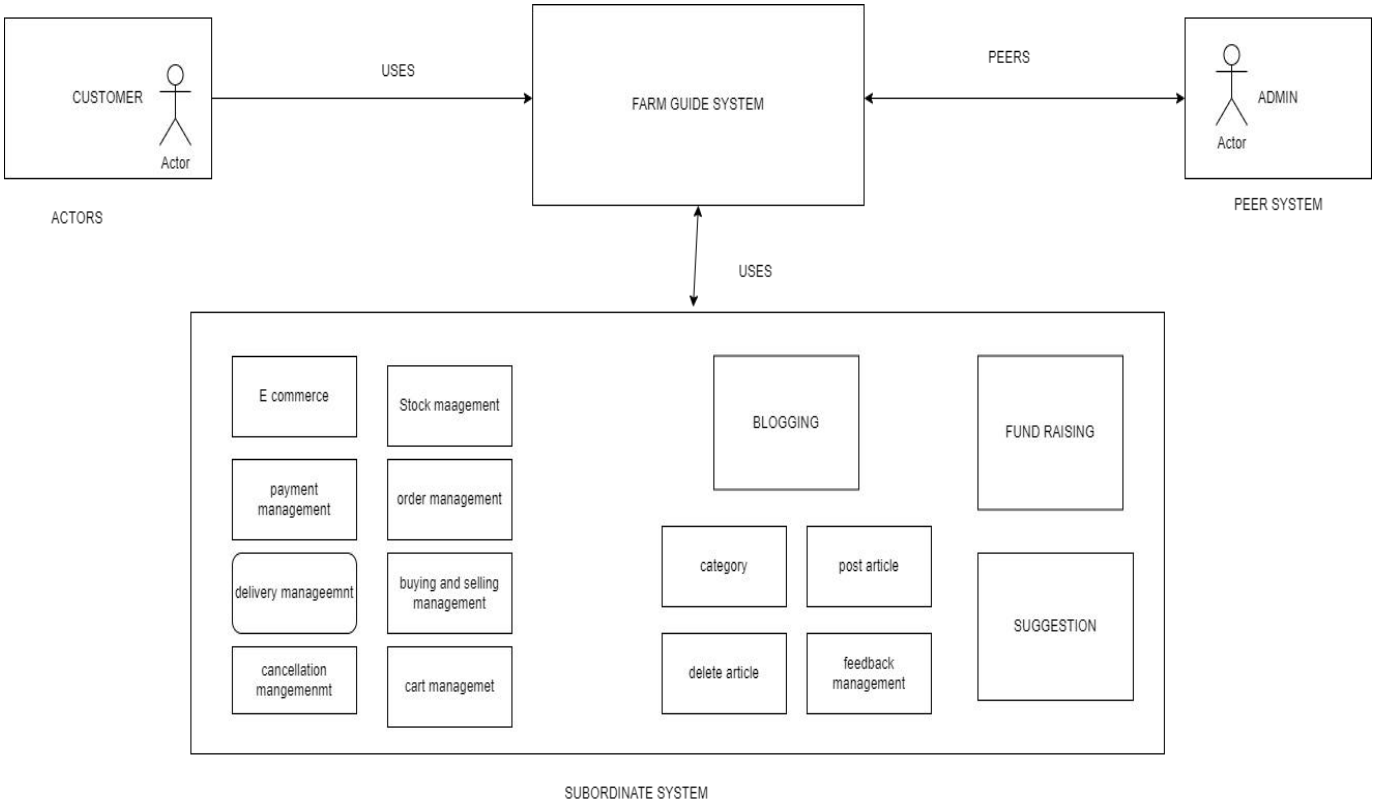


3. DETAILED DESIGN

3.1 Architectural Diagram

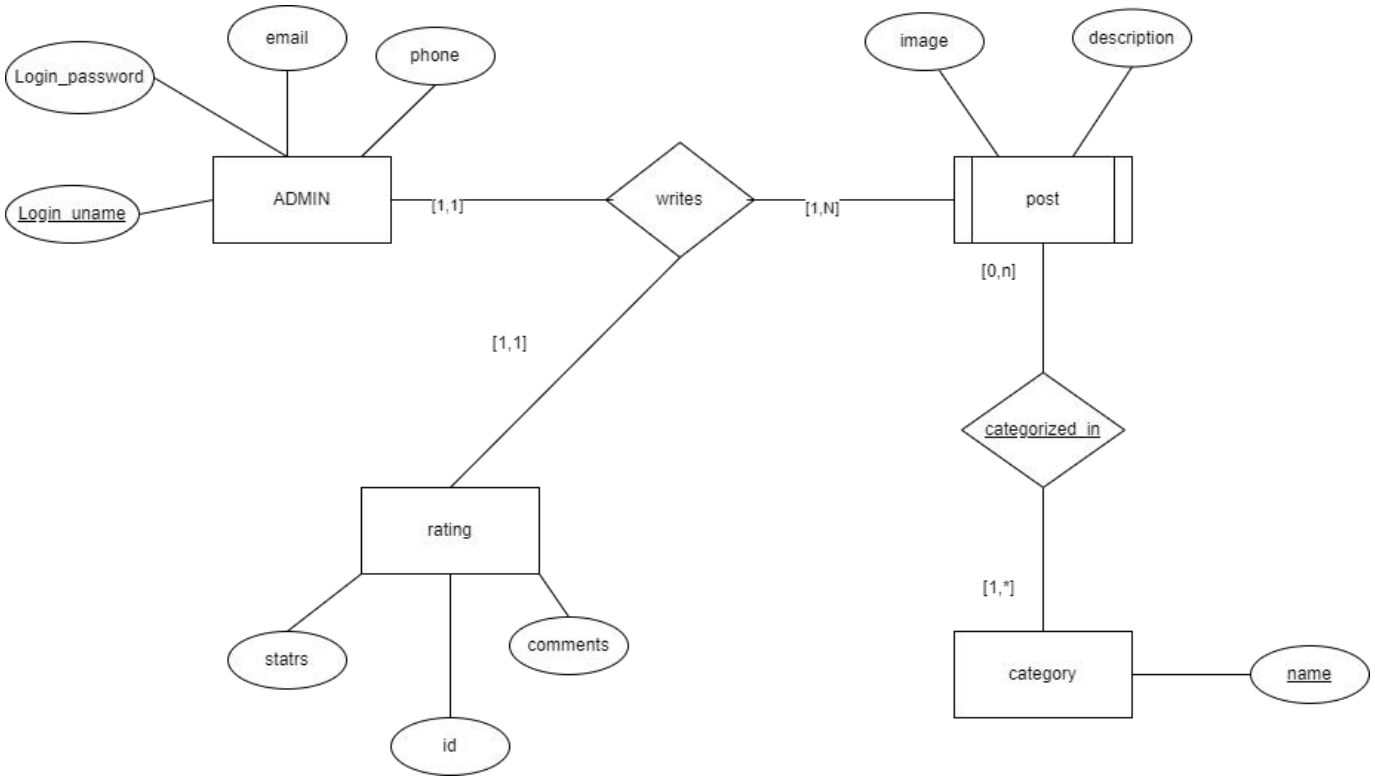
An architectural diagram is a visual representation that maps out the physical implementation for components of a software system. It shows the general structure of the software system and the associations, limitations, and boundaries between each element.

FARMGUIDE ARCHITECTURE DIAGRAM

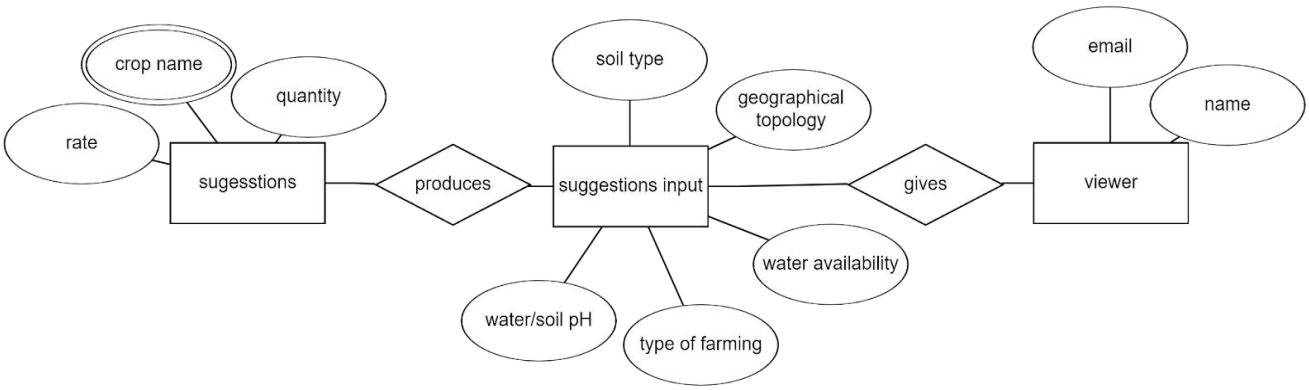


3.2 Entity Relationship Diagram

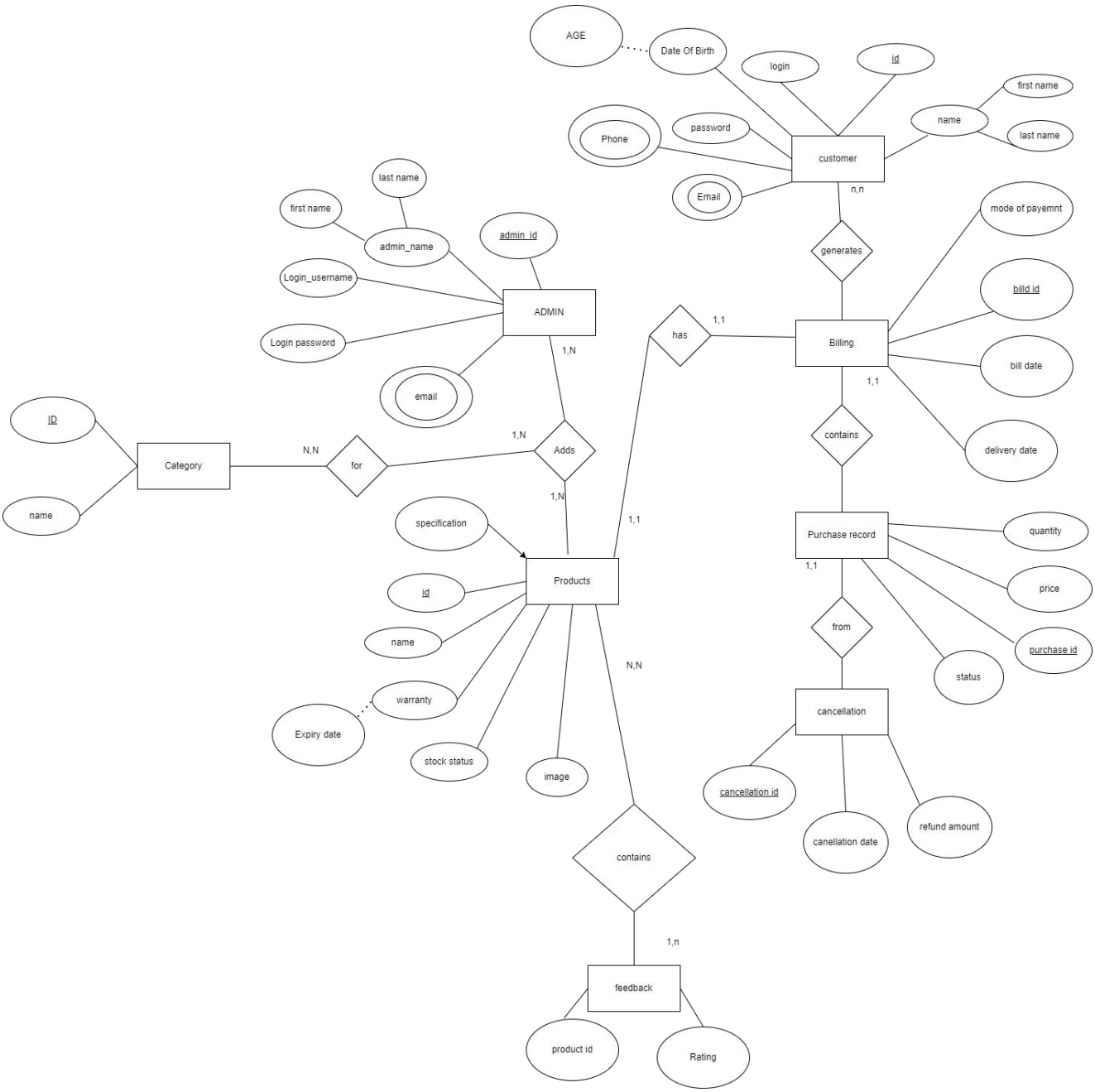
BLOGGING SYSTEM



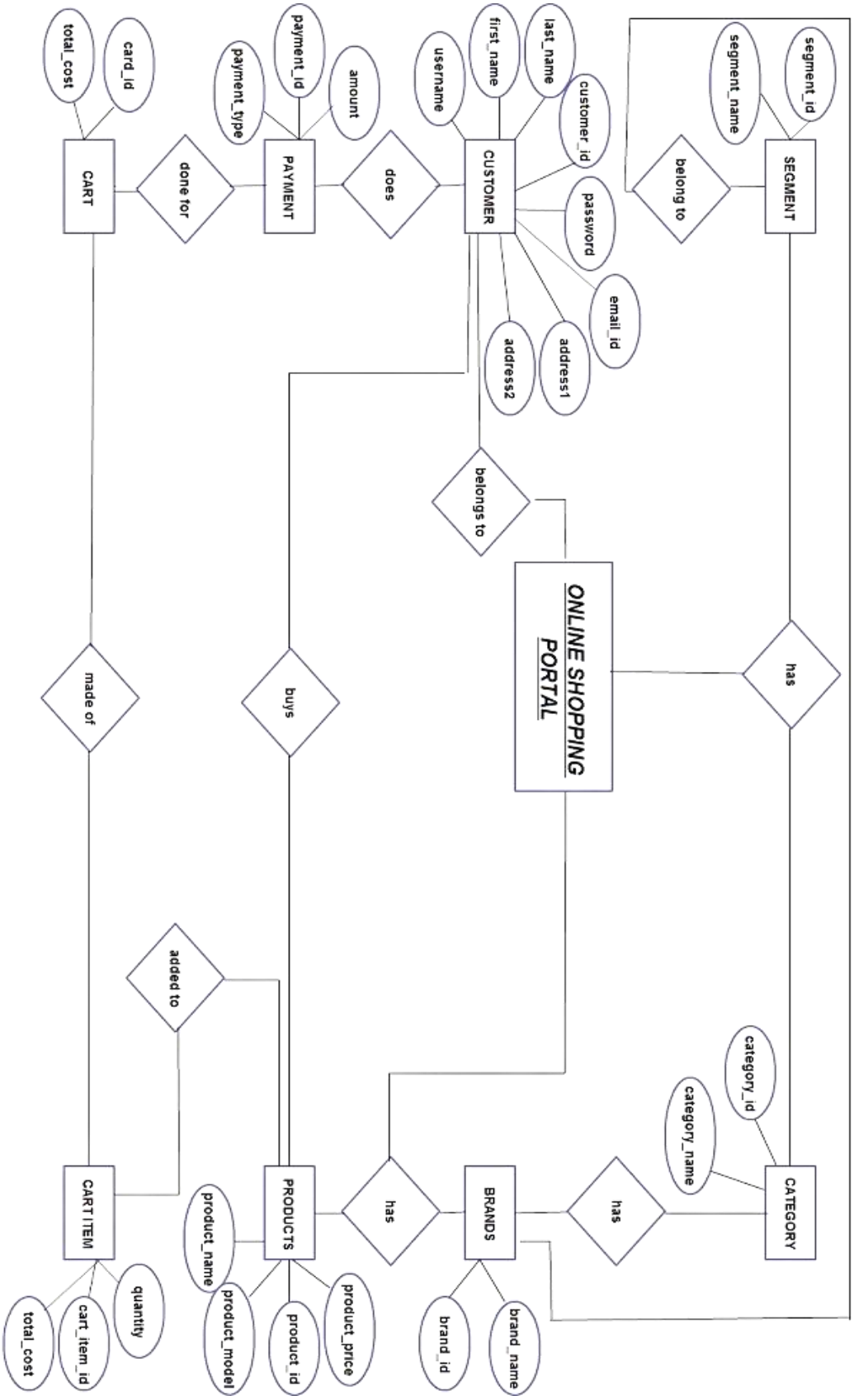
SUGGESTION MODULE:



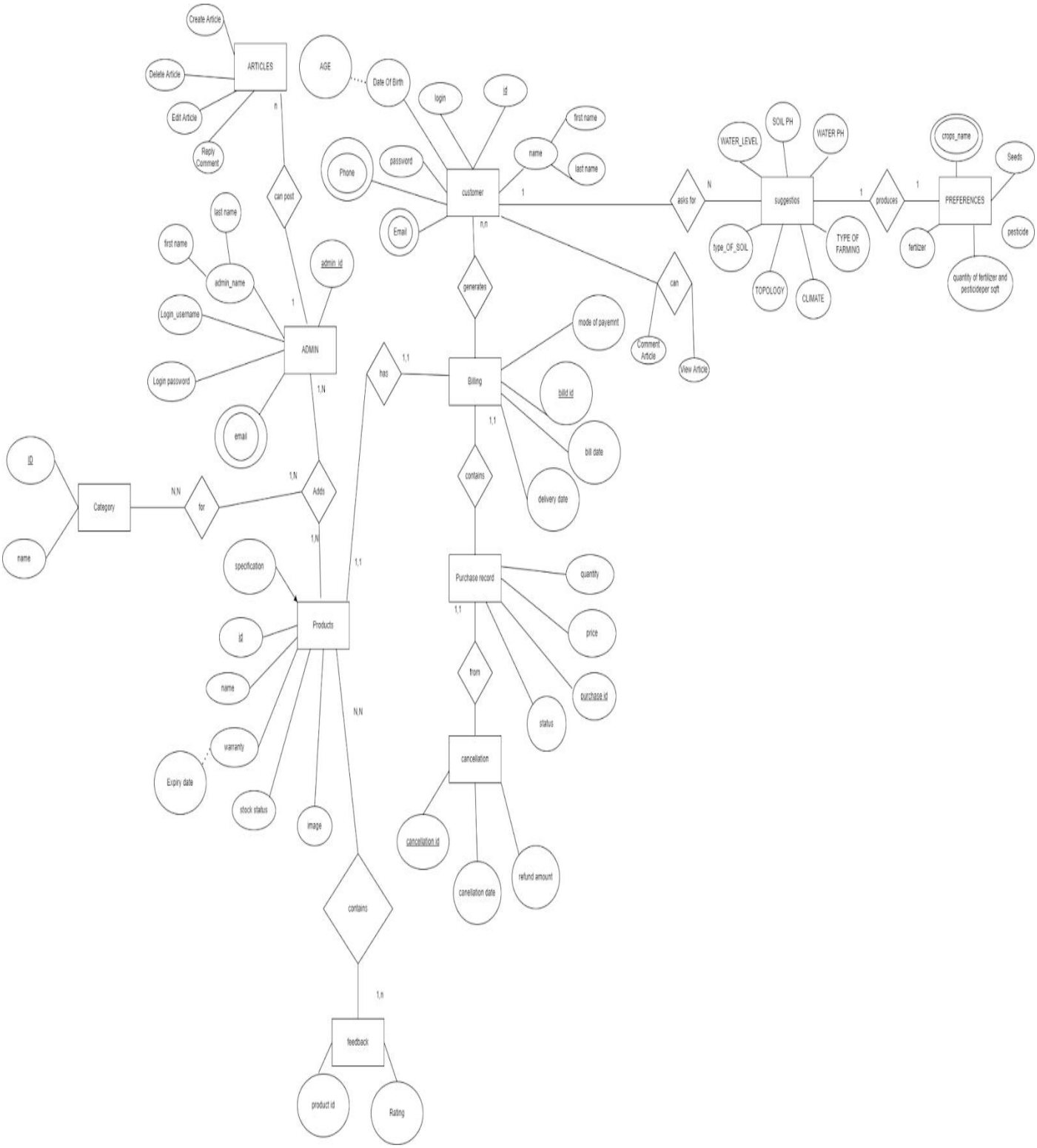
E COMMERCE SYSTEM VIEW 1:



E COMMERCE SYSTEM VIEW 2:



COMPLETE ER DIAGRAM



3.3 TABLE DESCRIPTION

1.Crop Recommendation System

Field	Description	Type	Length
suggestion_ID (PK)	Suggestion ID	Int	11
Soil_type	Type of soil	varchar	255
Climate type	Climatic condition of place	varchar	255
water_level	Availability of water in mm	float	10
Ph level	Water ph level	float	14
type_of _farming	Indoor / outdoor /terrace	varchar	255

2. Blogging System

Post Table :

Field	Description	Type	Length
post_id	Article id	int	10
title	Title of the article / blog	varchar	255
content	Description / body of the article	varchar	255
create_time	Time and date of article posted	DATE	date
author_id	Id of author posted article	int	10
update_time	Time and date of last modification to article	DATE	date

Comments Table:

Field	Description	Type	Length
comment_id	Comment id	int	10
Create _time	Time of comment created	Date	date
author	Person who posted comment	varchar	255
email	Mail of person posted comment	varchar	255
post_id	Id of post for which comment is made	int	10

Categories Table:

Field	Description	Type	Length
Title	Title for category	varchar	155
Slug	Corresponding slug	varchar	155
author	Person who posted comment	varchar	255
post_id	Id of post for which comment is made	int	10

Authentication and Authorization-table:

Field	Description	Type	Length
User-name	User name for the system user	varchar	255
password	Password for the system user	password	16
email	Email for the system user	varchar	255
First-name	First name of the user	varchar	255
Last -name	Last name of the user	varchar	255

3. Money Donation System

Field	Description	Type	Length
Donar_id	Id of the people who donated in our sytem	int	5
name	Name of the people who donated money in our system	varchar	255
email	Email of the person who donated money in our system	Varchar	255
phone	Pone number of the person who donated money in our system	int	10
amount	Amount donated by the person	int	15
message	Message typed by the user	varchar	255

4. E-commerce System

User Table

Field	Description	Type	Length
id	id	Int	5
username	Username of the customer	Varchar	255
email	Username email	Varchar	255
confimed	Status of user	boolean	1
firstname	User firstname	varchar	255
lastname	Use lastname	varchar	255
password	User password	password	16

Categories Table

Field	Description	Type	Length
id	Category id	Int	5
name	Category name	varchar	255
Products	Names of the product	varchar	255

Order Table

Field	Description	Type	Length
id	Order id	int	10
order	Order name	Varchar	255
Shipping address	Delivery address of customer	varchar	255
city	City of customer	varchar	255
state	State of customer	varchar	255
pin	Area pin of user	int	10
user	User who has order	varchar	255
Amount	Order bill amount	int	20

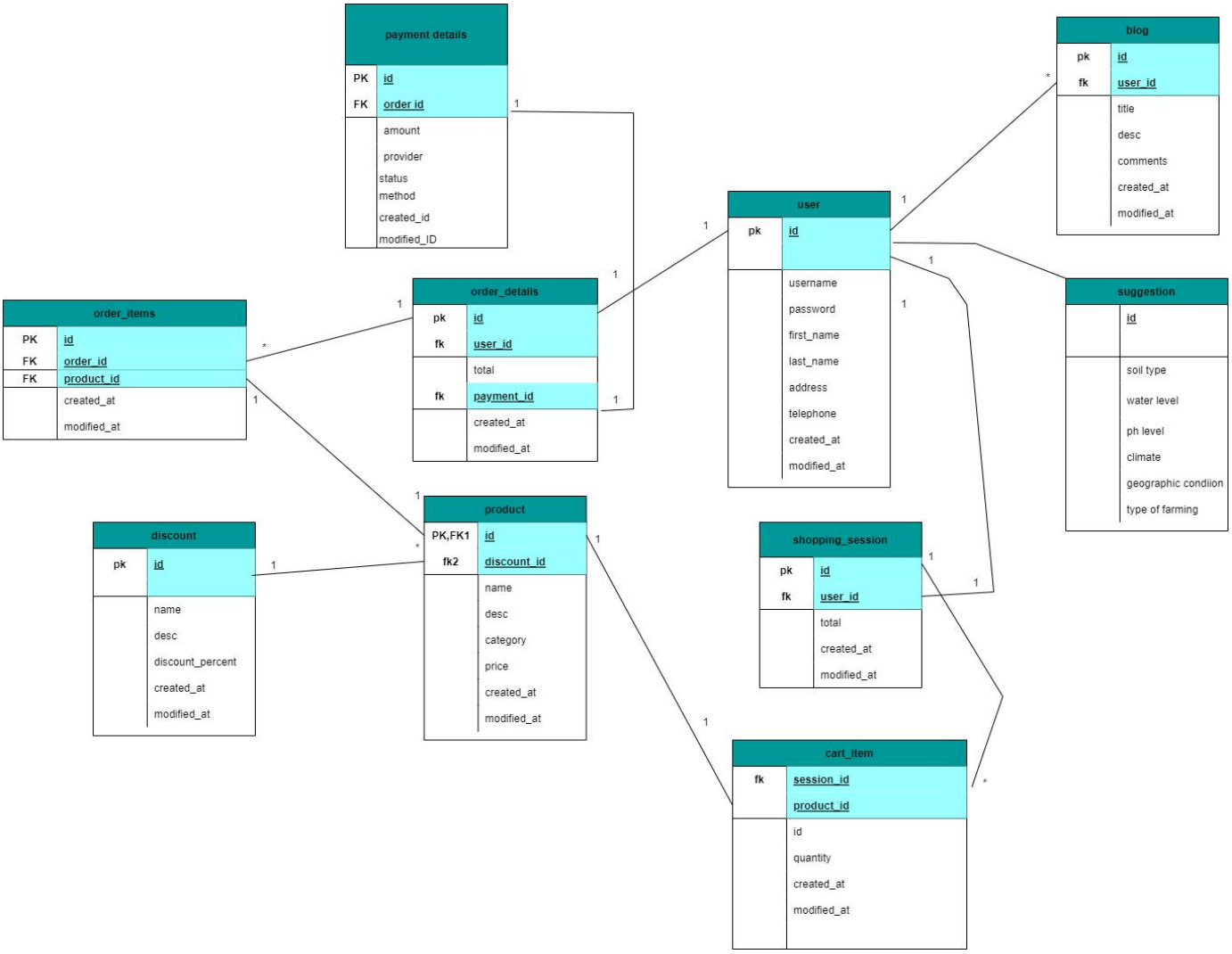
Products Table

Field	Description	Type	Length
id	Product id	Int	2
name	Product name	varchar	255
price	Product price	int	6
description	Product description	varchar	255
images	Product images	media	255
category	Product category	varchar	255

Admin Table

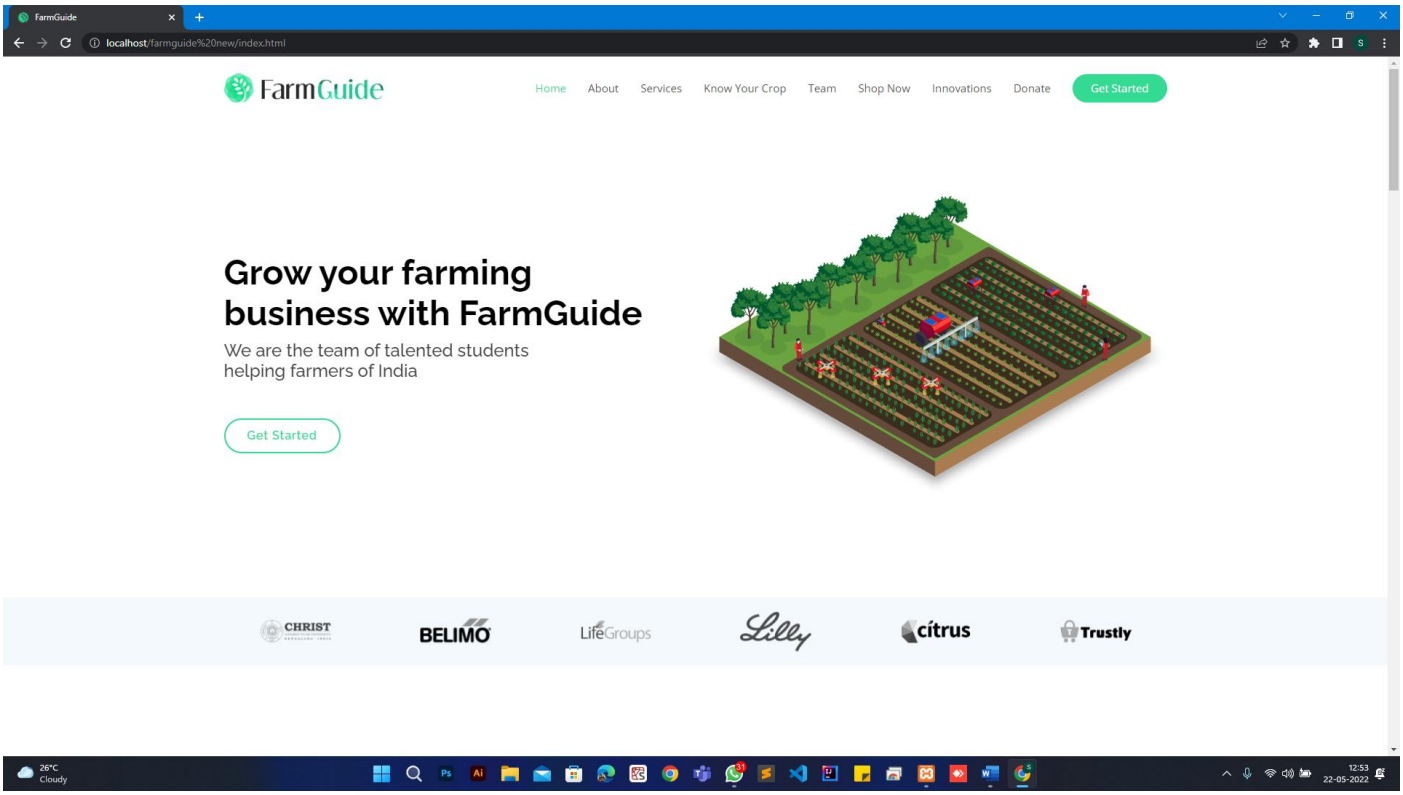
Field	Description	Type	Length
id	Id of customer	Int	5
username	Username of the admin	Varchar	255
email	Admin email	Varchar	255
confimed	Status of admin	boolean	1
firstname	Admin firstname	varchar	255
lastname	Admin lastname	varchar	255
password	Admin password	password	16
id	Id of admin	Int	5

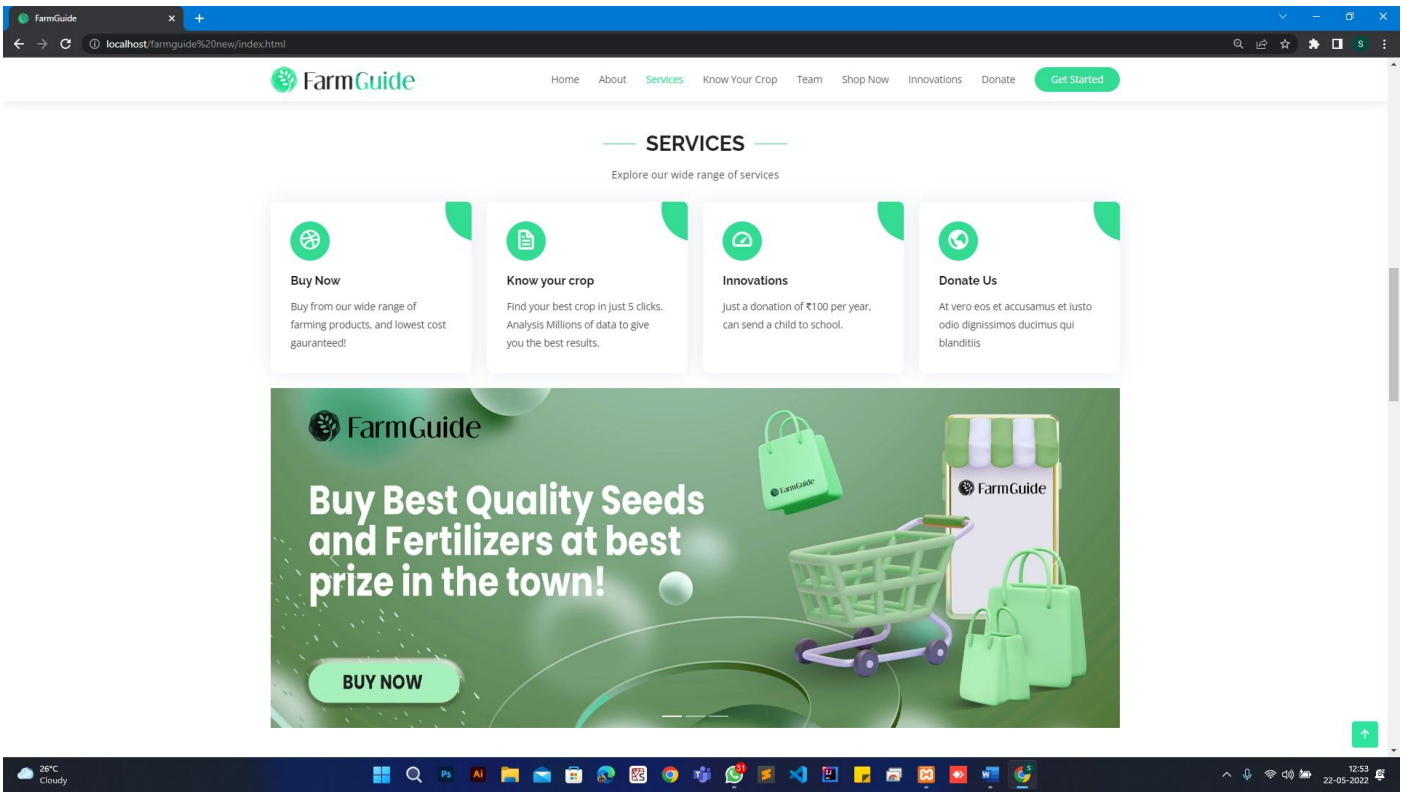
3.4 Relationship Schema

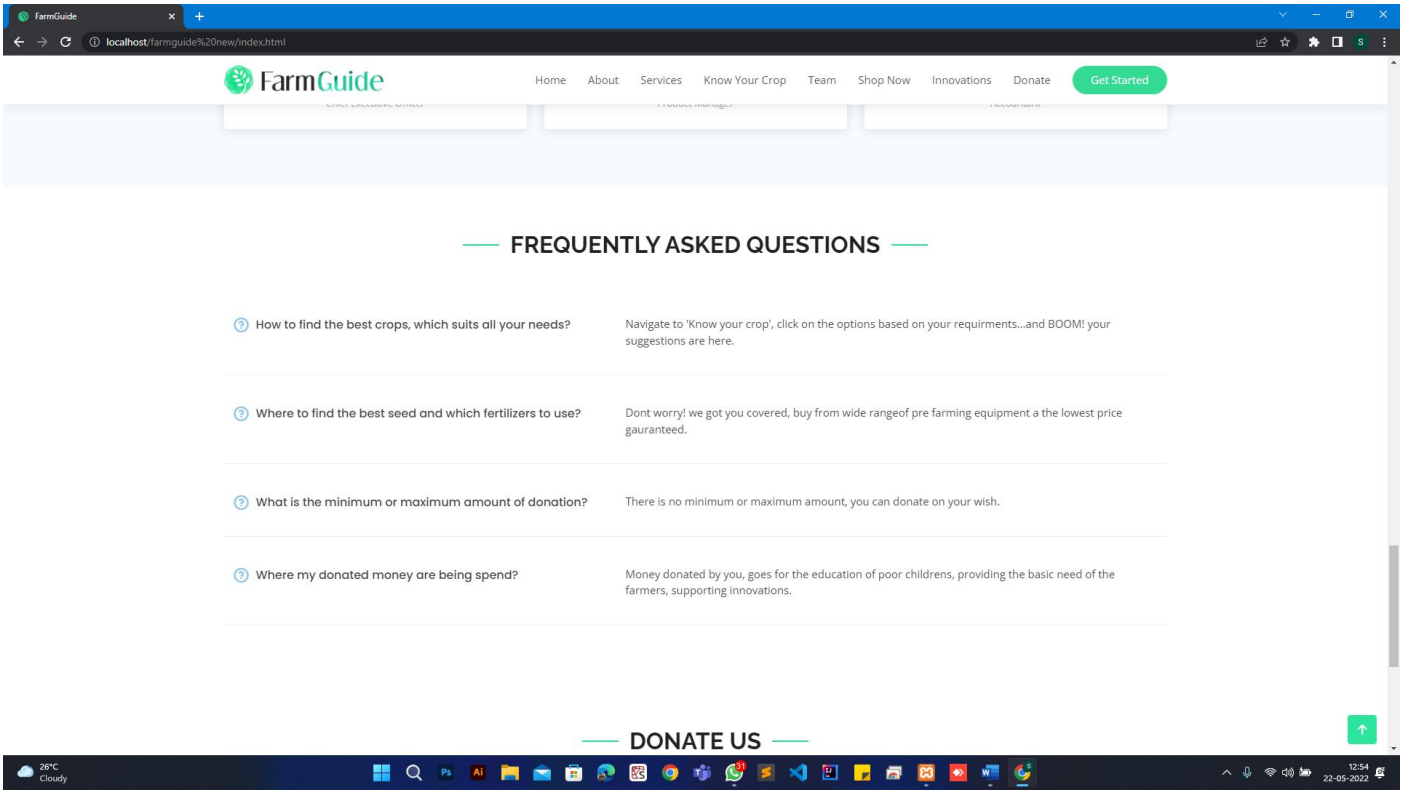


3.5 INTERFACE DESIGN

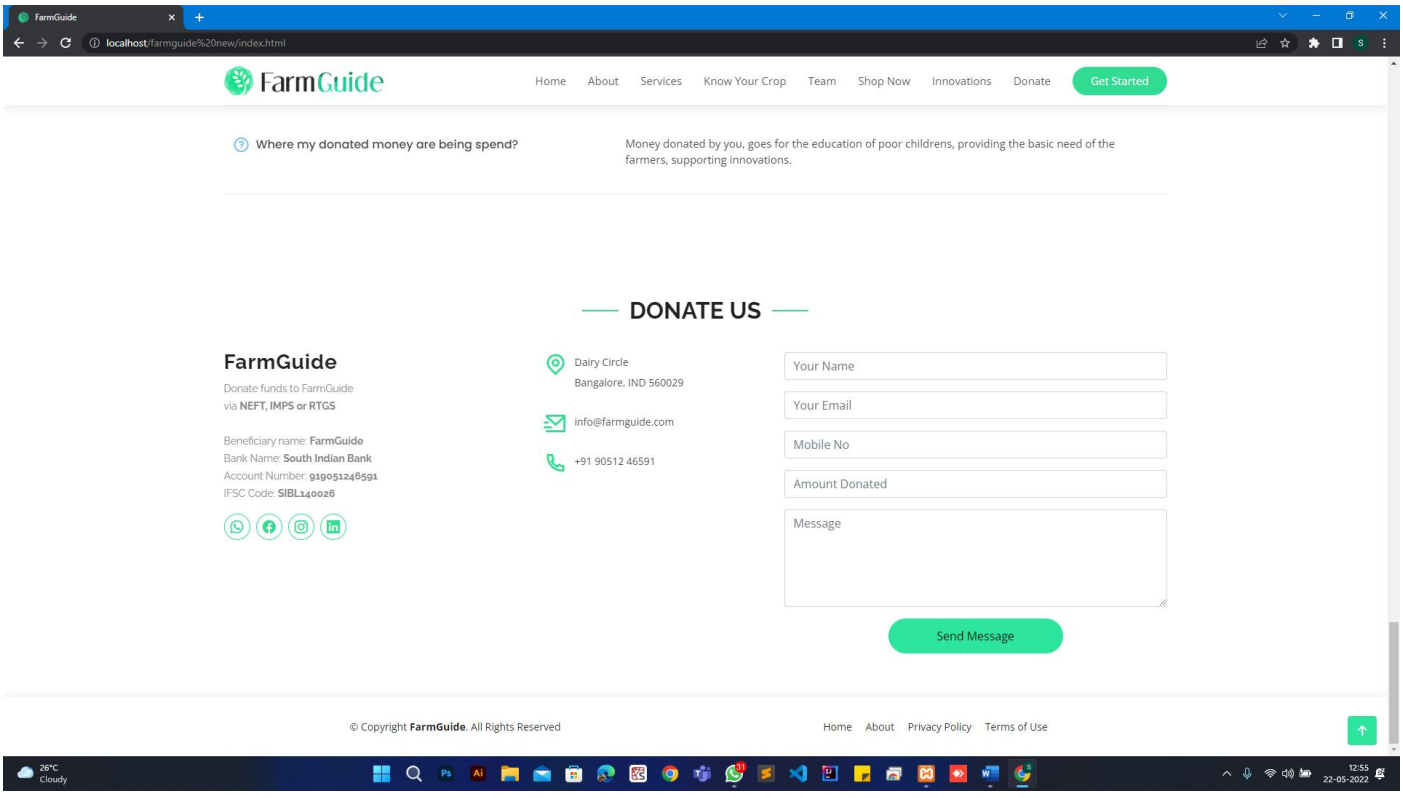
Homepage:



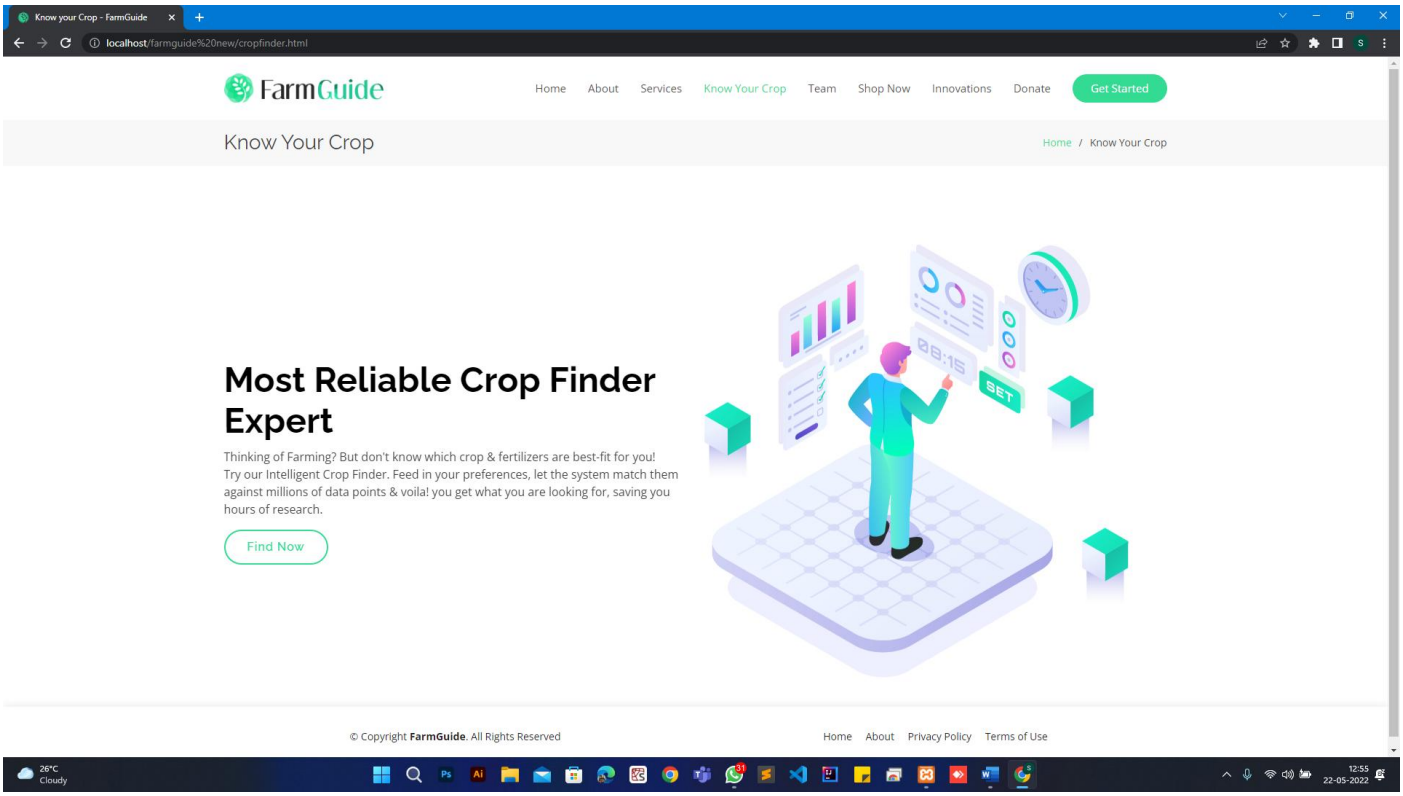


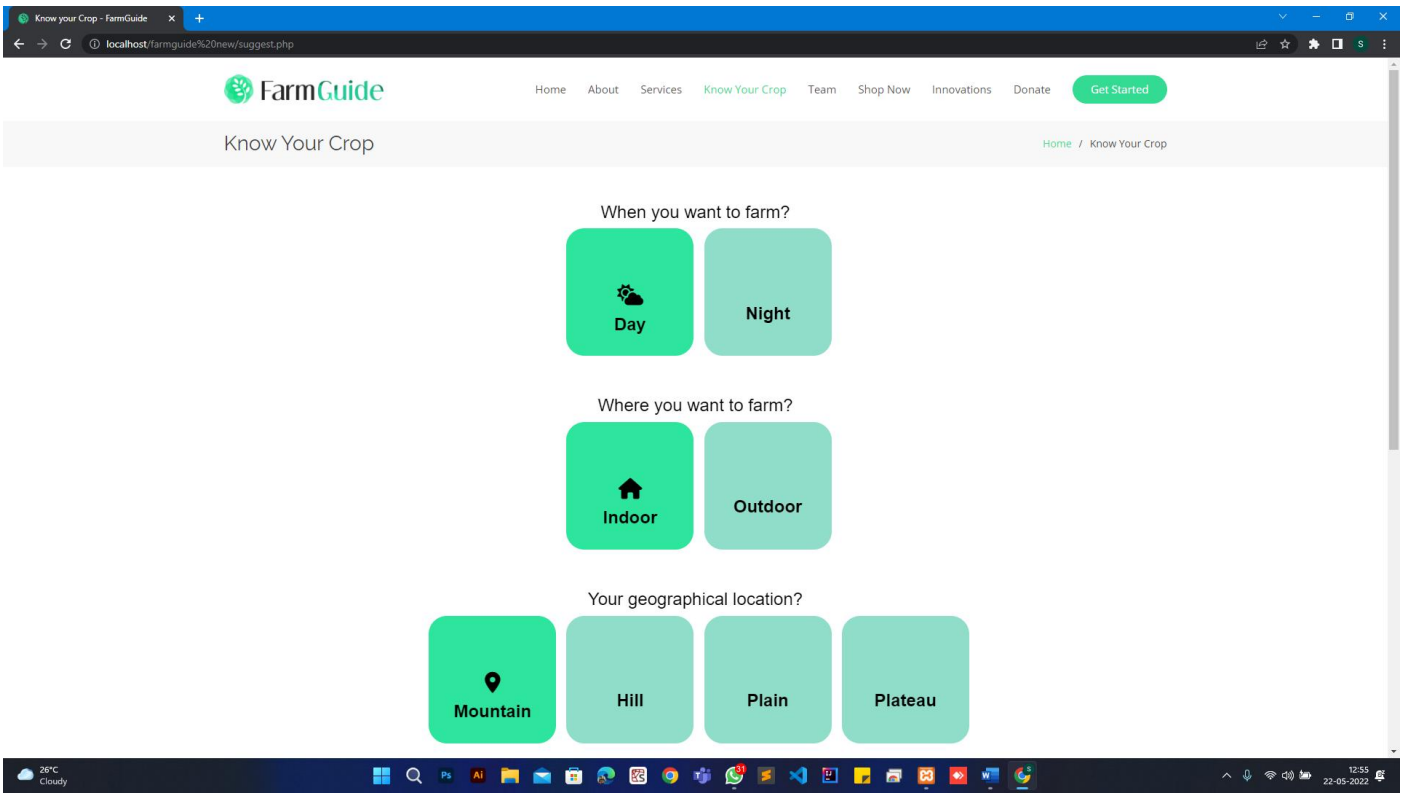


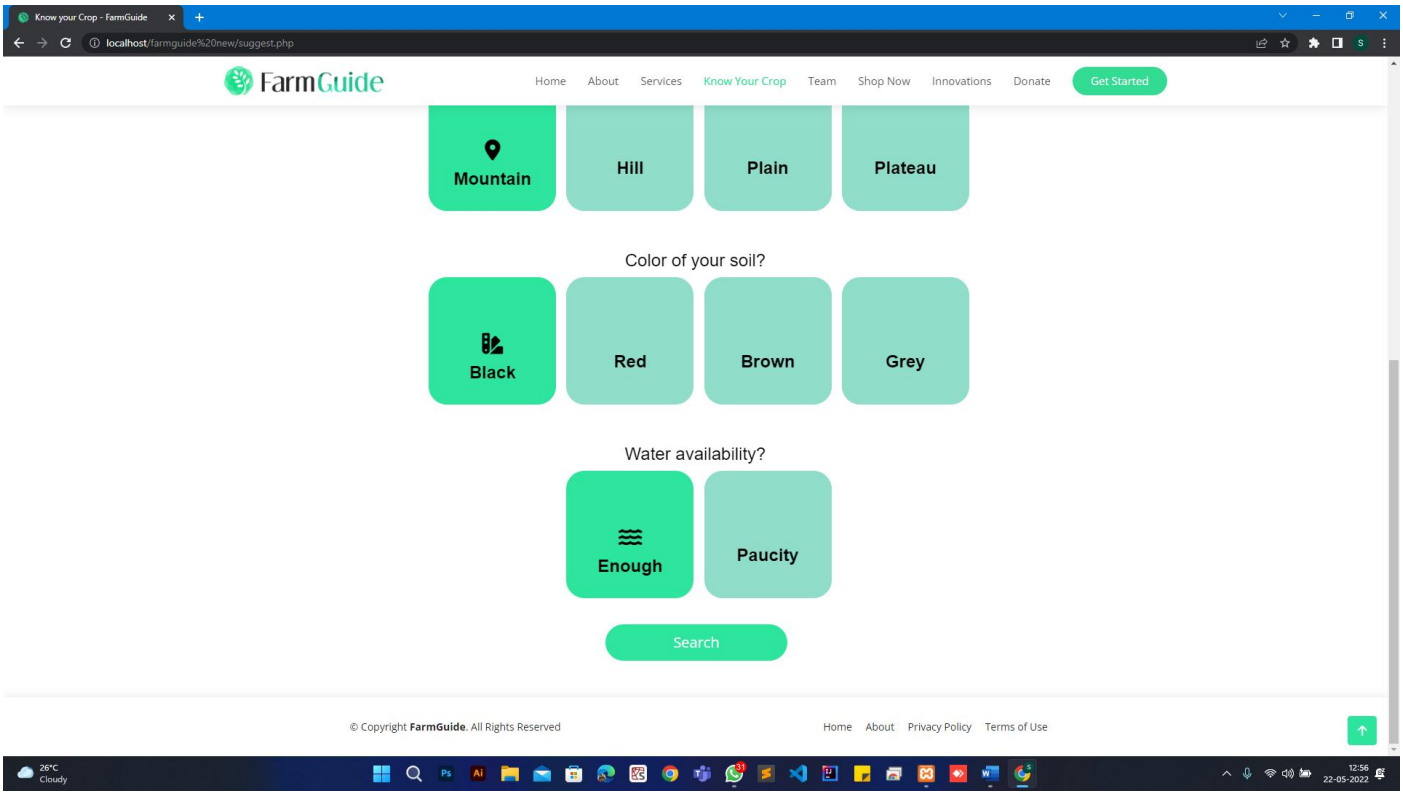
Donation Module:



Know your crop module:






Know your Crop - FarmGuide
localhost/farmguide%20new/suggest.php
FarmGuide
Home
About
Services
Know Your Crop
Team
Shop Now
Innovations
Donate
Get Started
Mountain
Hill
Plain
Plateau
Color of your soil?
Black
Red
Brown
Grey
Water availability?
Enough
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Search
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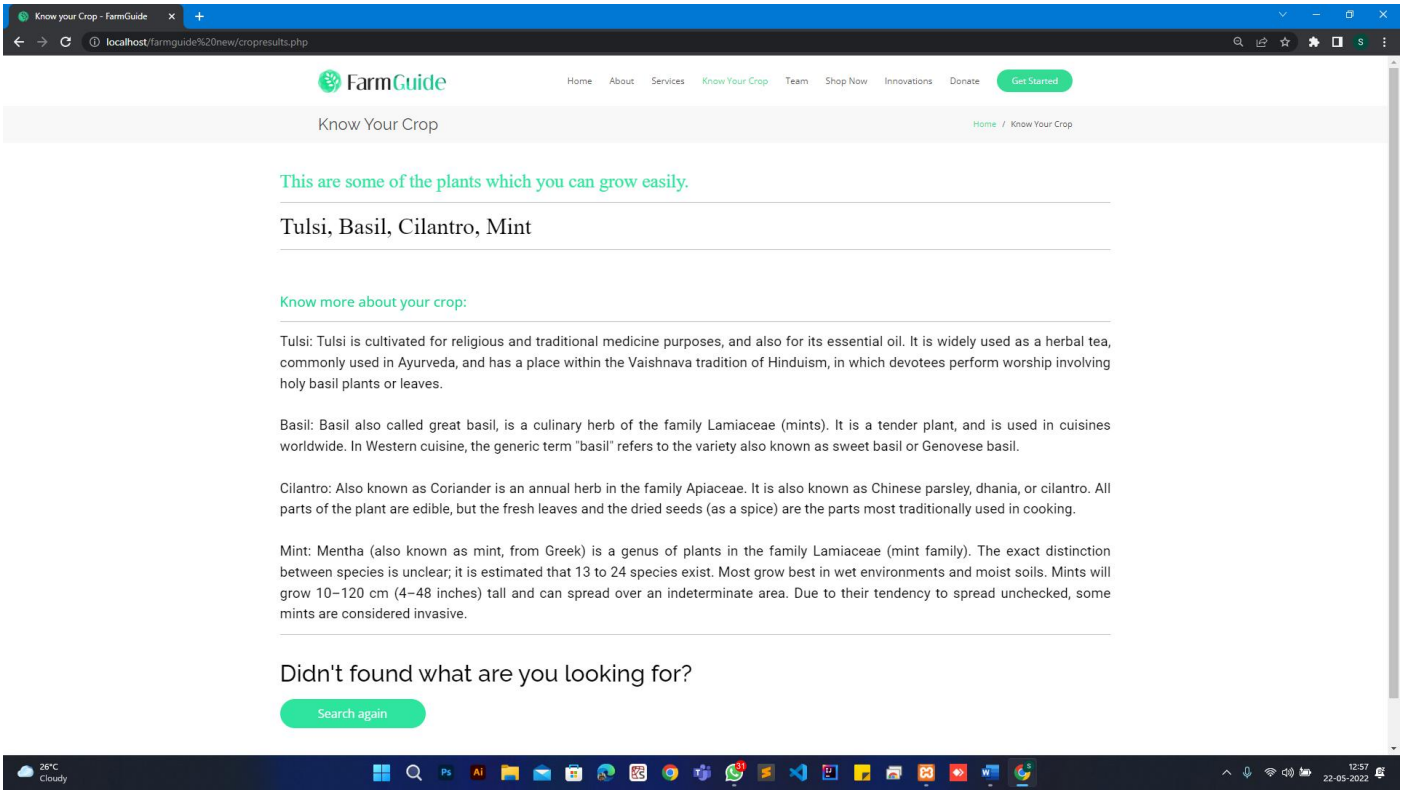
Know your Crop - FarmGuide
localhost/farmguide%20new/cropresults.php
FarmGuide
Home
About
Services
Know Your Crop
Team
Shop Now
Innovations
Donate
Get Started
Know Your Crop
Home / Know Your Crop
This are some of the plants which you can grow easily.
Tulsi, Basil, Cilantro, Mint
Know more about your crop:
Tulsi: Tulsi is cultivated for religious and traditional medicine purposes, and also for its essential oil. It is widely used as a herbal tea, commonly used in Ayurveda, and has a place within the Vaishnava tradition of Hinduism, in which devotees perform worship involving holy basil plants or leaves.
Basil: Basil also called great basil, is a culinary herb of the family Lamiaceae (mints). It is a tender plant, and is used in cuisines worldwide. In Western cuisine, the generic term "basil" refers to the variety also known as sweet basil or Genovese basil.
Cilantro: Also known as Coriander is an annual herb in the family Apiaceae. It is also known as Chinese parsley, dhania, or cilantro. All parts of the plant are edible, but the fresh leaves and the dried seeds (as a spice) are the parts most traditionally used in cooking.
Mint: Mentha (also known as mint, from Greek) is a genus of plants in the family Lamiaceae (mint family). The exact distinction between species is unclear; it is estimated that 13 to 24 species exist. Most grow best in wet environments and moist soils. Mints will grow 10–120 cm (4–48 inches) tall and can spread over an indeterminate area. Due to their tendency to spread unchecked, some mints are considered invasive.
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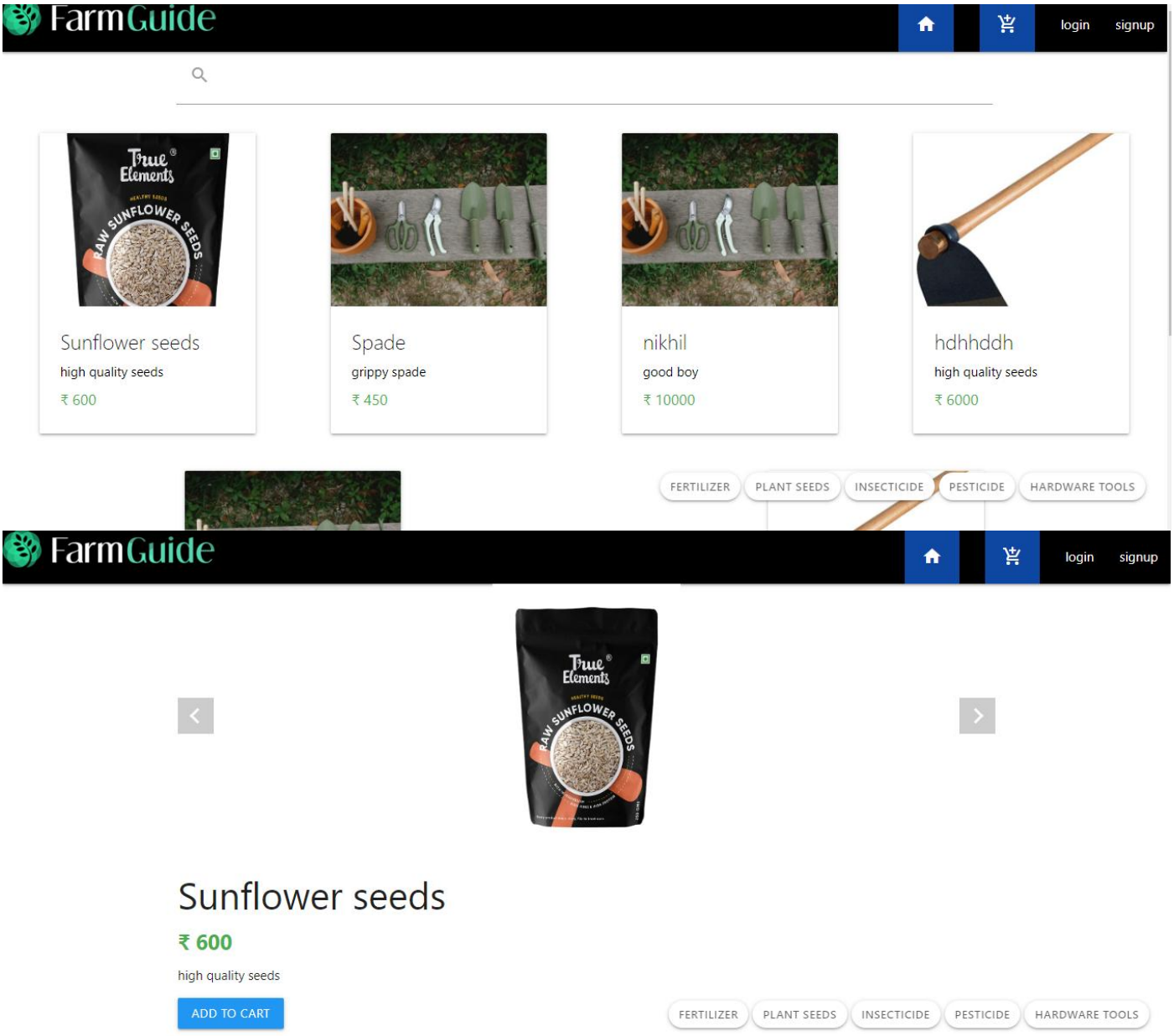
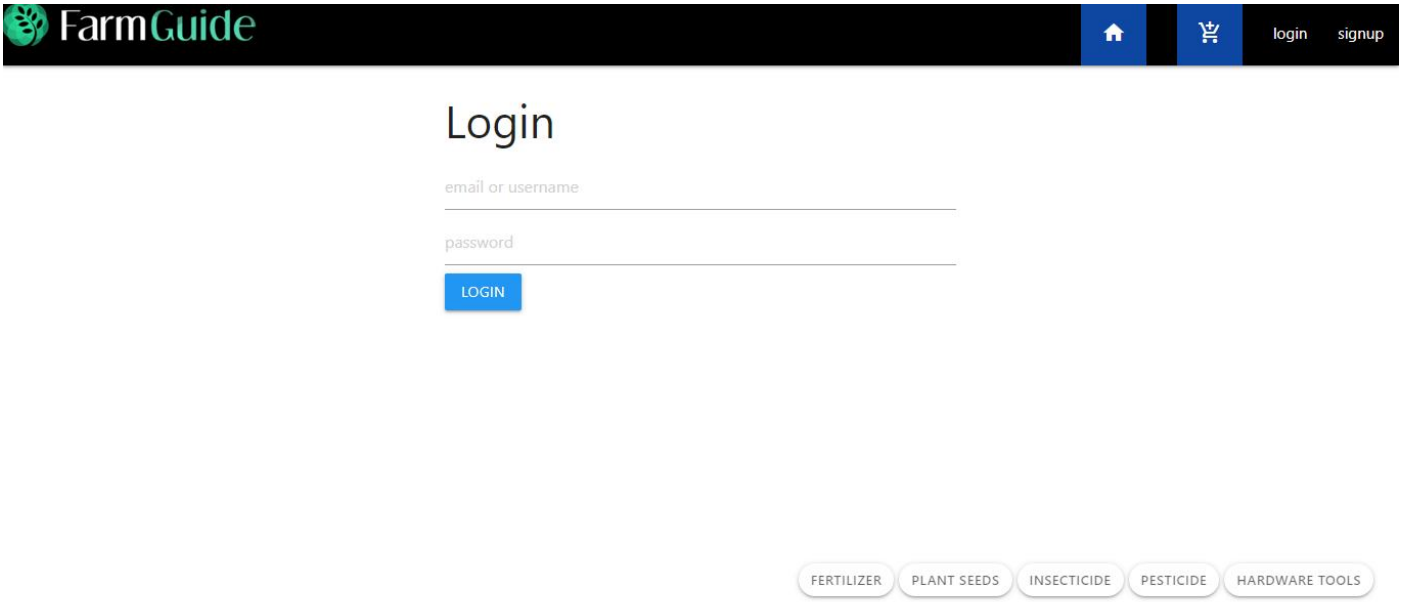
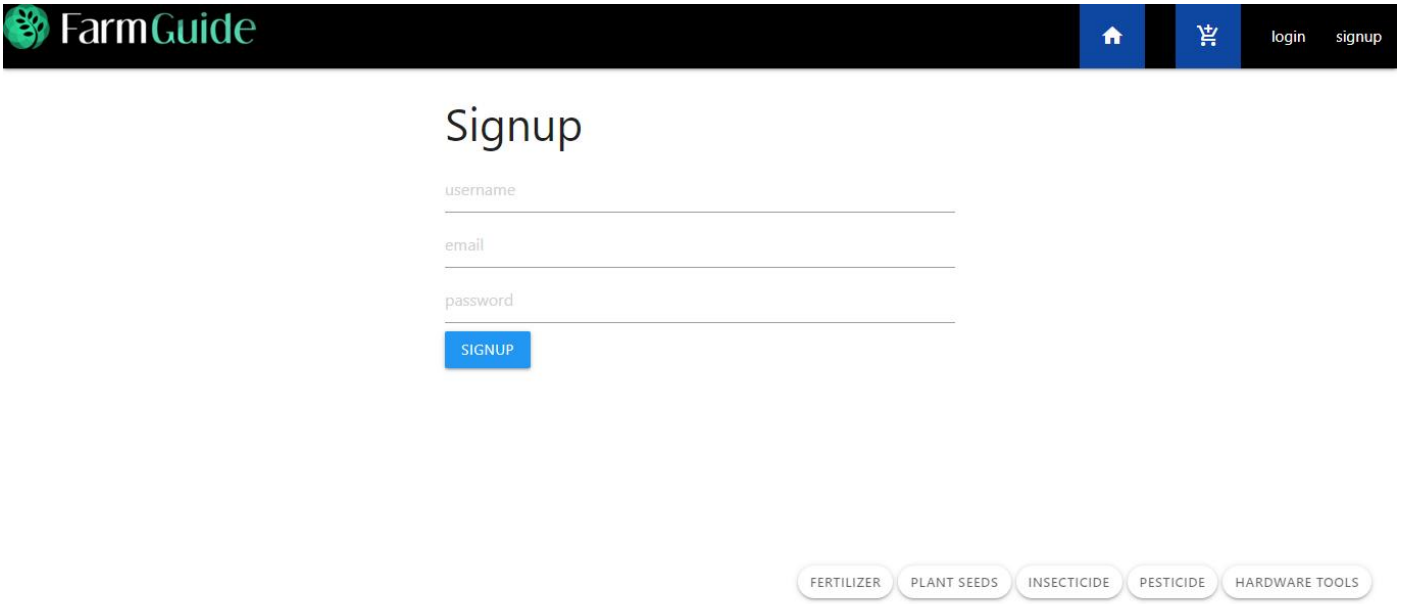
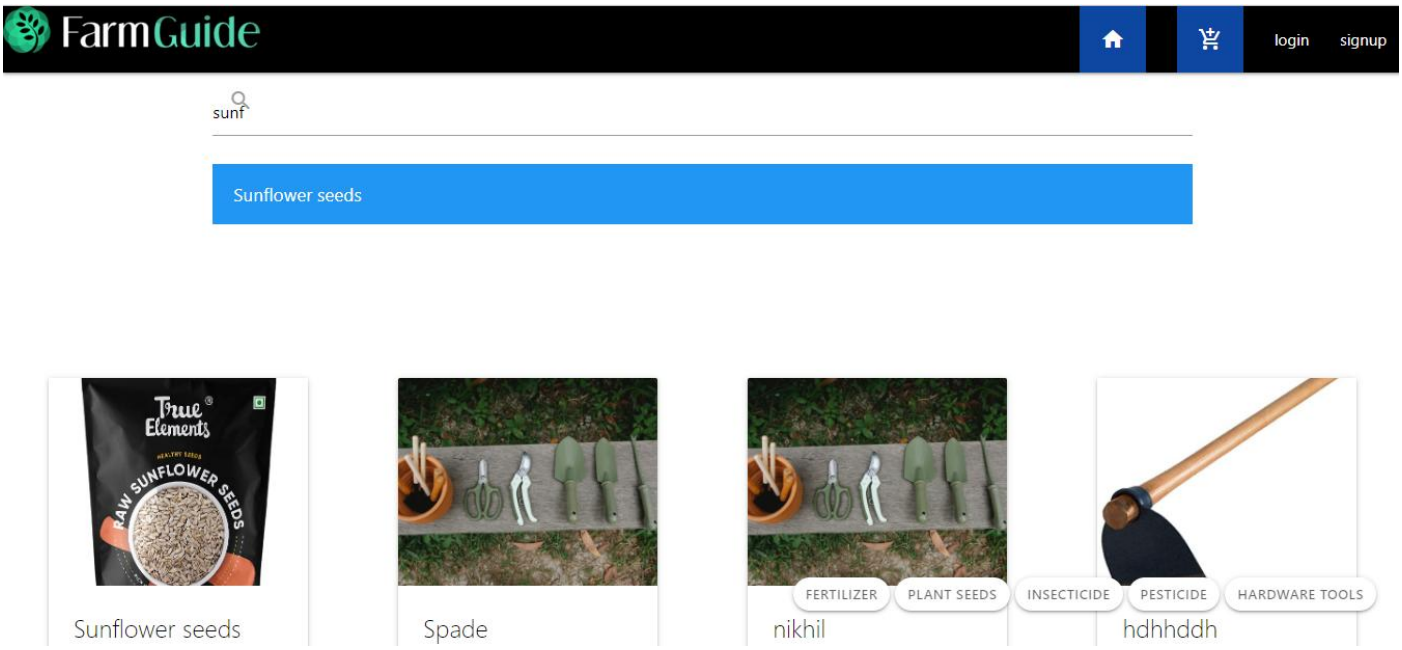
ECOMMERCE MODULE:

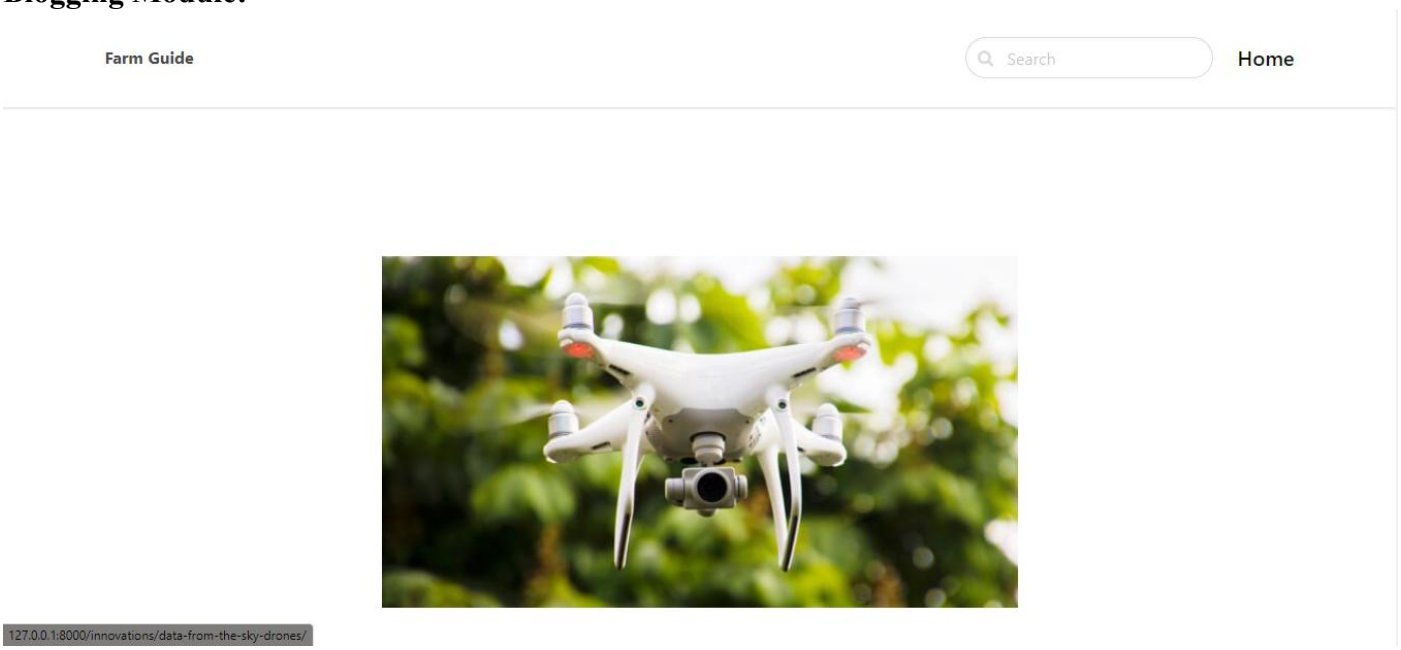



FarmGuide
login
signup
Login
email or username
password
LOGIN
FERTILIZER
PLANT SEEDS
INSECTICIDE
PESTICIDE
HARDWARE TOOLS


FarmGuide
login
signup
Signup
username
email
password
SIGNUP
FERTILIZER
PLANT SEEDS
INSECTICIDE
PESTICIDE
HARDWARE TOOLS



Blogging Module:



1 week, 1 day ago

Data From The Sky – Drones

With the assistance of drones farmers have an opportunity to define crop biomass, plant height, the presence of weeds, and water saturation on certain field areas with high precision.

127.0.0.1:8000/innovations/satellite-derived-data/

Home

1 week, 1 day ago

Satellite-Derived Data

Predicting yields, as well as conducting almost real-time field monitoring, with a view to detect a variety of threats with satellite data in service has never been so easy.

The sensors are able to give imagery in various spectra, allowing for the application of numerous spectral indices, such as the Normalized Difference Vegetation Index (NDVI). NDVI allows for the detection of vegetation content, the amount of wilting plants, and overall plant health. Next is the Canopy Chlorophyll Content Index (CCCI) that helps with nutrient application. Then, the Normalized Difference RedEdge (NDRE) detects Nitrogen content. And lastly, the Modified Soil-Adjusted Vegetation Index (MSAVI) is designed to minimize soil background impact at the earliest developmental stages of plants; the list goes on.

Comments

Name:

Email:

Body:

4.Construction

A construction code may be defined as a set of rules of procedure and standards of materials designed to secure uniformity and protect public interest, usually established by a public agency.

4.1 Software and Hardware Environments

Hardware Environments : [as per system on which project is built]

PROCESSOR	INTEL I7 8TH GEN
OPERATING SYSTEM	WINDOWS 11
MEMORY	16GB
HDD / SSD	1TB / 256 SSD
DATABASE	MYSQL , STRAP - GRAPHQL , DJANGO

Software Environments :

E-commerce Module :

1. React JS :
React.js is an open-source JavaScript library that is used for building user interfaces specifically for single-page applications. It's used for handling the view layer for web and mobile apps. React also allows us to create reusable UI components.React allows developers to create large web applications that can change data, without reloading the page. The main purpose of React is to be fast, scalable, and simple. It works only on user interfaces in the application. This corresponds to the view in the MVC template. It can be used with a combination of other JavaScript libraries or frameworks, such as Angular JS in MVC.

Why React JS:
The component-based approach, well-defined and use of just plain JavaScript make React very simple to learn.different developers can write individual parts and all changes made won't cause the logic of the application.Compared to other frontend frameworks, the React code is easier to maintain and is flexible due to its modular structure.The core of the framework offers a virtual DOM program and server-side rendering, which makes complex apps run extremely fast. It saves time for developers as they don't have to write various codes for the same features.React comes with JSX, an optional syntax extension, which makes it possible to write your own components.These components basically accept HTML quoting and also makes all subcomponent rendering a delightful experience for developers.

2. **Apollo Graphql :**

Apollo Client is a comprehensive state management library for JavaScript that enables you to manage both local and remote data with GraphQL. Use it to fetch, cache, and modify application data, all while automatically updating your UI.Apollo Client helps you structure code in an economical, predictable, and declarative way that's consistent with modern development practices.

GraphQL is a query language and server-side runtime for application programming interfaces (APIs) that prioritizes giving clients exactly the data they request and no more. GraphQL is designed to make APIs fast, flexible, and developer-friendly. Additionally, GraphQL gives API maintainers the flexibility to add or deprecate fields without impacting existing queries. Developers can build APIs with whatever methods they prefer, and the GraphQL specification will ensure they function in predictable ways to clients.GraphQL does not provide any direction for how to store data or what programming language to use—developers can use PHP (graphql-php), Scala (Sangria), Python (Graphene Python), Ruby (graphql-ruby), JavaScript (graphql.js), and more. GraphQL offers no requirements for the network, authorization, or pagination.From the point of view of the client, the most common GraphQL operations are likely to be queries and mutations. If we were to think about them in terms of the create, read, update and delete (CRUD) model, a query would be equivalent to read. All the others (create, update, and delete) are handled by mutations.

Why Graphql:

Being less “talkative” than REST makes GraphQL way faster, as you can cut down on your request by picking only the fields you want to query.By integrating multiple systems behind its API, GraphQL unifies them and hides their complexity. The GraphQL server is then responsible for fetching the data from the existing systems and packaging it up in the GraphQL response format. This is particularly relevant for legacy infrastructures or third-party APIs that have expanded over the years and now present a maintenance burden.When migrating from a monolithic backend application to a microservice architecture, a GraphQL API can help handle communication between multiple microservices by merging them into one GraphQL schema. While each microservice defines its own GraphQL schema and has its own GraphQL endpoint, one GraphQL API gateway consolidates all schemas into one global schema.fetching the exact data in a single request.developers can see what the schema can query and how the data is set up there. Based on that, they can easily add new fields to existing queries through a GraphQL IDE. There’s no need to validate the data format, as GraphQL does it for you. Developers need only to write resolvers – how the data will be received.If the goal is to provide a prototype, CRUD operations can be time-consuming. GraphQL speeds up this process by providing a single API endpoint that serves as a data proxy between the UI and the data storage.

3.Strapi CMS:

Strapi is an open-source headless CMS used for building fast and easily manageable APIs written in JavaScript. It enables developers to make flexible API structures easily using a beautiful user interface.Strapi can be used with various databases including MongoDB, PostgreSQL, etc.Strapi is a headless CMS [CONTENT MANAGEMENT SYSTEM].The “head” relates to where your content ends up, and the “body” is where your content is stored and authored.A headless CMS is a back-end only content management system (CMS) built from the ground up as a content repository that makes content accessible via an API for display on any device.Headless CMS are also particularly suitable for websites designed using the Jamstack model where JavaScript, APIs, and Markup work together to make web development easier and user experiences better.

Why Use Strapi:

Suppose you want to build a application from React.js and you don't know the Back-end stuff like Node, Express, Ruby on Rails. So you can use Strapi for that.Let consider you want to write contents and add it to draft or publish it. For that, we require Back-end. And here is Strapi come into existence.Let us explain with one more example: You are a freelancer and a client wanted to create a business website. You agree about it but the client wanted to manage content weekly. So you can use Strapi to manage content.Strapi helps you to make your Back-end within minutes and you just have to care about Front-end.Strapi can be used in various other projects as well.

Faster editing experiences:
Traditional CMS architectures have to spend resources on content editing, and content rendering. A headless CMS has an advantage over traditional alternatives because it doesn't have to deal with the rendering side of things.
Manage content for more channels:
Truly headless content isn't tied to a single presentation concern (e.g. website), so it can find an audience across multiple channels. You can use a headless CMS to manage content for apps and websites. You can even manage your internal/admin content in the same place and extract more value from it that way.
Developer flexibility
Because headless content is served over APIs, developers can choose their own frontend tooling. If you'd prefer to work with Javascript instead of PHP or Ruby, you can do that. You can also interchange parts of your stack, or move from one framework to another without affecting the CMS.
Enhanced security
Because headless content is separated from the presentation layer it's a smaller area of attack.

What is an API?
API is the acronym for Application Programming Interface, which is a software intermediary that allows two applications to talk to each other. In case you want to connect a React application with Strapi, we say that React is the client and Strapi the system. Indeed, React will communicate to Strapi, by making HTTP requests. Strapi will then give a response back to your client.If your Strapi application contains restaurants and you want to list them in your React application, all you need to do is to make an HTTP request to Strapi which will take care to give you a response containing your restaurants.

Crop Suggestion and Donation Module :

PHP :
PHP is known to be one of the simplest programming languages, any developer has ever come across! This is the major reason why most developers begin their career by mastering PHP.
Also, it is very easy for PHP to run fast as this language doesn't use much of the system to run your web app. Therefore, the web applications of web pages load quite speedily.
Also, being one of the oldest programming languages, PHP has gotten rid of most of the glitches, making it one of the simplest, flawless, and fastest programming language for your web development or open source development solutions.
The simplicity of coding, easy learning, and a faster approach makes PHP a lot better than the other complex programming languages.

MYSQL :
MySQL was developed for speed, even if this may come at the expense of some additional features. It is also known for its reliability as a database administrator, backed by a large community of programmers that have put the code through tough testing. Another benefit is that it is relatively simple to learn and use. And as it has been around for nearly three decades.
MySQL offers encryption using the Secure Sockets Layer (SSL) protocol, data masking, authentication plugins, and other layers of security to protect data integrity. The MySQL Enterprise package also includes firewall protection against cyberattacks.
The first thing that users notice is the User Interface of Website. Whether they are able to navigate to appropriate tabs or not , Whether the page gets properly loaded.. and so on. There are many things that a programmer has to keep in mind while designing it. Many users judge the programmers based on how UI is been designed. Programmers come up with so many amazing ideas with Front-end development such that 50% of job is handled by Front-end developers. Programmers would never like to let go any situation just because of UI which can be perfectly served by HTML,CSS (Now BootStrap), and JavaScript (also JQuery).

Blogging Module :

Django is a high-level Python language using a web framework that motivates speedy development and clean, pragmatic design. Created by encountered developers, it takes concern of much of the hassle of web development, so you can focus on typing your app without requiring to reinvent the wheel. It's a free launch source.
Ridiculously fast.
Django was constructed to assist developers to catch applications from scheme to completion as quickly as possible.
Reassuringly secure.
Django takes security seriously and assists developers don't want numerous regular security mistakes.
Exceedingly scalable.
Some of the busiest sites online force Django's aptitude to be quick and flexibly scalable.

I have used Django because it provides such advantages such as :
Advantages of Django
1. Batteries included
Django prides itself as a batteries-included framework. What that capability is that it comes with a lot of stuff out of the box, that you may additionally or might also no longer use relying on your application. Instead of having to write your very own code (the power), you simply want to import the programs that you prefer to use.

It's a phase of the conference over configuration paradigm that Django is phase of, and it permits you to make use of the options carried out by using world-class professionals. Django batteries span a large variety of subjects that include:

Authentication with auth package
Admin interfacing with admin package
Session administration with Sessions package
Managing brief or session-based messages with Messages package
Generating Google sitemap XML with Sitemaps package
Postgres exclusive points with Postgres Package
Hooking into "types" of content material with content material kinds framework

See all Django Batteries/Packages

2. **Python**
Since Django makes use of Python, it leverages some of the repute and electricity of python to its very own benefit. Python is one of the best -if no longer the easiest- programming language to examine for beginners, and it's additionally pretty famous in introductory laptop science guides round the world. The 2017 Stackoverflow Developers Survey published that Python is now greater frequent than PHP and Python jobs pay higher than C# and C++.

3. **Community**
Django's neighborhood is one of the fantastic matters about it, they are beneficial and actively working on making the framework extra beginner-friendly and stabilizing the framework whilst including new features. Django's documentation is pretty thorough and is beneficial as a standalone tutorial, it will assist you wrap your head around a number aspects so you can use it as a important supply of information.

4. **Scalable**
Most developers, when wondering about selecting up a framework diagram for the future in their choice. That's why selecting a scalable framework is pretty fundamental for many, and Django is simply that. It approves you to take a lot of unique moves concerning scalability, such as strolling separate servers for the database, the media, and the utility itself or even use clustering or load-balancing to distribute the software throughout more than one server.

5. **Built-in Admin**
The Django crew was once pretty considerate when they created the framework, and they saved consumer and consumer delight in mind. It's pretty unreasonable to create your very own admin interface at the backend simply to be capable of controlling your facts with primary CRUD operations. That's why Django gives an administrative interface proper out of the field that is each expert and versatile, in accordance to the archives the developer can now increase with the presentation in mind.

I have used Many of Django's features, but the most crucial feature that I have used in my blog module is the Admin interface feature. Initially, during team discussion, our team and I planned that there shouldn't be any login on the blog itself, and the login for the blog editing should be separate. And should have no connection with respect casual users who want to read the blog. The default and powerful admin interface attracted me to use Django for my entire module.

5. Testing

Software Testing is a method to check whether the actual software product matches expected requirements and to ensure that software product is Defect free. It involves execution of software/system components using manual or automated tools to evaluate one or more properties of interest. The purpose of software testing is to identify errors, gaps or missing requirements in contrast to actual requirements.

5.1 TEST CASE :

E-commerce Module :

LOGIN AND SIGNUP :

Test ID	Test Name	Description	Req ID	Procedure	Expected O/P
1.1	To verify whether the project is for ecommerce.	Check the script is for ecommerce.	1	1. Open the web application through the URL. 2. Go to the web application. 3. Access the common features of the website without a login.	1. Main page visibility has to be proper. 2. The URL should be existing and web application common features have to be visible to all users. 3. URL should run as an e-commerce web app.
2.1	Customer login: the users can access and purchase the products.	Users can purchase the products they required	2	1.1.1) login through the login link from the main page. 1.1.2) through the login, users can access the product details and further procedures. 1.1.3) users can add products to the cart and purchase the products added.	Accessibility to all user features such as add items to cart, perform checkout, perform payment.

3.1	Check if new user are able to register themselves	To check if new user are able to register themselves	3	3.1.1) Click on the link for new user registration 3.1.2) Check if the link is loading the new user registration form	The user should be able to register.
3.2	Check for wrong or invalid user credentials.	To check if an invalid input. alert is shown if invalid input is given.	3	3.2.1) check if it displays invalid input alert	Error alert, invalid input text should be displayed
3.3	Check for completion of necessary fields in the registration form upon submission of the form.	Check if all the required fields are filled when submit is clicked.	3	3.3.1) Give empty inputs in the required fields 3.3.2) Check if empty input alert is shown when submit is clicked	Error message should be shown – " Required fields must be filled"

4.1	Check if registered user is able to fill the application form.	Check if a registered user is able to fill the application form.	4	4.1.1) login using the user credentials. 4.1.2) Check if the user is a valid user. 4.1.3) Check if the user is able to fill the application form	1. Login should be successful 2. The User account should open 3. The User should be able to fill the application form link. 4. User input for application should be prompted
4.2	Check for invalid inputs in the application form	Check if invalid inputs are given in the application form	4	4.2.1) Click the application form link 4.2.2) Fill the form 4.2.3) Check if the invalid inputs alert is shown	Invalid input alert is displayed.

4.3	Check if the registered user is trying to register again	To check whether the registered user is registering once again	4	4.3.1) Click the application form 4.3.2) Fill the form 4..3) Check if the invalid inputs alert is shown	Alert message will be displayed – "The email id already exists"

Logout :

Test ID	Test Name	Description	Req ID	Procedure	Expected Output
5.1	To verify that the user successfully logs out.	User was successfully logged out.	5	1) User logins in. 2)User clicks the logout button .	1)User was successfully logged out from the site.
5.2	To verify that the user was unable to log out.	User wasn't successfully logged out.	5	1)User doesn't login in.	1.User was not able to logout.
5.3	To verify that the user was unable to log out.	User wasn't successfully logged out.	5	1)User logins in. 2)User doesn't click the logout button.	1.User was not able to logout.

Home Page :

Test id	Test name	Description	Req ID	Procedure	Expected Output
6.1	Te verify autoscroll	Auto scroll of Banner images works perfectly	6	1. Visit home page of ecommerce 2. See the banner image carousel	Banners images scrolls automatically .
6.2	Banner image scroll interval	To see at what time interval will the image be refreshed	6	3. page of ecommerce See the banner image carousel for next image to be displayed	Banners images scrolls automatically

6.3	Is the carousel click-able ?	When we click on carousel will it moves to left or right	6	Images slides to next images when we click on slider buttons on carouse	it successfully takes you to the right page and lest page [images]

PRODUCT SEARCH :

Test ID	Test Scenario	Test Case	req id	Test Step	Expected Result
7.1	Verify the product search functionality	Verify that the search field accepts alphabets, numbers or symbols.	7	Open browser Open url Click on the search field.	Browser should be opened Home page should be displayed Ecommerce page should be opened Search field should accept alphabets, numbers or symbols.
7.2	Verify the product search functionality	Verify that after entering search text and clicking on search icon, the search should be performed.	7	Open browser Open url Enter search text in the search field and click on the search icon.	Browser should be opened Ecommerce website should be opened Search should be performed according to search text provided by the user.

7.3	Verify the product search functionality	Verify that the search results should be as per the search query.	7	Open browser Open url Enter search text in the search field and click on the search icon.	Browser should be opened Ecommerce website should be opened Search should be performed according to search text provided by the user.
7.4	Verify the product search functionality	Verify that user should be able to search based on product name	7	Open browser Open url Enter search text in the search field and click on the search icon.	Browser should be opened Ecommerce website should be opened Users should be able to perform searches based on product name.
7.5	Verify the product search functionality	Verify that the number of search results displayed on one page.	7	Open browser Open url Enter search text in the search field and click on the search icon.	Browser should be opened Ecommerce website should be opened Search should be performed according to the search text provided and a specific number of results should be displayed on one page.

7.6	Verify the product search functionality	Verify that there should be a navigation button(Next and Previous) for navigation to pages.	7	Open browser Open url Enter search text in the search field and click on the search icon.	Browser should be opened Ecommerce website should be opened Search should be performed according to text provided by the user and the navigation button should be present on search result page.

CATEGORY :

Test id	Test name	Description	Req ID	Procedure	Expected Output
8.1	Verify product category functionality	The system should display corresponding category products when user clicks on that category	8	1. go to e-commerce product list page 2. Click on different category button	The system should be able to filter and display only the correct category item as specified by the user . display all products under that category
8.2	Verify product category functionality. Negative case	The system should not display other category product when user click on some other category	8	3. go to e-commerce product list page 4. Click on different category button	The system should not display some other category of product when he wanted particular category . The system should display an empty screen

PRODUCT LISTING / PAGINATION :

Test id	Test name	Description	Req ID	Procedure	Expected Output
9.1	Check the product listing page	The system displays all products present in website as cards which user can click and view its details	9	1. go to the e-commerce product list page. 2. Click any product category 3. Alter the no of items per page 4. Check the pagination	1. Product list pages is opened 2. All card are clearly visible 3. All details in card are displayed properly 4. Sorting works properly. 5. Pagination works properly 6. When clicked on individual card it should lead to its Single product display page

INDIVIDUAL PRODUCT :

Test ID	Test Scenario	description	req id	Test Step	Expected Result
10.1	Verify the details on Product Specification page	Verify that images of products are displayed correctly.	10	Open browser Open url Click on a product displayed on the home page.	Browser should be opened Ecommerce website should be opened the images of the product should be displayed correctly.
10.2	Verify the details on Product Specification page	Verify that the price of the product is displayed.	10	Open browser Open url Click on a product displayed on the home page.	Browser should be opened Ecommerce website should be opened the images of the product should be displayed correctly.
10.3	Verify the details on Product Specification page	Verify that product specifications are displayed.	10	Open browser Open url Click on a product displayed on the home page.	Browser should be opened Ecommerce website should be opened Product specifications should be displayed.
10.4	Verify the details on Product Specification page	Verify that information about IN-Stock/Out-Stock are displayed.	10	Open browser Open url Click on a product displayed on the home page.	Browser should be opened Ecommerce website should be opened Stock information should be displayed.

10.5	Verify the details on Product Specification page	Verify that all the variations of the product are displayed.	10	Open browser Open url Click on any product displayed on home page Click on a product displayed on the home page.	Browser should be opened Ecommerce website should be opened Users should be redirected to the product specification page. All the variations of the product should be displayed.
10.6	Verify the details on Product Specification page	Verify that payment options are mentioned on the product page.	10	Open browser Open url Click on the user name displayed on the home page. Click on a product displayed on the home page.	Ecommerce website should be opened user should be able to input username and password The payment options should be displayed.
10.7	Verify the details on Product Specification page	Verify that product suggestions related to the product should be displayed.	10	Open browser Open url Click on a product displayed on the home page.	Browser should be opened Ecommerce website should be opened The product suggestions should be displayed.

CART :

Test ID	Test Name	Description	req id.	Test Step	Expected Result
11.1	Verify the details on Cart Page	Verify that when a user clicks on add to cart, the product should be added to cart.	11	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on add to cart for the product.	Browser should be opened Ecommerce website should be opened user should be able to input username and password Home page should be displayed after login The product page should be displayed. The product should be added to cart.
11.2	Verify the details on Cart Page	Verify that the user should be able to continue shopping after adding items to cart.	11	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on add to cart for the product.	Browser should be opened Ecommerce website should be opened user should be able to input username and password Home page should be displayed after login and user name should be displayed on home page The product page should be displayed. The product should be added to cart and user can

					continue shopping.
11.3	Verify the details on Cart Page	Verify that item quantity should be increased if user adds same item in cart again.	11	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on add to cart for the product. Click on add to cart again for the same product.	Browser should be opened Ecommerce website should be opened user should be able to input username and password Home page should be displayed after login and user name should be displayed on home page The product page should be displayed. The product should be added to cart. The item quantity should be increased.
11.4	Verify the details on Cart Page	Verify that the total amount of all items should be displayed to the user.	11	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on add to cart for the product. Click on the go	Browser should be opened Ecommerce website should be opened user should be able to input username and password Users should be logged in and Search functionality is present on the home page. The product page should be displayed. The product should be added to cart. The total amount of all items in the cart should be

				to cart button.	displayed.
11.5	Verify the details on Cart Page	Verity that the amount displayed to the user should include the taxes and shipping charges as per location.	11	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on add to cart for the product. Click on the go to cart button.	Browser should be opened Ecommerce website should be opened user should be able to input username and password Users should be logged in and the home page should be the same on different browsers. The product page should be displayed. The product should be added to cart. The total amount should include taxes and shipping charges.
11.6	Verify the details on Cart Page	Verify that the user should not be able to add items in cart beyond a certain limit.	11	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on add to cart for the product many	Browser should be opened Ecommerce website should be opened user should be able to input username and password Users should be logged in and alignment of products on the home page should be proper. The product page should be displayed. The user should not be

				times.	allowed to add items to cart beyond a certain limit.
11.7	Verify the details on Cart Page	Verify that when the user clicks on remove from cart button the item should be removed from cart.	11	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on any product displayed on home page Click on add to cart for the product. Click on remove from cart button.	Browser should be opened Ecommerce website should be opened user should be able to input username and password Home page should be displayed after login and user name should be displayed on home page Users should be redirected to the product specification page. The product page should be displayed. The product should be added to cart. The item should be removed from cart.
11.8	Verify the details on Cart Page	Verify that items in the cart should be present if the user logs out and logs in again.	11	Open browser Open url Enter username and password Click on login button Click on the user name displayed on the home page. Click on any product	Browser should be opened Ecommerce website should be opened user should be able to input username and password Home page should be displayed after login and user name should be displayed on home page User profile should be displayed.

				displayed on home page Click on add to cart for the product. Click on Logout button Login again with same userid password	The product page should be displayed. The product should be added to cart. User is logged out. The user should be logged in and the items should be present in the cart.

CHECKOUTS AND PAYMENT PAGE :

Test ID	Test Scenario	Test Case	req id.	Test Step	Expected Result
12.1	Verify the details on Checkout,Payments Page	Verify that payments options applicable for the order should be displayed at checkout.	12	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on add to cart for the product. Click on Checkout button.	Browser should be opened Ecommerce website should be opened user should be able to input username and password Home page should be displayed after login The product page should be displayed. The product should be added to cart. The checkout page should be displayed with payments options.

12.2	Verify the details on Checkout,Payments Page	Verify that delivery details of items should be displayed at checkout.	12	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on add to cart for the product. Click on Checkout button.	Browser should be opened Ecommerce website should be opened user should be able to input username and password Home page should be displayed after login and user name should be displayed on home page The product page should be displayed. The product should be added to cart. The checkout page should be displayed with delivery details.
12.3	Verify the details on Checkout,Payments Page	Verify that user should get order details by message or email.	12	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on add to cart for the product. Click on Checkout button. Make payment for	Browser should be opened Ecommerce website should be opened user should be able to input username and password Home page should be displayed after login and user name should be displayed on home page The product page should be displayed. The product should be added to cart. The checkout page should be displayed with payments

				the order.	options. User should get order details by message or email.
12.4	Verify the details on Checkout,Payments Page	Verify that user should be directed to home page after checkout.	12	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on add to cart for the product. Click on Checkout button. Make payment for the order.	Browser should be opened Ecommerce website should be opened user should be able to input username and password User should be logged in and Search functionality is present on home page. The product page should be displayed. The product should be added to cart. The checkout page should be displayed with payments options. Ther order should be confirmed and user should be directed to home page.

12.5	Verify the details on Checkout,Payments Page	Verify that user should be displayed payment options such as Credit Card, Debit Card, Net Banking etc.	12	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on add to cart for the product. Click on Checkout button.	Browser should be opened Ecommerce website should be opened user should be able to input username and password User should be logged in and home page should be same on different browsers. The product page should be displayed. The product should be added to cart. The checkout page should be displayed with payments options such as debit card, credit card, netbanking etc.
12.6	Verify the details on Checkout,Payments Page	Verify that if user is not registered then payment should be done as Guest user.	12	Open browser Open url Click on any product displayed on home page Click on add to cart for the product. Click on Checkout button. Make payment for the order.	Browser should be opened Ecommerce website should be opened The product page should be displayed. The product should be added to cart. The checkout page should be displayed with payments options. The payment should be done as guest user.

12.7	Verify the details on Checkout,Payments Page	Verify that session should be timed out if payment is not done for a certain time.	12	Open browser Open url Enter username and password Click on login button Click on any product displayed on home page Click on any product displayed on home page Click on add to cart for the product. Click on Checkout button. Select payment method and click on pay. Stay on payment page for long time wtihout any activity.	Browser should be opened Ecommerce website should be opened user should be able to input username and password Home page should be displayed after login and user name should be displayed on home page User should be redirected to product specification page. The product page should be displayed. The product should be added to cart. The checkout page should be displayed with payments options. Payment page should be displayed. The payment session should be timedout.

12.8	Verify the details on Checkout,Payments Page	Verify that user details should be displayed on payment page for registered customers.	12	Open browser Open url Enter username and password Click on login button Click on user name displayed on home page. Click on any product displayed on home page Click on add to cart for the product. Click on Checkout button.	Browser should be opened Ecommerce website should be opened user should be able to input username and password Home page should be displayed after login and user name should be displayed on home page User profile should be displayed. The product page should be displayed. The product should be added to cart. The checkout page should be displayed with user details.

CROP SUGGESTION MODULE

Test Case ID	Test Case Name	Test Case Description	Requirement ID	Execution Steps	Expected result
13.1	Verify 'know your crop' functionality	Verify that the input radio buttons accepts the user inputs properly	13	Open browser Go to farmguide Navigate to Know Your crop Click on Find Now Give the inputs	Browser should open Homepage should be displayed Know your crop page should load Page should accept the inputs from the user
13.2	Verify 'know your crop' functionality	Verify the user should be able to get the output based on their inputs	13	Open browser Go to farmguide Navigate to Know Your crop Click on Find Now Give the inputs Click on search button	Browser should open Homepage should be displayed Know your crop page should load Page should accept the inputs from the user And gives the output based on the inputs

13.3	Verify 'know your crop' functionality	Verify the user is getting appropriate message if the system is unable to find the output	13	Open browser Go to farmguide Navigate to Know Your crop Click on Find Now Give the inputs Click on search button	Browser should open Homepage should be displayed Know your crop page should load Page should accept the inputs from the user System gives appropriate message if its unable to find the result

BLOG MODULE :

Test Case ID	Test Case Name	Test Case Description	Requirement ID	Execution Steps	Expected result
14.1	Home page	View all the blogs in a scrollable manner	14.0	Open browser Go to farmguide Navigate to Blog Blog page will be displayed	Browser should open Homepage should be displayed Blog page should load Page should have blogs for the user tp read
14.2	About Button	Should display a short description of the blog in general.	14.1	Open browser Go to farmguide Navigate to Blog Click on About	Browser should open Homepage should be displayed Blog page should load Click on About Page should have short description for the user to read
14.3	Search button	Verify the user is getting appropriate message to be searched if the system is unable to find the output It prints out "Search results **Query "weeks "** No result for the given query."	14.2	Open browser Go to farmguide Navigate to Blog Click on search bar Enter key words to be searched in the blog	Browser should open Homepage should be displayed Blog page should load Click on search bar Users should be able to type keywords to be searched within the blog if the key word is not found there should be an error message. IF found blog containing key word should be displayed

DONATION MODULE:

Test Case ID	Test Case Name	Test Case Description	Requirement ID	Execution Steps	Expected result
15.1	Verify 'Donation' functionality	Verify that the users are able to scan the QR code to donate	15	Open browser Go to farmguide Navigate to Donation Scan the QR code	Browser should open Homepage should be displayed Know your donation page should load User scans the QR code and donated successfully
15.2	Verify 'Donation' functionality	Verify that the users are able to fill the form able he/she donated	15	Go to farmguide Navigate to Donation User is able to give the inputs properly Click on 'submit' button	Browser should open Homepage should be displayed Know your crop page should load Page should accept the inputs from the user And gives the acknowledgement message
15.3	Verify 'Donation' functionality	Verify that the users are filling all the mandatory fields in the form	15	Open browser Go to farmguide Navigate to Know Your crop Click on Find Now Give the inputs Click on 'submit' button	Browser should open Homepage should be displayed Know your crop page should load Page should accept the inputs from the user System gives appropriate message if user leave any fields empty

5.2 MODULE INTEGRATION PLAN

INTEGRATION TESTING is defined as a type of testing where software modules are integrated logically and tested as a group. A typical software project consists of multiple software modules, coded by different programmers. The purpose of this level of testing is to expose defects in the interaction between these software modules when they are integrated.Integration Testing focuses on checking data communication amongst these modules.

PLAN :

Our project is divide into 4 different modules namely : E commerce module , Crop Suggestion.Module ,Donation Module . Each of these 4 modules is developed and runs on different framework and architecture .

E commerce uses JAM STACK [JavaScript , API , Markup] like - Graphql , Strapi Apollo client Framework for backend and micro-services. React Js , bootStrap , Html5 , Css for frontend development

Blogging module uses Django framework for complete backend and html5 , css bootstarp for frontend development .

When it comes to Donation and Crop Suggestion module , for frontend we used html5 css3 and bootstrap along with javascript for animation . For backend we used the legacy MYSQL .

All the team members divided ourself and started developing modules using these frameworks . we all know that all we cant integrate django along with strapi , and graphql with MYSQL .So we decided to host all our Module files along with database into FIREBASE and then link each modules INDEX pages for redirecting . In this way we achieve Integration of modules . But due to time constraint we couldn't achieve the above methodology.So what we did is , we gathered all our different modules into one system. For mysql we started its server using xamp . for django too we started its services and server from django terminal . for Ecommerce we started its server from Strapi node which gives admin panel of Strapi and for its react we started using node terminal.Now for redirecting we have to copy each modules URL address and paste it in the module at its endpoints or wherever redirecting of different modules is required.In this was we achieved complete Project Integration.So now whenever user clicks on bloggig section from home page , it redirects to blogging module .and when we click home page in blogging it aganii goes to Home page of project . this is the same case with e commerce module too . each redirecting tab is given its source url endpoints.

NOTE: to achieve this type of integration , all corresponding server has to be compulsorily started and all modules has to be locally present in one system.

5.3 TEST RESULT

E-Commerce Module

Login and signup

Test ID	Test Name	Description	Req ID	Procedure	Expected O/P	result
1.1	To verify whether the project is for ecommerce.	Check the script is for ecommerce.	1	1. Open the web application through the URL.	1. Main page visibility has to be proper.	pass
				2. Go to the web application.	2. The URL should be existing and web application common features have to be visible to all users.	
				3. Access the common features of the website without a login.	3. URL should run as an e-commerce web app.	
2.1	Customer login: the users can access and purchase the products.	Users can purchase the products they required	2	1.1.1) login through the login link from the main page.	Accessibility to all user features such as add items to cart, perform checkout, perform payment.	pass
				1.1.2) through the login, users can access the product details and further procedures.		

				1.1.3) users can add products to the cart and purchase the products added.		
3.1	Check if new user are able to register themselves	To check if new user are able to register themselves	3	3.1.1) Click on the link for new user registration 3.1.2) Check if the link is loading the new user registration form	The user should be able to register.	pass
3.2	Check for wrong or invalid user credentials.	To check if an invalid input. alert is shown if invalid input is given.	3	3.2.1) check if it displays invalid input alert	Error alert, invalid input text should be displayed	pass
3.3	Check for completion of necessary fields in the registration form upon submission of the form.	Check if all the required fields are filled when submit is clicked.	3	3.3.1) Give empty inputs in the required fields 3.3.2) Check if empty input alert is shown when submit is clicked	Error message should be shown – " Required fields must be filled"	pass
4.1	Check if registered user is able to fill the	Check if a registered user is able to fill the	4	4.1.1) login using the user credentials.	1. Login should be successful	pass

	application form.	application form.		4.1.2) Check if the user is a valid user.	2. The User account should open	
				4.1.3) Check if the user is able to fill the application form	3. The User should be able to fill the application form link.	
					4. User input for application should be prompted	
4.2	Check for invalid	Check if invalid	4	4.2.1) Click the application form link	Invalid input alert is displayed.	pass
	inputs in the	inputs are given in the application form		4.2.2) Fill the form		
	application form			4.2.3) Check if the invalid inputs alert is shown		
4.3	Check if the registered user is trying to register again	To check whether the registered user is registering once again	4	4.3.1) Click the application form	Alert message will be displayed – "The email id already exists"	pass
				4.3.2) Fill the form		
				3. .3) 4. Check if the invalid inputs alert is shown		

LOGOUT

Test ID	Test Name	Description	Req ID	Procedure	Expected Output	Result
5.1	To verify that the user successfully logs out.	User was successfully logged out.	5	1) User logins in. 2)User clicks the logout button .	1)User was successfully logged out from the site.	pass
5.2	To verify that the user was unable to log out.	User wasn't successfully logged out.	5	1)User doesn't login in.	1.User was not able to logout.	pass
5.3	To verify that the user was unable to log out.	User wasn't successfully logged out.	5	1)User logins in. 2)User doesn't click the logout button.	1.User was not able to logout.	pass

HOME PAGE

Test id	Test name	Description	Req ID	Procedure	Expected Output	Result
6.1	Te verify autoscroll	Auto scroll of Banner images works perfectly	6	1. Visit home page of ecommerce 2. See the banner image carousel	Banners images scrolls automatically .	pass pass
6.2	Banner image scroll interval	To see at what time interval will the image be refreshed	6	3. page of ecommerce See the banner image carousel for next image to be displayed	Banners images scrolls automatically	pass pass
6.3	Is the carousel click-able ?	When we click on carousel will it moves to left or right	6	Images slides to next images when we click on slider buttons on carouse	it successfully takes you to the right page and lest page [images]	pass

PRODUCT SEARCH

Test ID	Test Scenario	Test Case	req id	Test Step	Expected Result	result
7.1	Verify the product search functionality	Verify that the search field accepts alphabets, numbers or symbols.	7	Open browser	Browser should be opened	pass
				Open url	Home page should be displayed	
				Click on the search field.	Ecommerce page should be opened	
					Search field should accept alphabets, numbers or symbols.	
7.2	Verify the product search functionality	Verify that after entering search text and clicking on search icon, the search should be performed.	7	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Enter search text in the search field and click on the search icon.	Search should be performed according to search text provided by the user.	

7.3	Verify the product search functionality	Verify that the search results should be as per the search query.	7	Open browser Open url Enter search text in the search field and click on the search icon.	Browser should be opened Ecommerce website should be opened Search should be performed according to search text provided by the user.	pass
7.4	Verify the product search functionality	Verify that user should be able to search based on product name	7	Open browser Open url Enter search text in the search field and click on the search icon.	Browser should be opened Ecommerce website should be opened Users should be able to perform searches based on product name.	pass
7.5	Verify the product search functionality	Verify that the number of search	7	Open browser	Browser should be opened	pass

		results displayed on one page.		Open url Enter search text in the search field and click on the search icon.	Ecommerce website should be opened Search should be performed according to the search text provided and a specific number of results should be displayed on one page.	
7.6	Verify the product search functionality	Verify that there should be a navigation button(Next and Previous) for navigation to pages.	7	Open browser Open url	Browser should be opened Ecommerce website should be opened	pass

				Enter search text in the search field and click on the search icon.	Search should be performed according to text provided by the user and the navigation button should be present on search result page.	

CATEGORY

Test id	Test name	Description	Req ID	Procedure	Expected Output	result
8.1	Verify product category functionality	The system should display corresponding category products when user clicks on that category	8	1. go to e-commerce product list page 2. Click on different category button	The system should be able to filter and display only the correct category item as specified by the user . display all products under that category	pass

8.2	Verify product category functionality. Negative case	The system should not display other category product when user click on some other category	8	3. go to e-commerce product list page 4. Click on different category button	The system should not display some other category of product when he wanted particular category . The system should display an empty screen	pass

PODUCT LISTING / PAGINATION

Test id	Test name	Description	Procedure	Expected Output	result
9.1	Check the product listing page	The system displays all products present in website as cards which user can click and view its details	1. go to the e-commerce product list page. 2. Click any product category 3. Alter the no of items per page 4. Check the pagination	1. Product list pages is opened 2. All card are clearly visible 3. All details in card are displayed properly 4. Sorting works properly.	pass

				5. Pagination works properly	
				6. When clicked on individual card it should lead to its Single product display page	

INDIVIDUAL PRODUCT :

Test ID	Test Scenario	description	req id	Test Step	Expected Result	result
10.1	Verify the details on Product Specification page	Verify that images of products are displayed correctly.	10	Open browser Open url Click on a product displayed on the home page.	Browser should be opened Ecommerce website should be opened the images of the product should be displayed correctly.	pass
10.2	Verify the details on Product Specification page	Verify that the price of the product is displayed.	10	Open browser Open url	Browser should be opened Ecommerce website should be opened	pass

				Click on a product displayed on the home page.	the images of the product should be displayed correctly.	
10.3	Verify the details on Product Specification page	Verify that product specifications are displayed.	10	Open browser Open url Click on a product displayed on the home page.	Browser should be opened Ecommerce website should be opened Product specifications should be displayed.	pass
10.4	Verify the details on Product Specification page	Verify that information about IN-Stock/Out-Stock are displayed.	10	Open browser Open url Click on a product displayed on the home page.	Browser should be opened Ecommerce website should be opened Stock information should be displayed.	pass
10.5	Verify the details on Product Specification page	Verify that all the variations of the product are displayed.	10	Open browser Open url	Browser should be opened Ecommerce website should be opened	pass

				Click on any product displayed on home page Click on a product displayed on the home page.	Users should be redirected to the product specification page. All the variations of the product should be displayed.	
10.6	Verify the details on Product Specification page	Verify that payment options are mentioned on the product page.	10	Open browser Open url Click on the user name displayed on the home page. Click on a product displayed on the home page.	Ecommerce website should be opened user should be able to input username and password The payment options should be displayed.	pass
10.7	Verify the details on Product Specification	Verify that product suggestions	10	Open browser	Browser should be opened	pass

	page	related to the product should be displayed.		Open url Click on a product displayed on the home page.	Ecommerce website should be opened The product suggestions should be displayed.	

CART :

Test ID	Test Name	Description	req id.	Test Step	Expected Result	result
11.1	Verify the details on Cart Page	Verify that when a user clicks on add to cart, the product should be added to cart.	11	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Home page should be displayed after login	
				Click on any product displayed on home page	The product page should be displayed.	

				Click on add to cart for the product.	The product should be added to cart.	
11.2	Verify the details on Cart Page	Verify that the user should be able to continue shopping after adding items to cart.	11	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Home page should be displayed after login and user name should be displayed on home page	
				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart and user can continue shopping.	

11.3	Verify the details on Cart Page	Verify that item quantity should be increased if user adds same item in cart again.	11	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Home page should be displayed after login and user name should be displayed on home page	
				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart.	
				Click on add to cart again for the same product.	The item quantity should be increased.	

11.4	Verify the details on Cart Page	Verify that the total amount of all items should be displayed to the user.	11	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Users should be logged in and Search functionality is present on the home page.	
				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart.	
				Click on the go to cart button.	The total amount of all items in the cart should be displayed.	

11.5	Verify the details on Cart Page	Verity that the amount displayed to the user should include the taxes and shipping charges as per location.	11	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Users should be logged in and the home page should be the same on different browsers.	
				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart.	
				Click on the go to cart button.	The total amount should include taxes and shipping charges.	

11.6	Verify the details on Cart Page	Verify that the user should not be able to add items in cart beyond a certain limit.	11	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Users should be logged in and alignment of products on the home page should be proper.	
				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product many times.	The user should not be allowed to add items to cart beyond a certain limit.	

11.7	Verify the details on Cart Page	Verify that when the user clicks on remove from cart button the item should be removed from cart.	11	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Home page should be displayed after login and user name should be displayed on home page	
				Click on any product displayed on home page	Users should be redirected to the product specification page.	
				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart.	

				Click on remove from cart button.	The item should be removed from cart.	
11.8	Verify the details on Cart Page	Verify that items in the cart should be present if the user logs out and logs in again.	11	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Home page should be displayed after login and user name should be displayed on home page	
				Click on the user name displayed on the home page.	User profile should be displayed.	
				Click on any product displayed on home page	The product page should be displayed.	

				Click on add to cart for the product.	The product should be added to cart.	
				Click on Logout button	User is logged out.	
				Login again with same userid password	The user should be logged in and the items should be present in the cart.	

CHECKOUTS AND PAYMENT PAGE :

Test ID	Test Scenario	Test Case	req id.	Test Step	Expected Result	result
12.1	Verify the details on Checkout,Payments Page	Verify that payments options applicable for the order should be displayed at checkout.	12	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Home page should be displayed after login	

				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart.	
				Click on Checkout button.	The checkout page should be displayed with payments options.	
12.2	Verify the details on Checkout,Payments Page	Verify that delivery details of items should be displayed at checkout.	12	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Home page should be displayed after login and user name should be displayed on home page	

				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart.	
				Click on Checkout button.	The checkout page should be displayed with delivery details.	
12.3	Verify the details on Checkout,Payments Page	Verify that user should get order details by message or email.	12	Open browser	Browser should be opened	fail
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Home page should be displayed after login and user name should be displayed on home page	

				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart.	
				Click on Checkout button.	The checkout page should be displayed with payments options.	
				Make payment for the order.	User should get order details by message or email.	
12.4	Verify the details on Checkout,Payments Page	Verify that user should be directed to home page after checkout.	12	Open browser	Browser should be opened	fail
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	

				Click on login button	User should be logged in and Search functionality is present on home page.	
				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart.	
				Click on Checkout button.	The checkout page should be displayed with payments options.	
				Make payment for the order.	Ther order should be confirmed and user should be directed to home page.	
12.5	Verify the details on Checkout,Pay	Verify that user should be displayed payment options such as Credit Card, Debit	12	Open browser	Browser should be opened	fail

	ments Page	Card, Net Banking etc.		Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	User should be logged in and home page should be same on different browsers.	
				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart.	

				Click on Checkout button.	The checkout page should be displayed with payments options such as debit card, credit card, netbanking etc.	
12.6	Verify the details on Checkout,Payments Page	Verify that if user is not registered then payment should be done as Guest user.	12	Open browser	Browser should be opened	pass
				Open url	Ecommerce website should be opened	
				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart.	
				Click on Checkout button.	The checkout page should be displayed with payments options.	

				Make payment for the order.	The payment should be done as guest user.	
12.7	Verify the details on Checkout,Payments Page	Verify that session should be timed out if payment is not done for a certain time.	12	Open browser	Browser should be opened	fail
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	
				Click on login button	Home page should be displayed after login and user name should be displayed on home page	
				Click on any product displayed on home page	User should be redirected to product specification page.	
				Click on any product displayed on home page	The product page should be displayed.	

				Click on add to cart for the product.	The product should be added to cart.	
				Click on Checkout button.	The checkout page should be displayed with payments options.	
				Select payment method and click on pay.	Payment page should be displayed.	
				Stay on payment page for long time wtihout any activity.	The payment session should be timedout.	
12.8	Verify the details on Checkout,Payments Page	Verify that user details should be displayed on payment page for registered customers.	12	Open browser	Browser should be opened	fail
				Open url	Ecommerce website should be opened	
				Enter username and password	user should be able to input username and password	

				Click on login button	Home page should be displayed after login and user name should be displayed on home page	
				Click on user name displayed on home page.	User profile should be displayed.	
				Click on any product displayed on home page	The product page should be displayed.	
				Click on add to cart for the product.	The product should be added to cart.	
				Click on Checkout button.	The checkout page should be displayed with user details.	

CROP SUGGESTION MODULE

Test Case ID	Test Case Name	Test Case Description	Requirement ID	Execution Steps	Expected result	result

13.1	Verify 'know your crop' functionality	Verify that the input radio buttons accepts the user inputs properly	13	Open browser	Browser should open	pass
				Go to farmguide	Homepage should be displayed	
				Navigate to Know Your crop	Know your crop page should load	
				Click on Find Now	Page should accept the inputs from the user	
				Give the inputs		
13.2	Verify 'know your crop' functionality	Verify the user should be able to get the output based on their inputs	13	Open browser	Browser should open	pass
				Go to farmguide	Homepage should be displayed	
				Navigate to Know Your crop	Know your crop page should load	

				Click on Find Now	Page should accept the inputs from the user	
				Give the inputs	And gives the output based on the inputs	
				Click on search button		
13.3	Verify 'know your crop' functionality	Verify the user is getting appropriate message if the system is unable to find the output	13	Open browser	Browser should open	pass
				Go to farmguide	Homepage should be displayed	
				Navigate to Know Your crop	Know your crop page should load	
				Click on Find Now	Page should accept the inputs from the user	

				Give the inputs	System gives appropriate message if its unable to find the result	
				Click on search button		

BLOG MODULE

Test Case ID	Test Case Name	Test Case Description	Requirement ID	Execution Steps	Expected result	result
14.1	Home page	View all the blogs in a scrollable manner	14	Open browser	Browser should open	pass
				Go to farmguide	Homepage should be displayed	
				Navigate to Blog	Blog page should load	
				Blog page will be displayed	Page should have blogs for the user tp read	
14.2	About Button	Should display a short description of the blog in general.	14.1	Open browser	Browser should open	pass

				Go to farmguide	Homepage should be displayed	
				Navigate to Blog	Blog page should load	
				Click on About	Click on About	
					Page should have short description for the user to read	
14.3	Search button	Verify the user is getting appropriate message to be searched if the system is unable to find the output	14.2	Open browser	Browser should open	pass
		It prints out “Search results				
		Query "weeks "		Go to farmguide	Homepage should be displayed	

		No result for the given query.”				
				Navigate to Blog	Blog page should load	
				Click on search bar	Click on search bar	
				Enter key words to be searched in the blog	Users should be able to type keywords to be searched within the blog if the key word is not found there should be an error message. IF found blog containin g key word should be displayed	

DONATION MODULE:

Test Case ID	Test Case Name	Test Case Description	Req uire men t ID	Execution Steps	Expected result	result
15.1	Verify ‘Donation’ functionality	Verify that the users are able to scan the QR code to donate	15	Open browser	Browser should open	pass

				Go to farmguide	Homepage should be displayed	
				Navigate to Donation	Know your donation page should load	
				Scan the QR code	User scans the QR code and donated successfully	
15.2	Verify 'Donation' functionality	Verify that the users are able to fill the form able he/she donated	15	Go to farmguide	Browser should open	pass
				Navigate to Donation	Homepage should be displayed	
				User is able to give the inputs properly	Know your crop page should load	
				Click on 'submit' button	Page should accept the inputs from the user	

					And gives the acknowledgement message	
15.3	Verify 'Donation' functionality	Verify that the users are filling all the mandatory fields in the form	15	Open browser	Browser should open	pass
				Go to farmguide	Homepage should be displayed	
				Navigate to Know Your crop	Know your crop page should load	
				Click on Find Now	Page should accept the inputs from the user	
				Give the inputs	System gives appropriate message if user leave any fields empty	
				Click on 'submit' button		

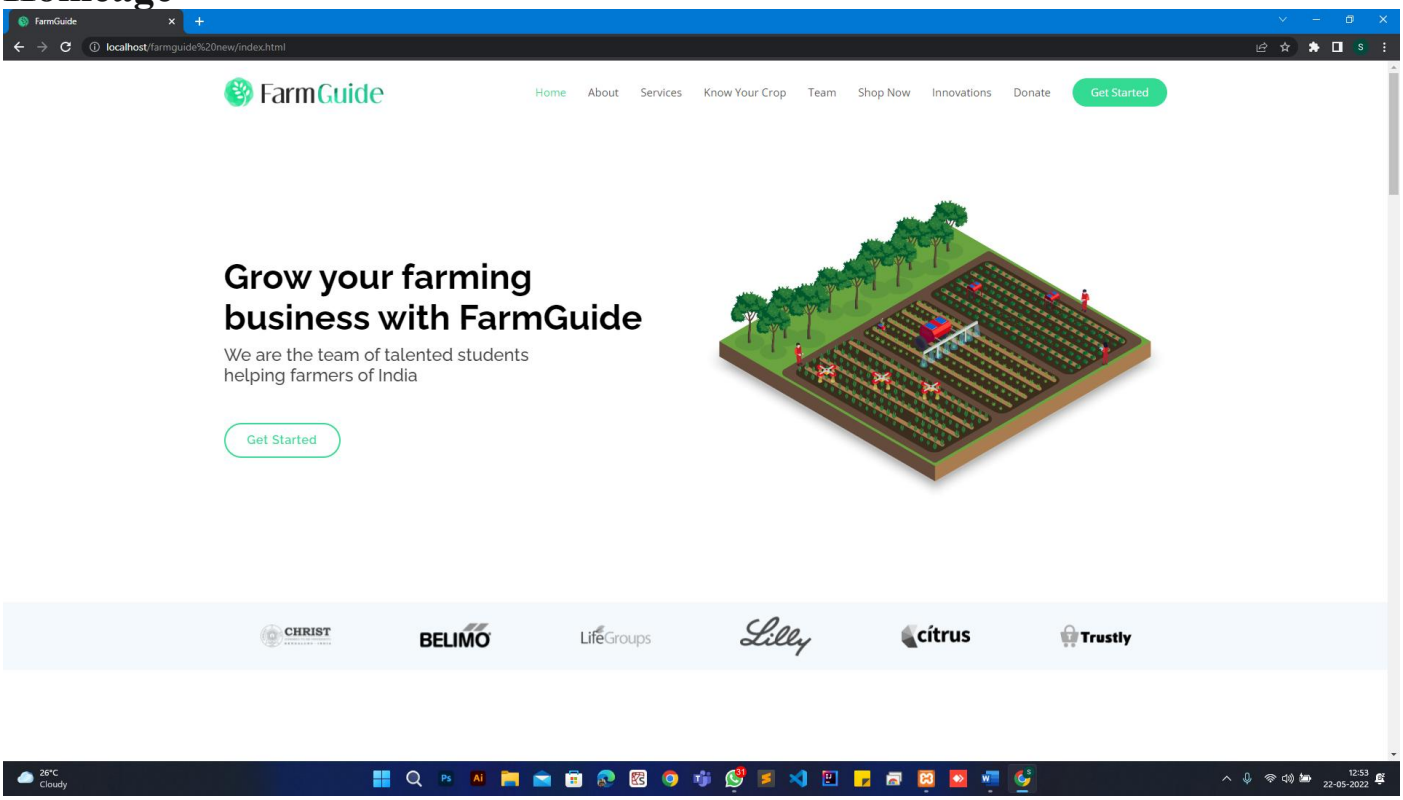
5.4 Defects

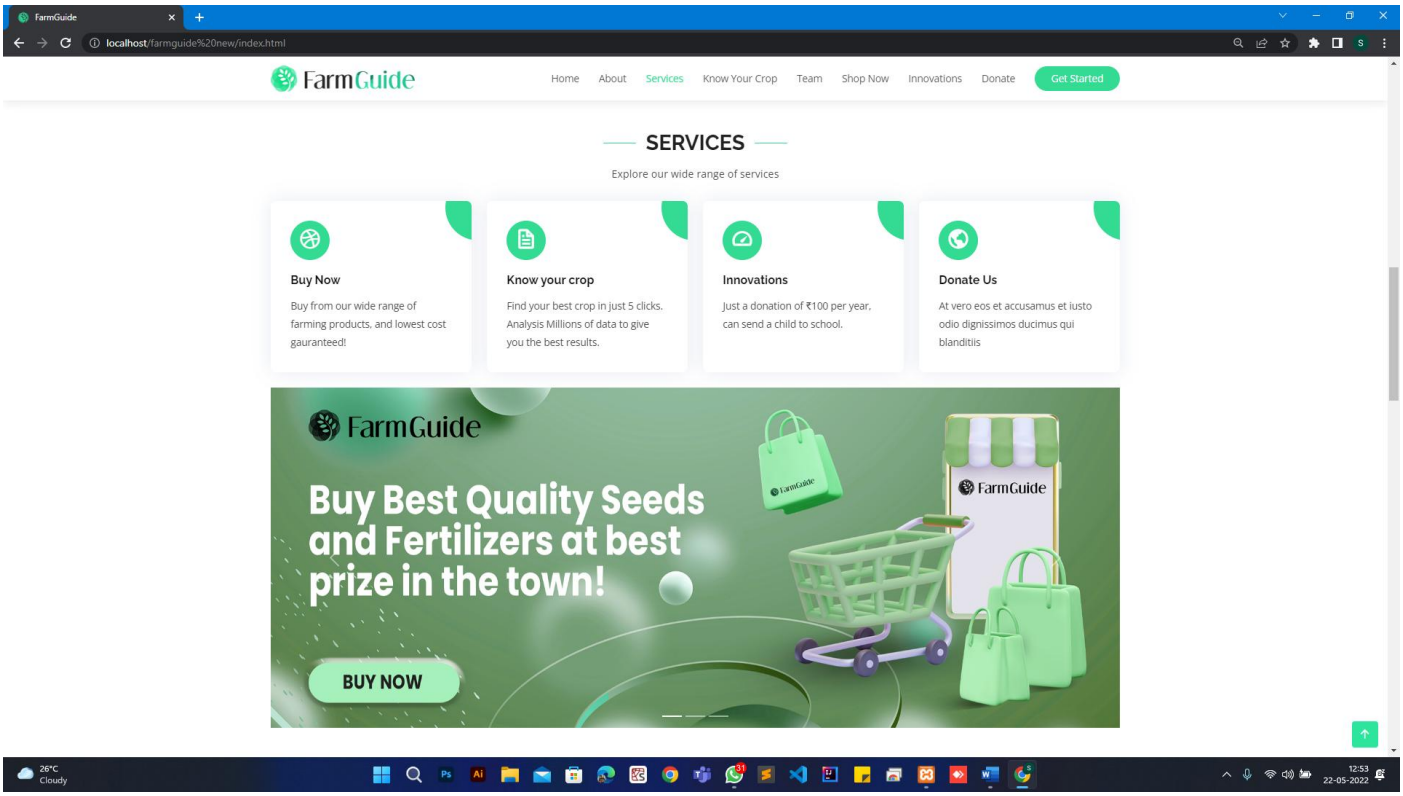
The following are the bugs/defects in our project:

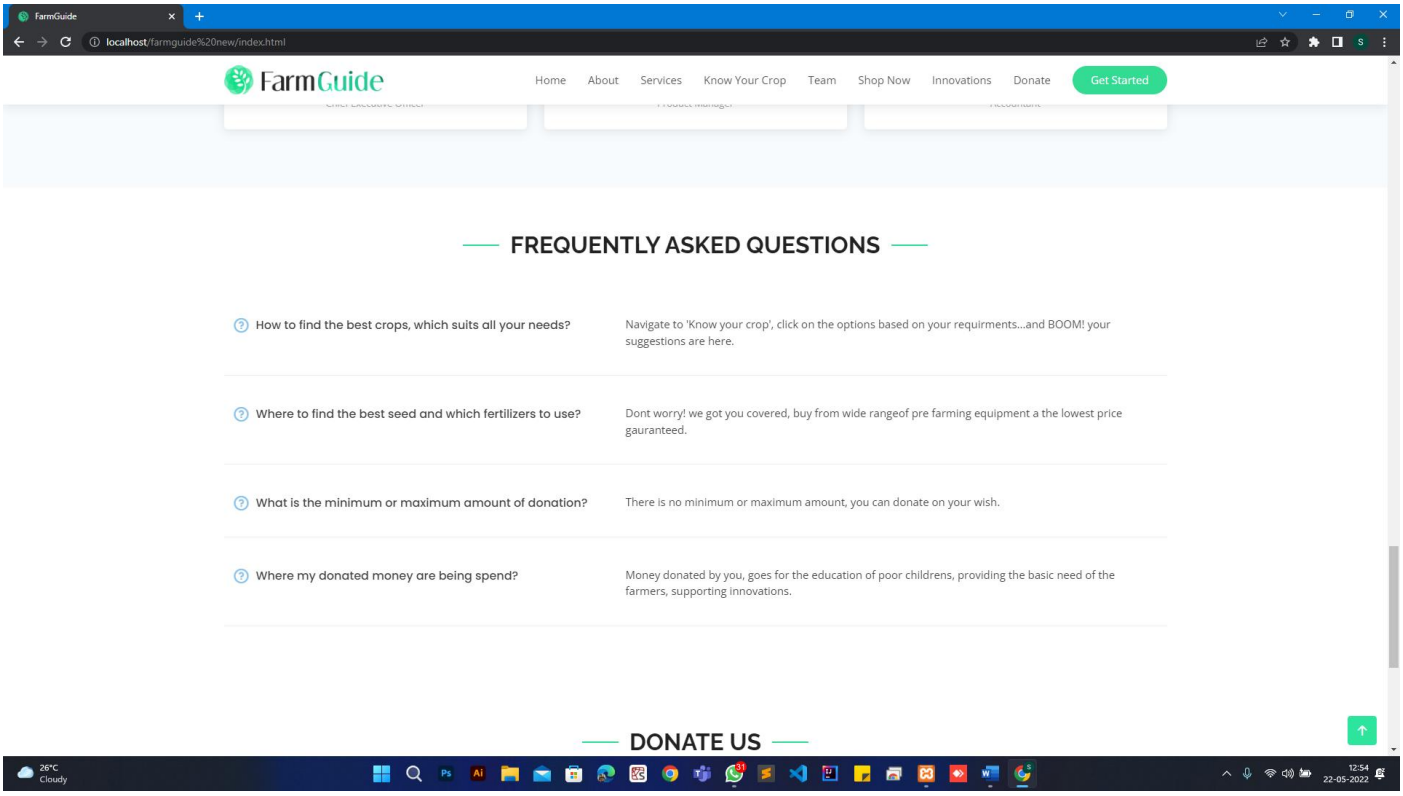
- Payment module is not working
- Orders of user is not generating as it is connected with payment and payment is not working
- Admin cannot see order history as there is no entry made in orders table since order and payment functionality is not working

6.SCREENSHOTS

Homeage







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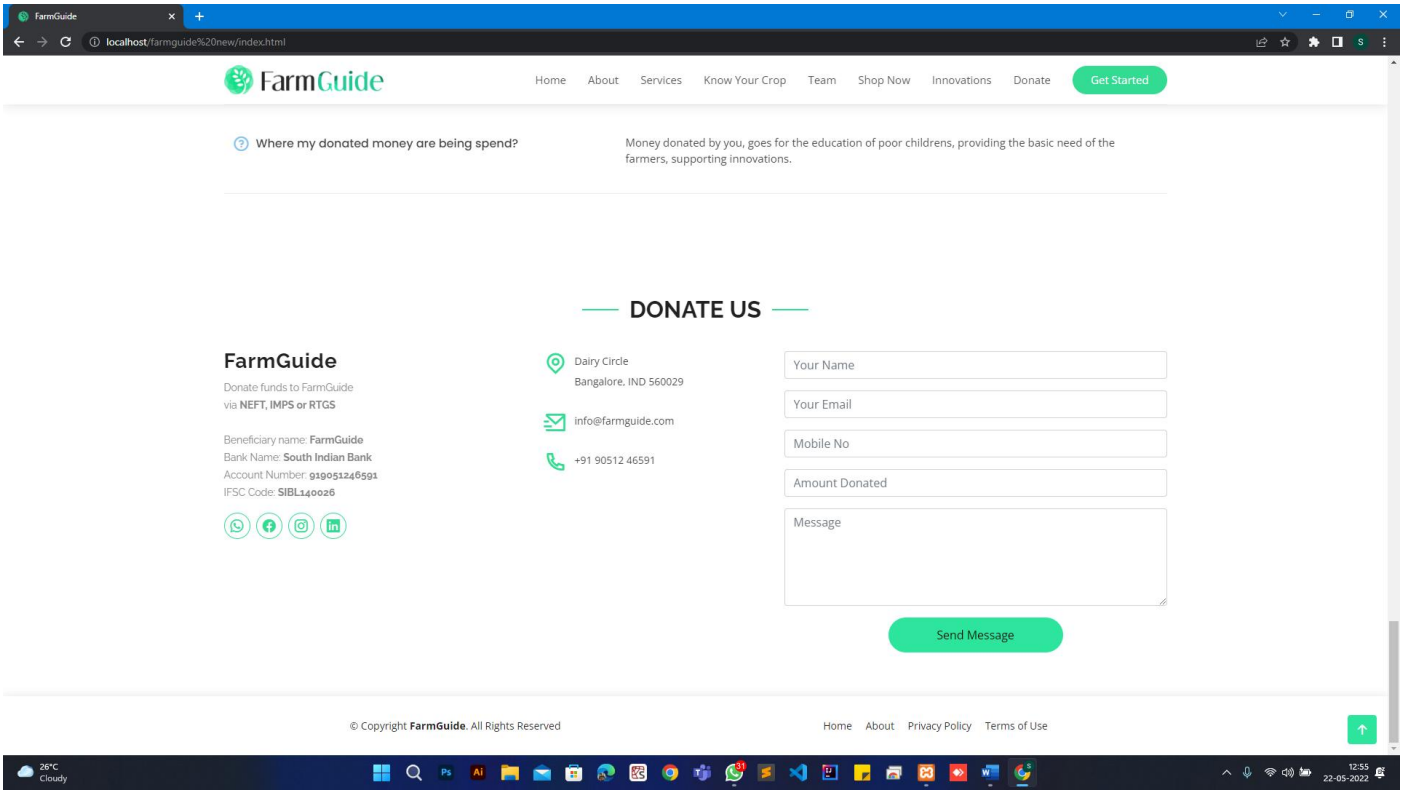
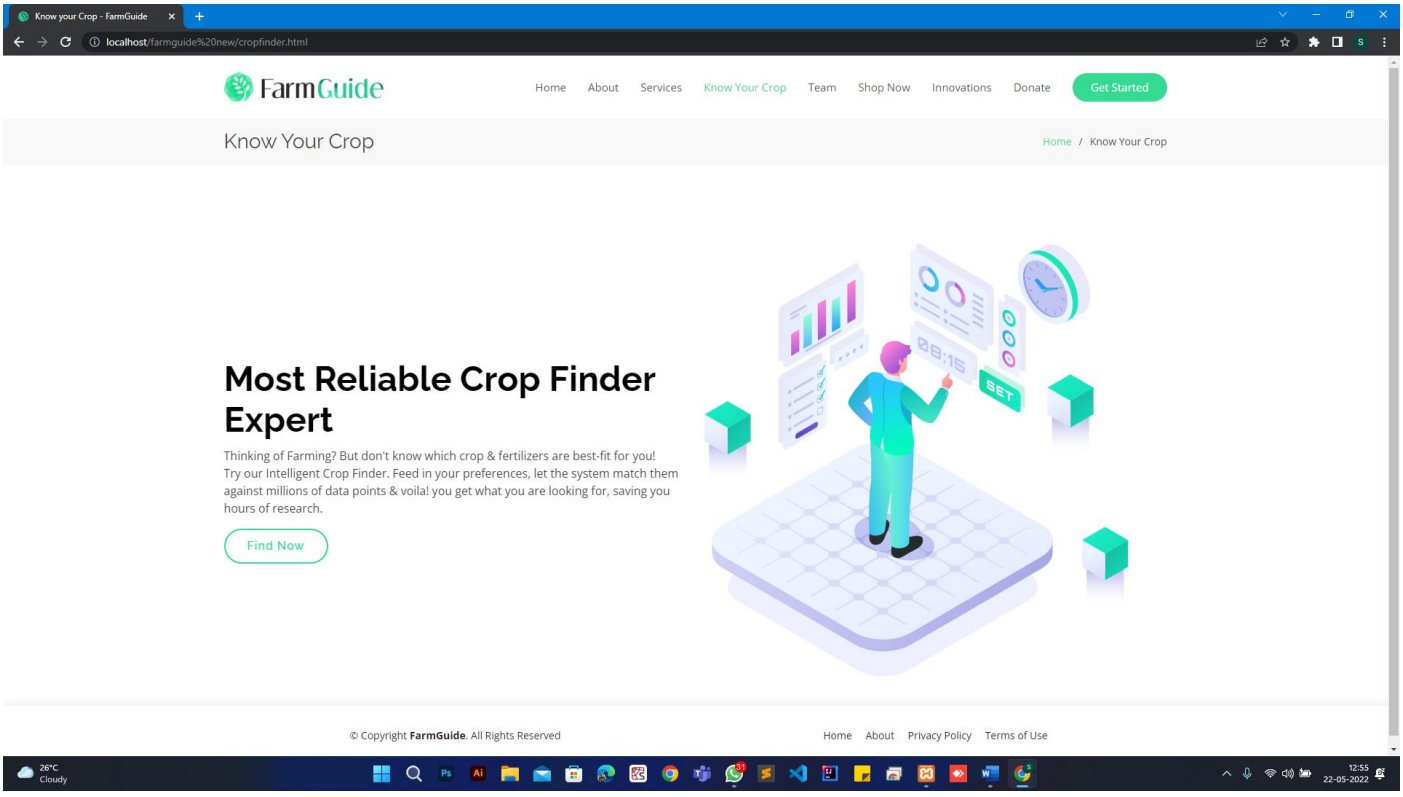
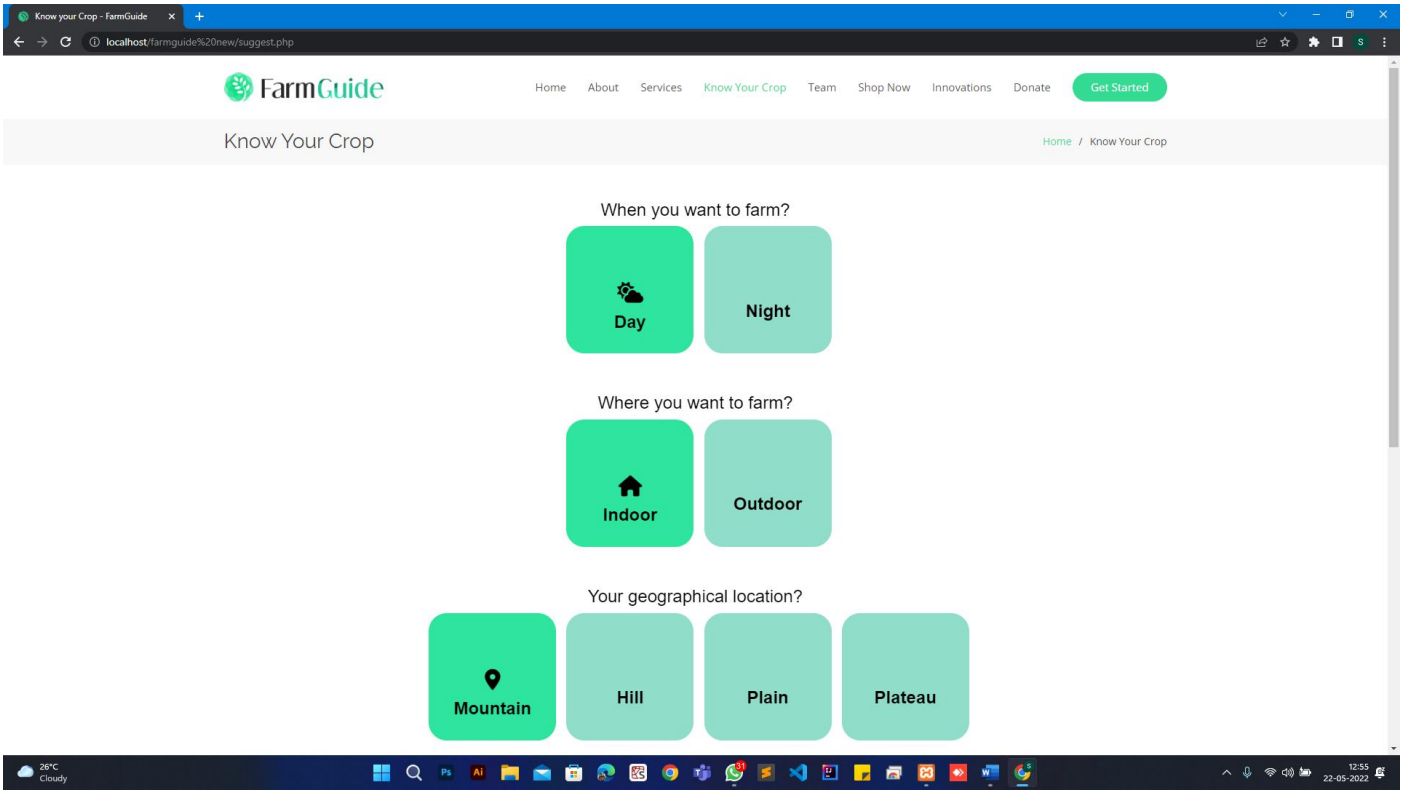
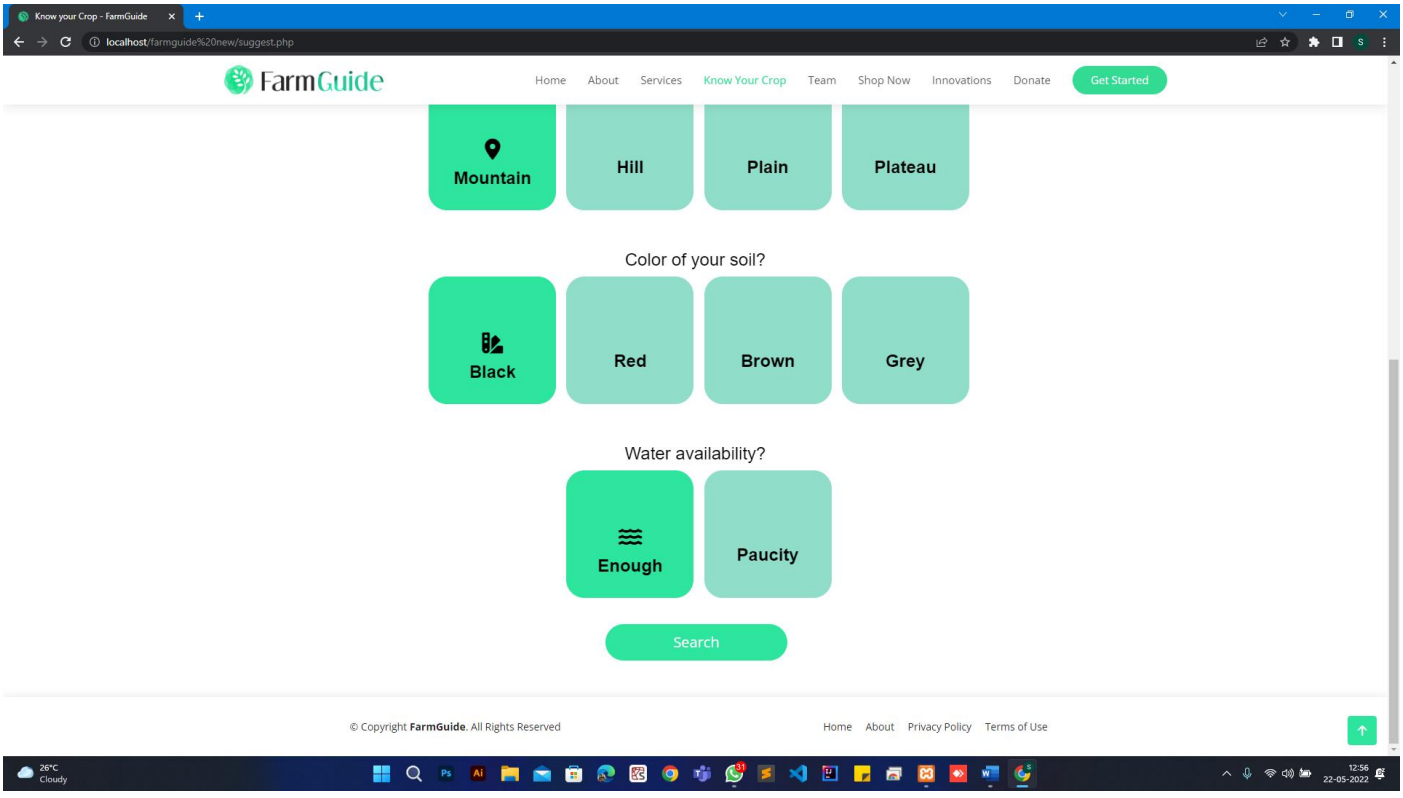


Know your crop module:




Know your Crop - FarmGuide
localhost/farmguide%20new/suggest.php
FarmGuide
Home
About
Services
Know Your Crop
Team
Shop Now
Innovations
Donate
Get Started
Know Your Crop
Home / Know Your Crop
When you want to farm?
Day
Night
Where you want to farm?
Indoor
Outdoor
Your geographical location?
Mountain
Hill
Plain
Plateau


Know your Crop - FarmGuide
localhost/farmguide%20new/suggest.php
FarmGuide
Home
About
Services
Know Your Crop
Team
Shop Now
Innovations
Donate
Get Started
Mountain
Hill
Plain
Plateau
Color of your soil?
Black
Red
Brown
Grey
Water availability?
Enough
Paucity
Search
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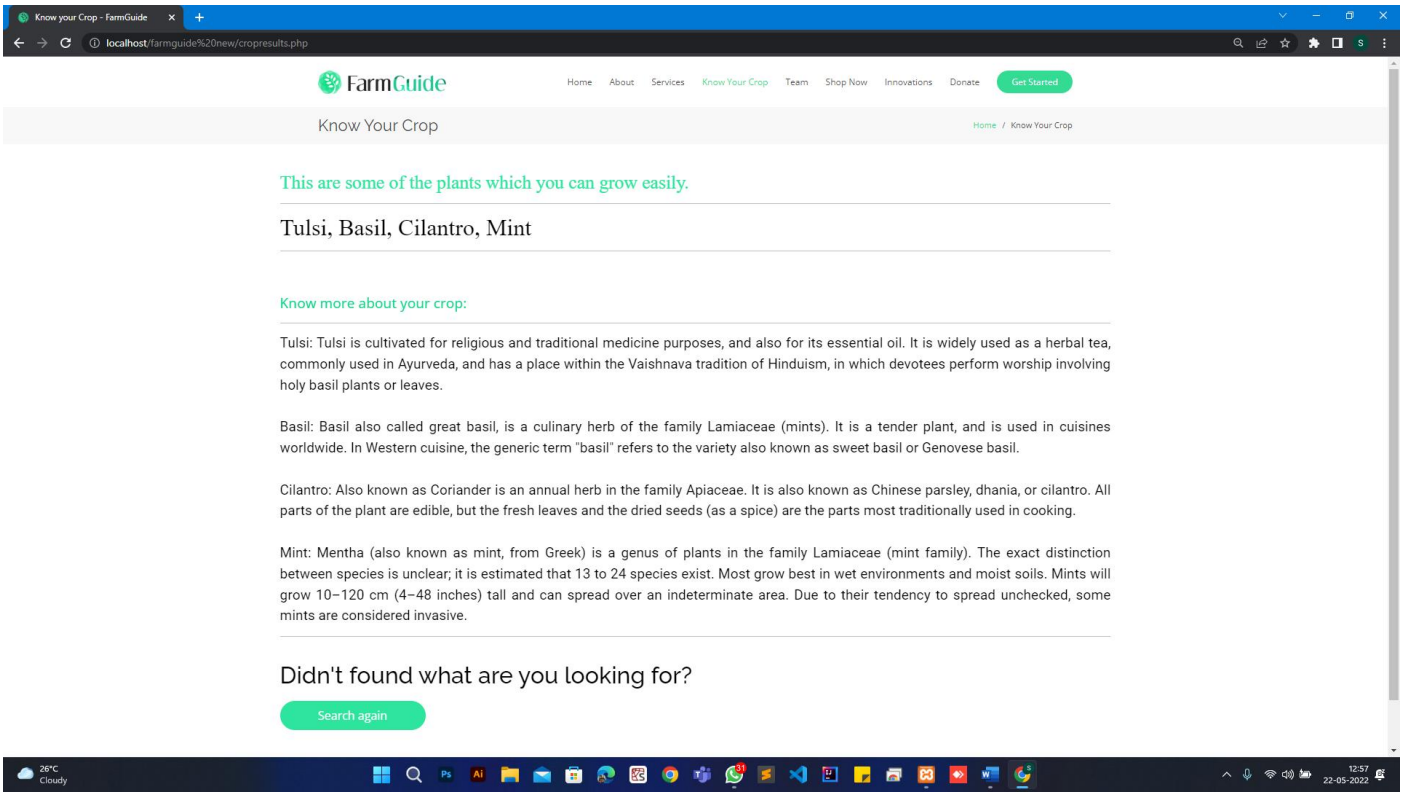
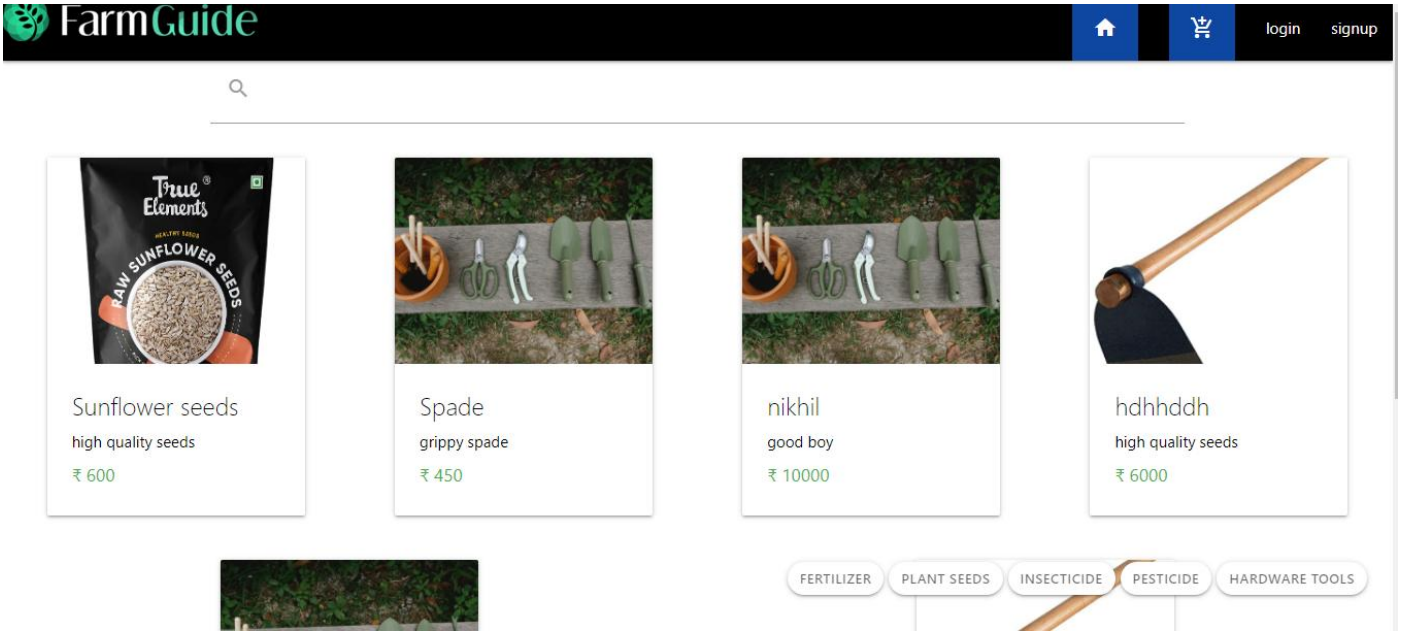
Home
About
Privacy Policy
Terms of Use


Know your Crop - FarmGuide
localhost/farmguide%20new/cropresults.php
FarmGuide
Home
About
Services
Know Your Crop
Team
Shop Now
Innovations
Donate
Get Started
Know Your Crop
Home / Know Your Crop
This are some of the plants which you can grow easily.
Tulsi, Basil, Cilantro, Mint
Know more about your crop:
Tulsi: Tulsi is cultivated for religious and traditional medicine purposes, and also for its essential oil. It is widely used as a herbal tea, commonly used in Ayurveda, and has a place within the Vaishnava tradition of Hinduism, in which devotees perform worship involving holy basil plants or leaves.
Basil: Basil also called great basil, is a culinary herb of the family Lamiaceae (mints). It is a tender plant, and is used in cuisines worldwide. In Western cuisine, the generic term "basil" refers to the variety also known as sweet basil or Genovese basil.
Cilantro: Also known as Coriander is an annual herb in the family Apiaceae. It is also known as Chinese parsley, dhania, or cilantro. All parts of the plant are edible, but the fresh leaves and the dried seeds (as a spice) are the parts most traditionally used in cooking.
Mint: Mentha (also known as mint, from Greek) is a genus of plants in the family Lamiaceae (mint family). The exact distinction between species is unclear; it is estimated that 13 to 24 species exist. Most grow best in wet environments and moist soils. Mints will grow 10–120 cm (4–48 inches) tall and can spread over an indeterminate area. Due to their tendency to spread unchecked, some mints are considered invasive.
Didn't found what are you looking for?
Search again

Ecommerce :


FarmGuide
login
signup
True Elements
RAW SUNFLOWER SEEDS
Sunflower seeds
high quality seeds
₹ 600
Spade
grippy spade
₹ 450
nikhil
good boy
₹ 10000
hdhhddh
high quality seeds
₹ 6000
FERTILIZER
PLANT SEEDS
INSECTICIDE
PESTICIDE
HARDWARE TOOLS

FarmGuide

login signup

Sunflower seeds

₹ 600

high quality seeds

ADD TO CART

FERTILIZER PLANT SEEDS INSECTICIDE PESTICIDE HARDWARE TOOLS

FarmGuide

login signup

Login

email or username

password

LOGIN

FERTILIZER PLANT SEEDS INSECTICIDE PESTICIDE HARDWARE TOOLS

FarmGuide

login signup

Signup

username

email

password

SIGNUP

FERTILIZER PLANT SEEDS INSECTICIDE PESTICIDE HARDWARE TOOLS

FarmGuide

login signup

sunf

Sunflower seeds

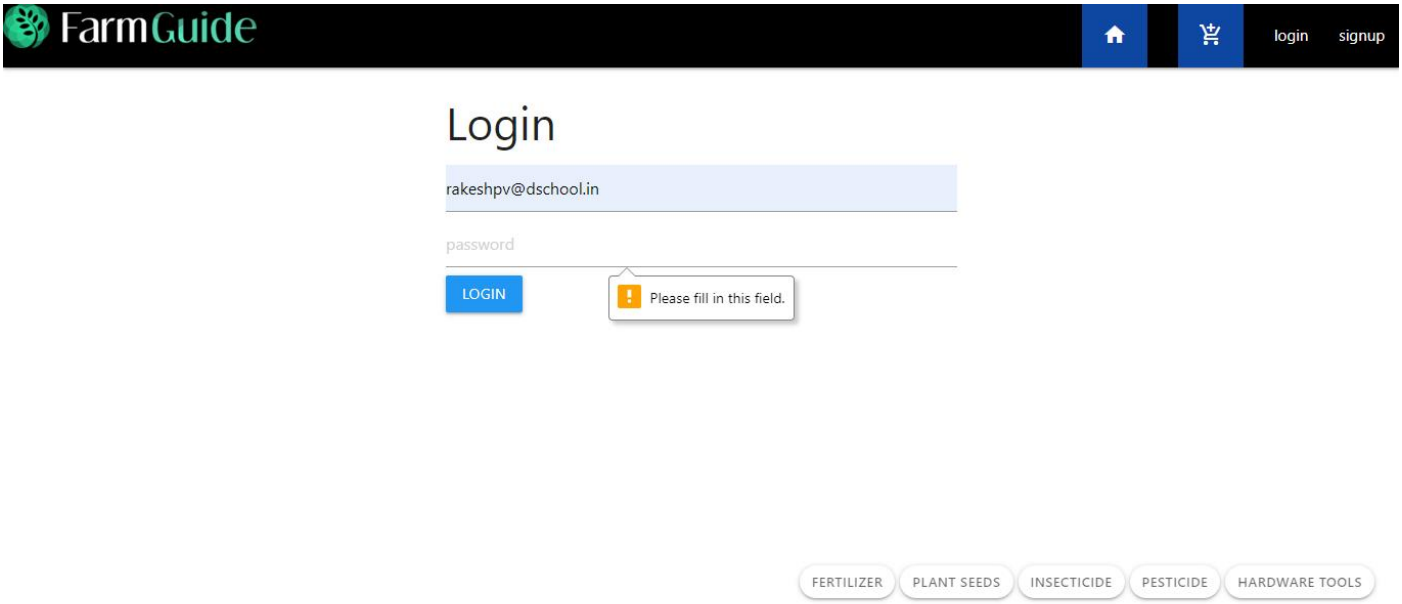
Sunflower seeds

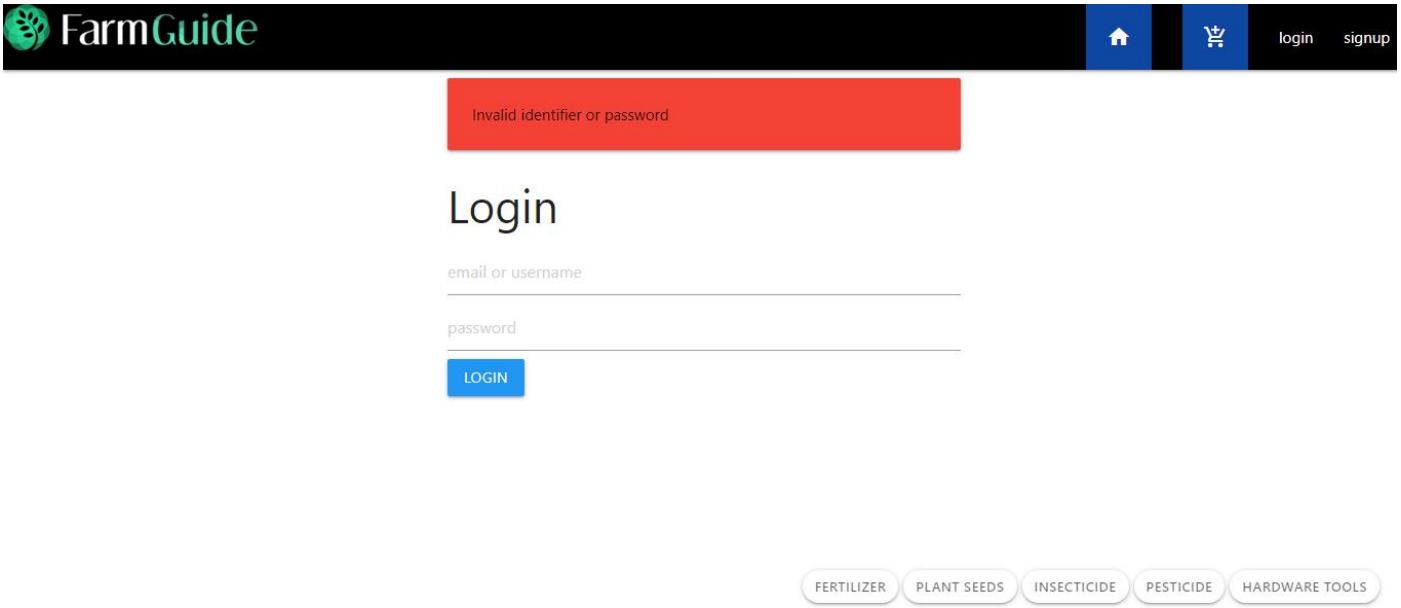
Spade

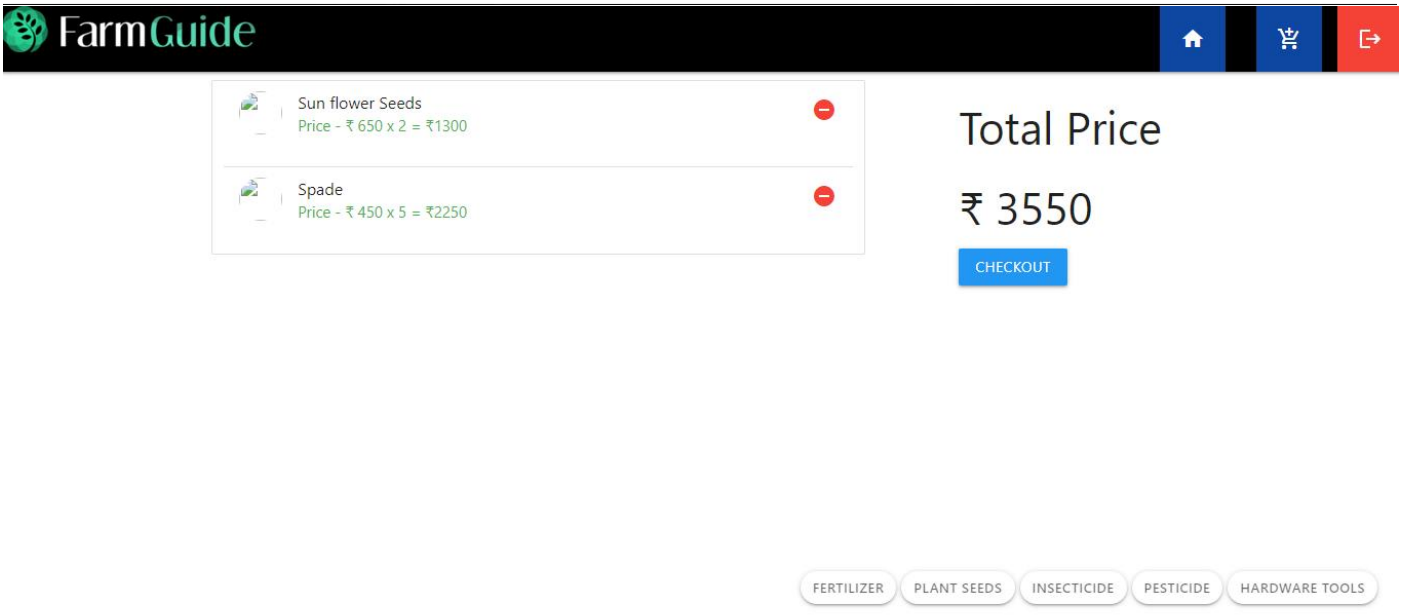
nikhil

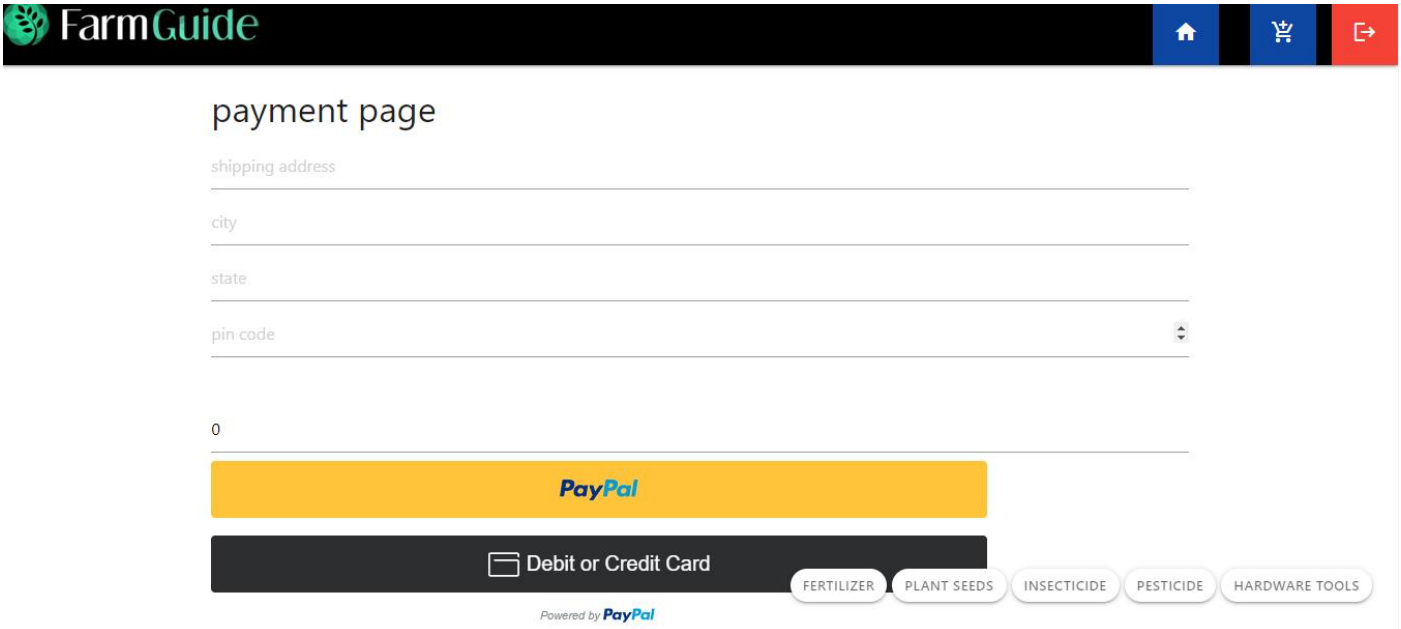
hdhhddh

FERTILIZER PLANT SEEDS INSECTICIDE PESTICIDE HARDWARE TOOLS


FarmGuide
login
signup
Login
rakeshpv@dschool.in
password
LOGIN
Please fill in this field.
FERTILIZER
PLANT SEEDS
INSECTICIDE
PESTICIDE
HARDWARE TOOLS


FarmGuide
login
signup
Invalid identifier or password
Login
email or username
password
LOGIN
FERTILIZER
PLANT SEEDS
INSECTICIDE
PESTICIDE
HARDWARE TOOLS


FarmGuide
Sun flower Seeds
Price - ₹ 650 x 2 = ₹1300
Spade
Price - ₹ 450 x 5 = ₹2250
Total Price
₹ 3550
CHECKOUT
FERTILIZER
PLANT SEEDS
INSECTICIDE
PESTICIDE
HARDWARE TOOLS


FarmGuide
payment page
shipping address
city
state
pin code
0
PayPal
Debit or Credit Card
Powered by PayPal
FERTILIZER
PLANT SEEDS
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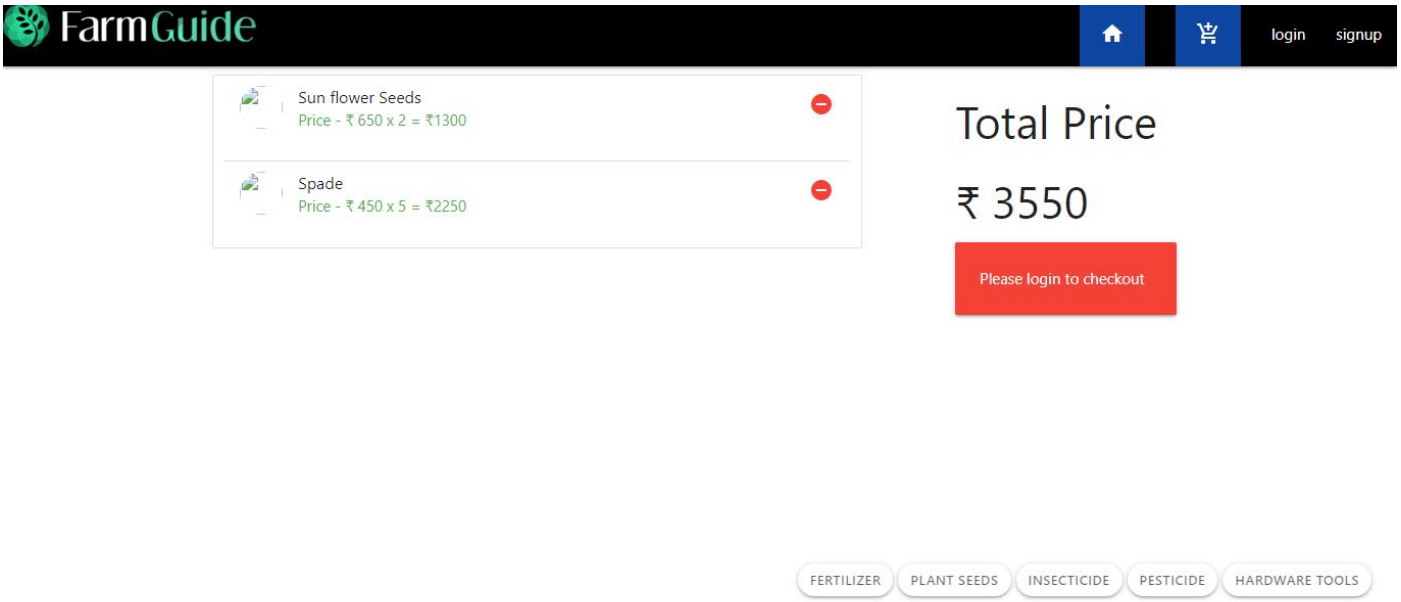
PESTICIDE
HARDWARE TOOLS


FarmGuide
login
signup
Sun flower Seeds
Price - ₹ 650 x 2 = ₹1300
Spade
Price - ₹ 450 x 5 = ₹2250
Total Price
₹ 3550
Please login to checkout
FERTILIZER
PLANT SEEDS
INSECTICIDE
PESTICIDE
HARDWARE TOOLS

FarmGuide
login
signup
Your cart is empty
FERTILIZER
PLANT SEEDS
INSECTICIDE
PESTICIDE
HARDWARE TOOLS

Blogging Module

Farm Guide

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Home

127.0.0.1:8000/innovations/data-from-the-sky-drones/

1 week, 1 day ago

Satellite-Derived Data

Predicting yields, as well as conducting almost real-time field monitoring, with a view to detect a variety of threats with satellite data in service has never been so easy.

The sensors are able to give imagery in various spectra, allowing for the application of numerous spectral indices, such as the Normalized Difference Vegetation Index (NDVI). NDVI allows for the detection of vegetation content, the amount of wilting plants, and overall plant health. Next is the Canopy Chlorophyll Content Index (CCCI) that helps with nutrient application. Then, the Normalized Difference RedEdge (NDRE) detects Nitrogen content. And lastly, the Modified Soil-Adjusted Vegetation Index (MSAVI) is designed to minimize soil background impact at the earliest developmental stages of plants; the list goes on.

Comments

Name

Email

Body

Submit comment

rakeshpv 1 week, 1 day ago

1 week, 1 day ago

Data From The Sky – Drones

With the assistance of drones farmers have an opportunity to define crop biomass, plant height, the presence of weeds, and water saturation on certain field areas with high precision.

127.0.0.1:8000/innovations/satellite-derived-data/

7 Conclusion and Learnings

The main aim of the application is to have a suggestion platform for crops and plantations so that any common man who has no knowledge about farming gets to know what kind of seeds and plantation he can grow and start either indoor or outdoor farming / gardening. Also we provide an E-commerce so that user can directly purchase plantation , seeds , fertilizers and hardware tools needed for gardening / farming .

We have an exclusive E_commerce for gardening / farming after he gets commendation from the system

7.1 Design and Implementation Issues

7.1.1 Design Issues

Since this was a huge project on Farming / Gardening we had huge heap of requirements which were very dynamic in nature, though requirements got freeze after requirement gathering process, it took few more iterations as the system was very new and big. The team has followed Iterative software development process in designing this application but still first few phases of working prototype took time to completely understand the requirements of our clients.

7.1.2 Implementation Issues

During initial phase of implementation, the team faced few challenges like choosing the compatible framework . We also had to work on the secure order placement interface i.e. OpenLink that processes the incoming and outgoing requests and responses this demanded the team to learn and understand data flow in less stipulated time. We spent time on choosing the framework as we need to develope this project very quickly and robust .

7.2 Advantages

The primary intention and objective of having this System is to fill up the void of E-commerce along with Suggestion in FARMING DOMAIN , And this system greatly helps in reducing the overall errors to minimum and the customer to make sure right service is given at all the time

7.3 Future Scope of FarmGuide

1. Deploying it in real time network using HEROKU
2.Use of AI and ML for crop suggestion and necessary items required for that crop [fertilizers , equipments , procedure]
3.use of payment gateway
4.real-time tracking of packages.
5.Cancellation of packages after ordering and payment is done.
6.Use of otp and email functionality.

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2. https://www.youtube.com/watch?v=c1xTDSIXit8
3. https://www.youtube.com/watch?v=vcopLqUq594
4. https://www.youtube.com/watch?v=XKWJFpZYVAQ
5. https://www.youtube.com/watch?v=HpwiVbrdURI
6. https://www.youtube.com/watch?v=f-MPC83OYlQ
7. https://www.youtube.com/watch?v=nP-MvFoDVZE