FARMEASE

AN INTERNSHIP REPORT

Submitted by

DIVYARAJSINH VALA

191290107073

In partial fulfilment for the award of the degree of

BACHELOR OF ENGINEERING

In

COMPUTER ENGINEERING

Gyanmanjari Institute of Technology, Bhavnagar

Gujarat Technological University, Ahmedabad

APRIL, 2023

Gyanmanjari Institute of Technology
Survey No: 30, near iscon eleven, Sidsar Road, Bhavnagar-364060

CERTIFICATE

This is to certify that the internship report submitted has been carried out by **Divyarajsinh Vala** under my guidance in partial fulfilment for the degree of Bachelor of Engineering in Information Technology, 8th Semester of Gujarat Technological University, Ahmedabad during the academic year 2021-22.

Prof. Abhilasha M Raval
Internal Guide.

Prof. Prashant Viradiya
Head of Department

Gyanmanjari Institute of Technology
Survey No: 30, near iskcon eleven, Sidsar Road, Bhavnagar-364060

DECLARATION

I hereby declare that the Internship report submitted along with the Internship **Web Development** submitted in partial fulfillment for the degree of Bachelor of Engineering in information and technology engineering to Gujarat Technological University, Ahmedabad, is a bonafide record of original internship work carried out by me at **Adite Technologies LLP** under the supervision of **Jap Dave** and that no part of this report has been directly copied from any student‘s reports or taken from any other source, without providing due reference.

Name of Students

Divyarajsinh Vala

Sign of Students

_____

ACKNOWLEDGEMENT

I wish to express my sincere gratitude to my internship guide **Prof. Abhilasha Raval** and all the faculty members for helping us through our internship by giving us the necessary suggestions and advice along with their valuable coordination in completing this work.

I also thank my parents, friends and all the members of the family for their precious support and encouragement which they had provided in completion of our work. In addition to that, I would also like to mention the college personnel who gave us the permission to use and experience the valuable resources required for the internship from the college premises.

Thus, In conclusion to the above said, I once again thank the faculties and members of **Gyanmanjari Institute Of Technology** for their valuable support in completion of the internship.

Divyarajsinh Vala

191290107073

ABSTRACT

The main objective of this internship was WEBSITE DESIGN AND DEVELOPMENT. Several programming languages are in use to develop a web-based application or software. Some of them are only used for the UI and the frontend of the application, some are used for the backend design of the software. For example- HTML, CSS, Bootstrap Framework, etc. are some languages todevelop the frontend of an application. Python and its faramwork like flask and Django etc are used at the backend. If we develop a web-based application that is very useful for us because we can access it from anywhere in the world. It is very helpful for our daily life. That is why I choose the subject of my report is WEBSITE DESIGN AND DEVELOPMENT. Working in **Adite Technologies LLP**. Interactive added huge experiences to my upcoming career. This report takes us through all my internships.

LIST OF FIGURES

LIST OF TABLES

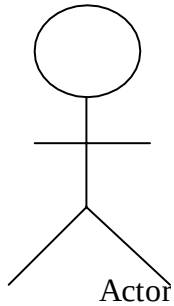
LIST OF ABBREVIATIONS AND SYMBOLS

Abbreviations

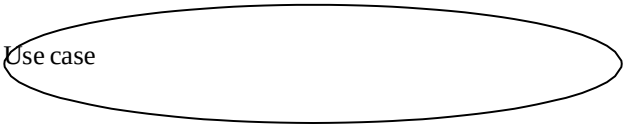
API	**Application Programming Interface**
RAM	**Random Access Memory**
Q and A	**Question and Answer**

Symbols

Symbols For Use Case Diagram:



Actor

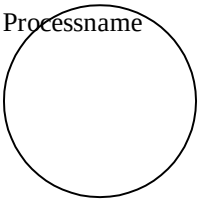


Use case

Association

<<Include>>, <<Exits>>, <<Uses>>

Symbol For Dataflow Diagram:



Process

Data Flow

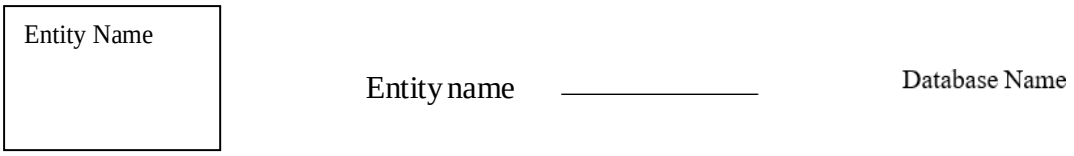

Entity Name
Entity name
Database Name

TABLE OF CONTENTS

1. OVERVIEW OF THE COMPANY

1.1 Introduction

We are a Web, Mobile service base company to provide our clients an excellent product from overside. They started this company in theyear 2012 as a service and client-based. Then after he expanded with his skills and staff to provide clients a complete package from design to development in any framework. Each year he is expanding his level of skills and creativity in all aspects. He believes in growth that is meant to change the future of IT firms.

We‘re a passionate team of application makers who breathe, drink, eat, play, think and talk, in addition to designing and coding, the apps. Our passion for work reflects our values and produces a delightfulexperience for our clients. The unmatched diversity of verticals and impeccable experience make us the best team to overcome any project development challenge. Our team thoroughly listens, carefully understands, and meticulously produces. The seamless integration of our values makes us an empathic partner for our clients. The experience is always nonpareil.

1.2 SCOPE OF WORK

We put into use our digital talent pool of developers and designers to unlock the business potential of our clients spread across diverse industry verticals. As an experienced organization, we cater to multiple industry genres that are inclusive of healthcare, retail, e-commerce, media, and transport and logistics. With a multitude of clients around several countries, at Adite Technologies our focus is on entwining our services with the core values that our custom web design company takes pride in.

1.3 Organization chart

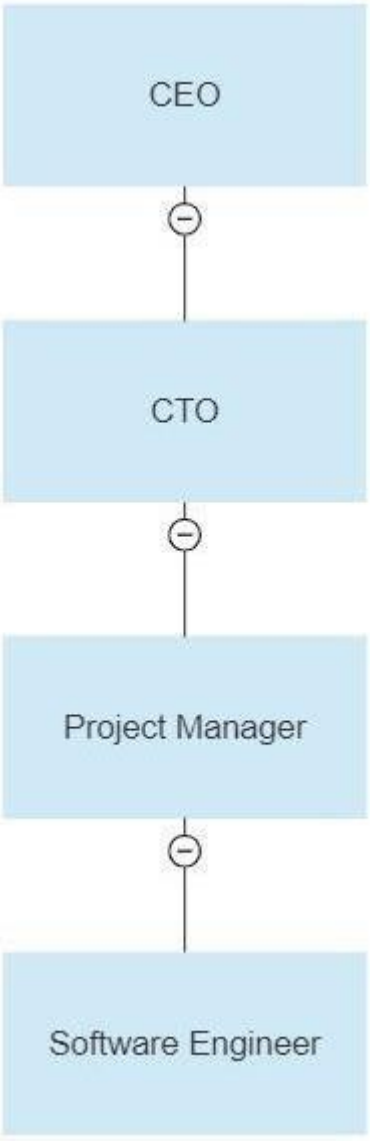


Fig 1.1 Organization Chart.

2. OVERVIEW OF DIFFERENT PROCESS CARRIED OUT IN THE COMPANY

2.1 IT INCLUDES THE DETAILS ABOUT THE WORK BEING CARRIED OUT IN EACH DEPARTMENT.

In the company, the process is like firstly the company gets the requirement from the client the requirement may be in any form like in figures or rough works.

The client and the company person will discuss the sketches and after one meeting the company person will create a document on the features list showing how many features there will be in the project.

Then they have a meeting with the client and the client and company person will be discussed the features. Then the project will start.

2.2 EACH STAGE OF PRODUCTION

1) **Project Plan:** Initial Contact with the client and get the project description. Introduction presentation and partner visibility verification. provide goal and objective to learn the requirement and understand the client business and prepare brief project requirements. Then to a business development consultant to analyze the requirement and feasibility with the technical team analysis questions and assumptions and suggestions and then requirement and estimation approval and present the project plan including a details specification timeline and cost.

2) **Discovery:** Internal analysis with project manager and specification finalization is done. Details Q and A on specification and content requirement content delivery timeline, scope change, implement schedule.

3) **Design and Scope:** The client gives some objectives and preference lead designer sketch that is designed and analyzed by the developer and the project manager's feedback is provided to the clientand an initial layout draft is done then client feedback and layout finalization and final specification, timeline cost and project plan approval are done.

4) **Implementation and launch:** The project manager and developer team start developing the system and it is seen by the client to get the feedback and add some more functionality in its finalize project is reviewed by the client and is launched.

2.3 PREPARE SCHEMATIC LAYOUT WHICH SHOWS THE SEQUENCE OF OPERATION FOR MANUFACTURING OF END PRODUCT.

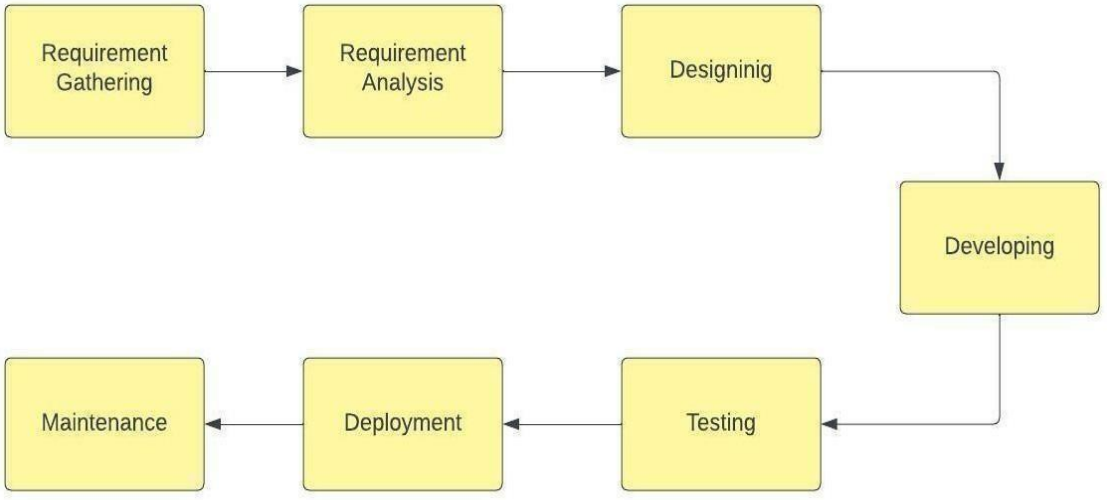


Fig 2.1 Schematic Layout.

3. INTRODUCTION

3.1 INTERNSHIP SUMMARY

Farmease is an website of e-commerce to sell the organic item and buy the item.It will have three user which is supper-admin, admin and customer. Super-admin and admin have different rights and customer can buy the organic items. We can add,delete and update product, framer, admin and many more functionalities are present in site as well as we can see all the information in Gujrati language.

Blog site is used to show the information on different topics. User can add the blog main page show use the information about different topics which are added previously. Use can read full blog by click on read blog.
User can also update and delete the blog.

3.2 PURPOSE

The main purpose of this all project is done to get the knowledge from that and how to write an code in effective way and how software aremade in company.

3.3 OBJECTIVE

- While internships are often associated with college students seeking to gain experience in a specific field, it's important to recognize that training opportunities can be valuable for a wide range of individuals

- Internships in order to receive real world experience and develop their skills.

- An objective for this position should emphasize the skills you already possess in the area and your interest in learning more.

- Utilizing internships is a great way to build your resume and develop skills that can be emphasized in your resume for future jobs. When you are applying for a Training Internship,make sure to highlight any special skills or talents that can make you stand apart from the rest of the applicants so that you have an improved chance of landing the position.

3.4 SCOPE

1) An Internship Provides Real Life Experience and Exposure If you're lucky enough to snag a beneficial internship, it can be remarkably valuable for your career. An internship enables you to gain first-hand exposure to working in the real world. It also allows students to harness the skill, knowledge, and theoretical practice they learned in university. You can acquire endless amounts of education in your life, however, that knowledge doesn't always translate to the working life.

2) The Opportunity To Learn More About Yourself The experiences we go through are what shape us. Your internship will not only encourage personal development, but also a greater understanding of self. To know yourself is to know your goals and how to best achieve them.

3.5 TECHNOLOGY USED

1. PYTHON

Python is a high-level, interpreted programming language that is used for a wide range of purposes, including web development, data analysis, artificial intelligence, and scientific computing. It was created in the late 1980s by Guido van Rossum and emphasizes code readability and simplicity, making it an excellent choice for beginners and experienced developers alike. Python supports a variety of programming paradigms, including procedural, object-oriented, and functional programming, and is available for use on a variety of operating systems, including Windows, Linux, and macOS. It has a vast library of modules and tools that make it an incredibly powerful and versatile language. Python is used for a wide range of applications, including scientific computing, web development, data science, machine learning, and automation. It is also an excellent language for beginners due to its ease of use and readability.

2. HTML, CSS, BOOTSTRAP

HTML, or Hypertext Markup Language, is a markup language that is used to create the structure and content of web pages. It is the foundation of every website and is responsible for defining the various elements of a page, such as text, images, and links.

CSS, or Cascading Style Sheets, is a stylesheet language used to define the style, layout, and formatting of a webpage. It allows developers to separate the presentation layer from the content layer, making it easier to manage and modify appearance.

Bootstrap is a front-end development framework that is built on HTML, CSS, and JavaScript. It provides a set of pre-designed templates, styles, and components that can be used to create responsive and mobile-first web pages quickly.

3. FLASK FRAMWORK

Flask is a micro web framework written in Python that allows you to quickly and easily build web applications. It is lightweight, modular, and easy to use, making it a popular choice for small to medium-sized web projects.

Flask provides tools and libraries that allow you to handle common web development tasks, such as handling HTTP requests and responses, routing URLs to different functions, managing sessions and cookies, and accessing databases. It also supports the use of templates, which allow you to create dynamic HTML pages by filling in placeholders with data from your application.
One of the main advantages of Flask is its simplicity and flexibility.

Overall, Flask is a great choice for developers who want to build small to medium-sized web applications quickly and easily, without sacrificing flexibility or scalability.

4. DJANGO FRAMWORK

Django is a high-level, full-stack web framework written in Python. It provides a powerful and flexible toolkit for building web applications, with a focus on simplicity, modularity, and reusability.

Django comes with a built-in ORM (Object-Relational Mapping) system that allows you to interact with your database using Python objects, instead of writing raw SQL queries. It also provides an admin interface, which allows you to easily manage your application's data without writing any code.

In addition, Django has a robust URL routing system, a template engine for creating dynamic HTML pages, and support for handling HTTP requests and responses, including handling file uploads, managing cookies and sessions, and dealing with user authentication and authorization.

Overall, Django is a great choice for developers who want to build complex, large-scale web applications quickly and efficiently, while maintaining a high level of code quality and flexibility.

5. Backend: API

API is API (Application Programming Interface) is a set of protocols, routines, and tools for building software applications. In the context of web development, an API allows different applications to communicate with each other over the internet. In Python Django, you can create APIs using a variety of tools and libraries.

One popular tool for building APIs in Django is Django REST framework, which provides a set of tools and libraries for building RESTful APIs. REST (Representational State Transfer) is a style of web architecture that uses HTTP requests to get, post, put, and delete data. RESTful APIs are a popular way to build web services, as they are flexible, scalable, and easy to use.

Django REST framework provides a number of features that make it easy to build RESTful APIs in Django, including:

1. Serialization: Django REST framework provides a serializer that allows you to convert complex data types, such as Django models, into JSON or other formats that can be easily transmitted over the web.

2. Views: Django REST framework provides a set of views that handle

3. Authentication: Django REST framework provides a number of authentication schemes, including token authentication, basic authentication, and OAuth2 authentication.

4. Permissions: Django REST framework allows you to define permissions for your API endpoints, controlling who can access and modify data.

Overall, Django provides a powerful set of tools for building APIs, making it easy to create RESTful web services that can be consumed by a variety of applications and devices.

Here is a real-life API example. You may be familiar with the process of searching for flights online. Just like the restaurant, you have a variety of options to choose from, including different cities, departure and return dates, and more. Let us imagine that you‘re booking you are flight on an airline website. You choose a departure city and date, a return city and date, cabin class, as well as other variables. To book yourflight, you interact with the airline‘s website to access their database andsee if any seats are available on those dates and what the costs might be.

3.6 INTERNSHIP PLANNING

3.6.1 Internship Development Approach and Justification

My company has implemented a structured timetable with daily reporting to my mentor. Each task has a set deadline for completion, and my mentor provides guidance and instruction for each new topic. With the help of both my mentor and online resources, I am continuously learning and developing new skills. This structured approach has been instrumental in my personal and professional growth.

3.6.2 Project Effort and Time, Cost EstimationEffort and Time Estimation:

Effort: It is according to the internship roadmap given to me as written above.

Time: 6 Months

3.6.3 Roles and Responsibilities

As a Python Web Development intern, I am responsible for developing the back-end component of a web application. My role involves receiving assignments and ensuring their timely and satisfactory completion. I have been entrusted with both work assignments and the responsibility of meeting their objectives. Through my efforts, I aim to contribute meaningfully to the success of the project.

A web developer is responsible for developing applications for web devices. They are responsible for designing and coding the base application, ensuring the quality of the application, fixing the bugs of the application, maintaining the code, and implementing application updates. My role is to create the back-end with help of python, flask, Django and send it to front-end developer for future development.

3.7 PROJECT SCHEDULING

Scheduling the project task is an important project planning activity. It involves deciding which tasks would be taken up when.

Table 3.1 Project Time Scheduling

Title	Date	Status
Python Documentation	01/02/2022 to 20/02/2023	Completed
OOPS concepts in python	21/02/2023 to 28/02/2023	Completed
Learn Concepts of Flask.	01/03/2023 to 13/03/2023	Completed
Learn Concepts of Django.	14/03/2023 to 23/03/2023	Completed
Learn about GitHub and MongoDB	24/03/2023 to 31/03/2023	Completed
Blog Project	01/04/2023 to 08/04/2023	Completed
FARMEASE	09/04/2023 t0 23/04/2023	Continue

4. SYSTEM ANALYSIS

4.1 STUDY OF CURRENT SYSTEM

Python is a popular choice for back-end development alongside languages like Java and Node.js. One of the main reasons for this is its ease of use, thanks to a simple and intuitive syntax, extensive standard library, and built-in functions and modules that streamline application development. Python's versatility also plays a significant role, enabling developers to use it for a wide range of tasks.

4.2 PROBLEM AND WEAKNESSES OF CURRENT SYSTEM

While Python is a popular language for web development, there are still some potential problems and weaknesses to consider:

Performance: Compared to other languages like Java or C++, Python can have slower performance, especially when it comes to heavy computational tasks.

Dependency Management: Python's dependency management system can be complex, with potential issues arising from version conflicts and incompatible dependencies.

Debugging: Debugging can be challenging with Python, especially with complex code and dynamic typing.

It's essential to consider these potential issues when choosing Python for web development and find ways to mitigate them. However, many developers still find that the benefits of using Python outweigh these challenges.

4.3 REQUIREMENTS OF NEW SYSTEM

Flask and Django are popular web frameworks in Python that offer several benefits over other frameworks. Flask's simplicity and flexibility make it a great choice for small projects or when starting with web development, while Django's batteries-included approach saves development time and effort by providing many built-in features. Both frameworks have large and active communities, providing ample resources and support for developers.

4.4 ACTIVITY IN PROPOSED SYSTEM

The Blog and FarmEase websites are proposed due to get the knowledge from it by practicing this type of example.The Blog will show you the blogs on different topic, and do simple Crud operation is the main operation to learn the technology. I have made Crud Operat in Blog and FarmEase webapp in a different frameworks that is flask and Django.

4.5 FEATURES OF PROPOSED SYSTEM

- User Friendly
- High Resolution Photo & video
- Super-admin, admin and normal user have different rights.
- Can Add different product and user and admins.
- Security Features.

4.6 LIST MAIN MODULES OF PROPOSED SYSTEM

There are mainly one modules in the Both the Project.

1. **User Module**

   1) Blog: The user can add the blog into the database and user can view all Blogs and update the Blog details and delete the Blog.

   2) FarmEase: Main user is identified as super-admin he can and the sub-admin also add states and cites after that he can add the product and also add farmers while sub-admin have view rights in some of the functionality and normal use can only see the product and buy the available products.

4.7 SELECTION OF SOFTWARE AND HARDWARE

Server Side
Hardware:

Table 4.1 Hardware Recommendation for Server Side

Processor	1.6 GHz Dual core Intel core i3
Storage	256 GB
RAM	8 GB

Software:

Table 4.2 Software Recommendation for Server Side

Operating System	Window, Ubuntu, Mac os
Web Browser	Google Chrome, FireFox, Safari
Coding	VS Code
Database	SQLite, MongoDB

Client Side

Table 4.3 Hardware & Software Recommendation for Client Side

Operating System	Window,Ubuntu,Mac os
Processor	Intel core i3
Storage	550 MB
RAM	Minimum of 512 MB

5. SYSTEM DESIGN

5.1 SYSTEM DESIGN & METHODOLOGY

In our system, we will be following the incremental model. Because the requirements of the system are clearly defined and understood. Major requirements are defined; however, some details can evolve with time. The technology which will be used to develop this project is also well understood and is available easily. Hence this model suits perfectly todevelop of this project.

5.2 DATABASE DESIGN / STRUCTURE

1. Architecture design:

To describe the views, models, states and structure of the system.

2. Logical design:

To represent the widgets, inputs and outputs of the system. Example: ER Diagrams(EntityRelationship Diagrams).

3. Physical design:

Define as:

a. How users add information to the system and how the system representsinformation back to the user.
b. How the data is modeled and stored within the system.
c. How data moves through the system, how data is validated, securedand/or transformed as it flows through and out of the system.

5.3 CASE DIAGRAM

1) Blog:

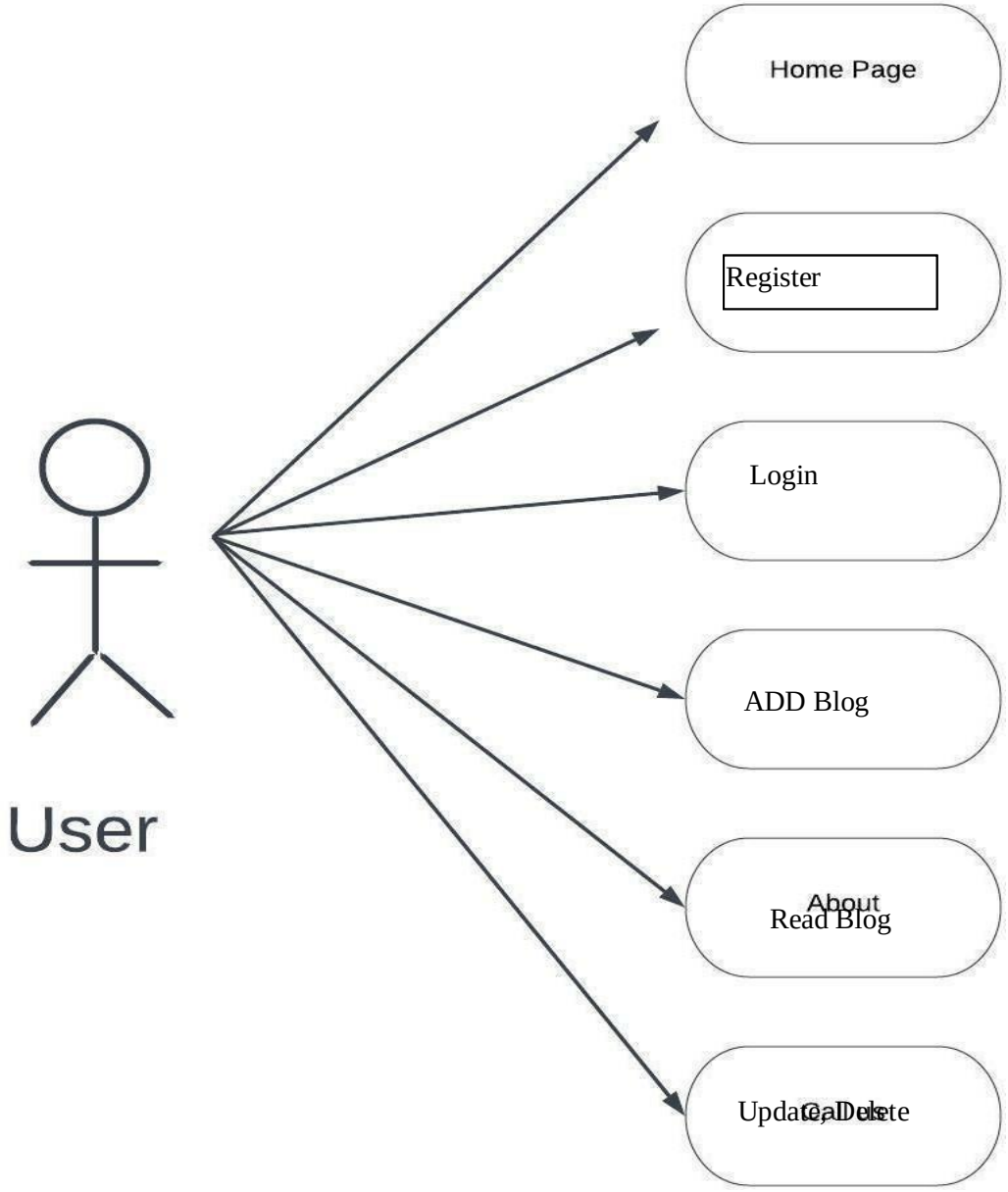


Fig. 5.3.1 Use Case Of Blog

2) FarmEase:

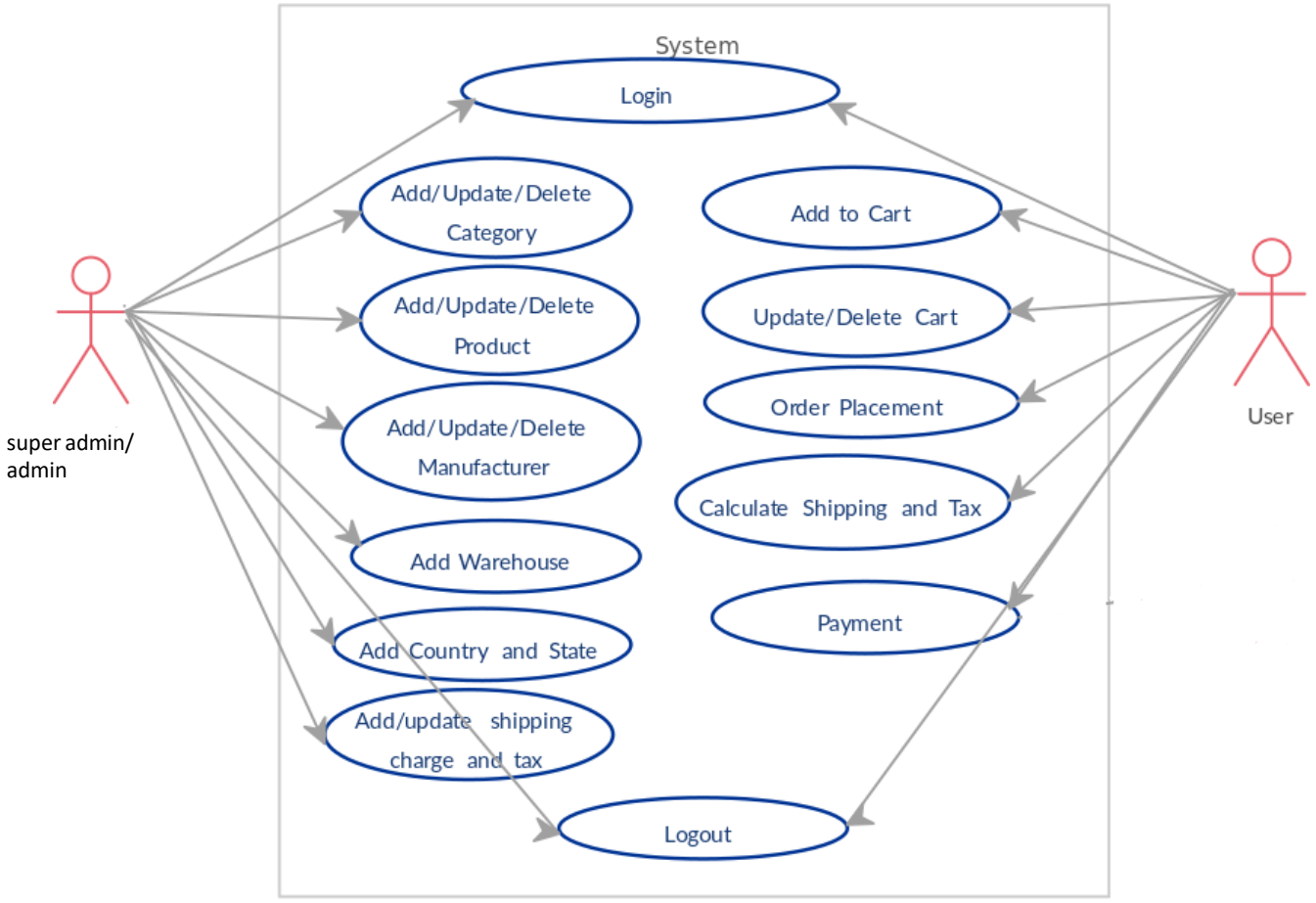


Fig 5.3.2 Use Case of FarmEase

6. IMPLEMENTATION

6.1 IMPLEMENTATION ENVIRONMENT

In our company a different workspace area for the implementation group. In our company, many implementation groups have to work on knowing what is client requirements. Then the implementation department knows what is client requirements then they assign a work todeveloper and teach a fully explained what is client requirements.

6.2 MODULES SPECIFICATIONS

There are mainly One modules in the Both the project.

1. **User Module**

I. **Blog:** The user can add the Blog into the database and user can view all Blogs and edit and delete the Blog.

- **Home Page:** In this, only welcome messages are shown and a button for start.
- **Read Page:** In this, all products are shown with an image, title, and a button to read.
- **Add Blog :** In this one form take data of Blogdetails which is product title, image, description, price, category.
- **Edit Product Page:** It is one type of form and in that already Blog data is filled and the user can edit that data.

II. **FarmEase:** main user called as super admin have all the rights while sub-admin have some kind of rights. And customer can only buy and view available prducts.

Super-admin page: admin can add sub-admin as well as farmer also add products, states, cities and many more things

Sub-admin Page: in this user have almost everting like super admin but some rights are not provided.

Customer page: he or she is only allowed to buy and view poduct.

We can also have almost whole site in Gujrati so every one can use it easily.

6.3 SCREEN SHOTS

1. Blog

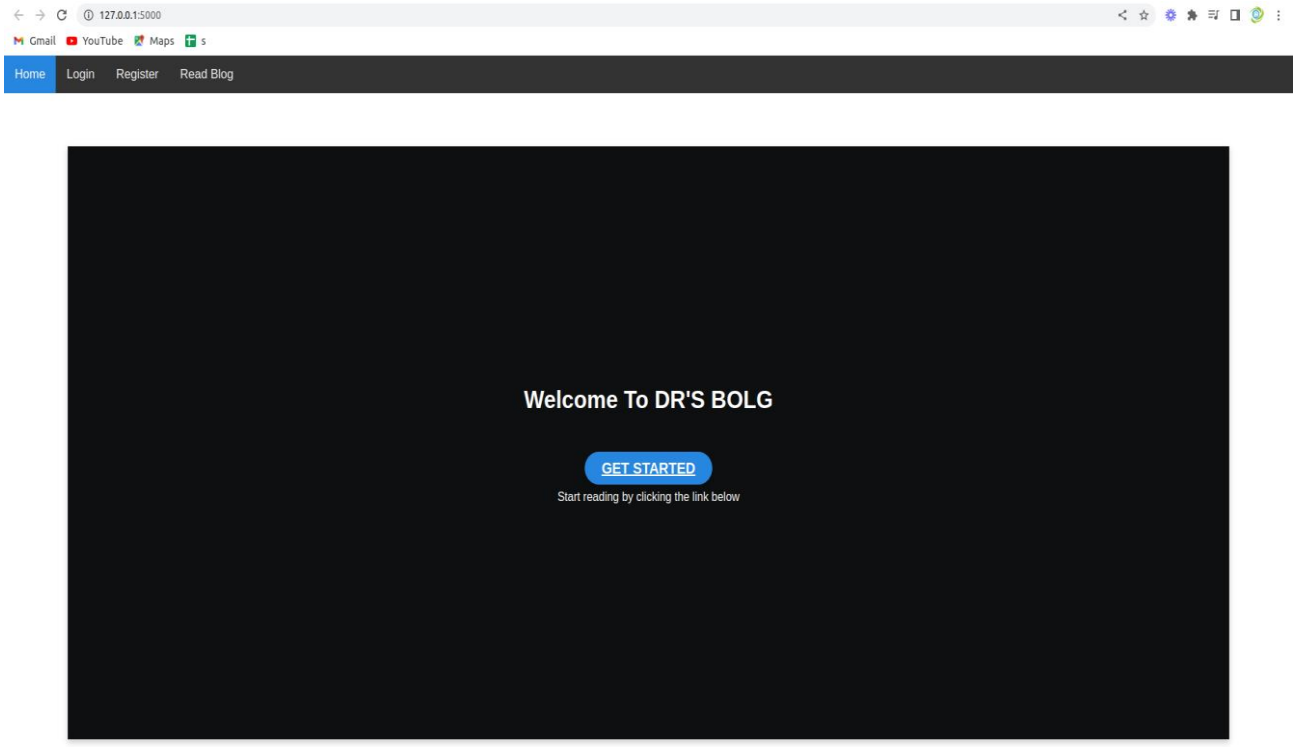


Fig 6.1 Home Page Blog

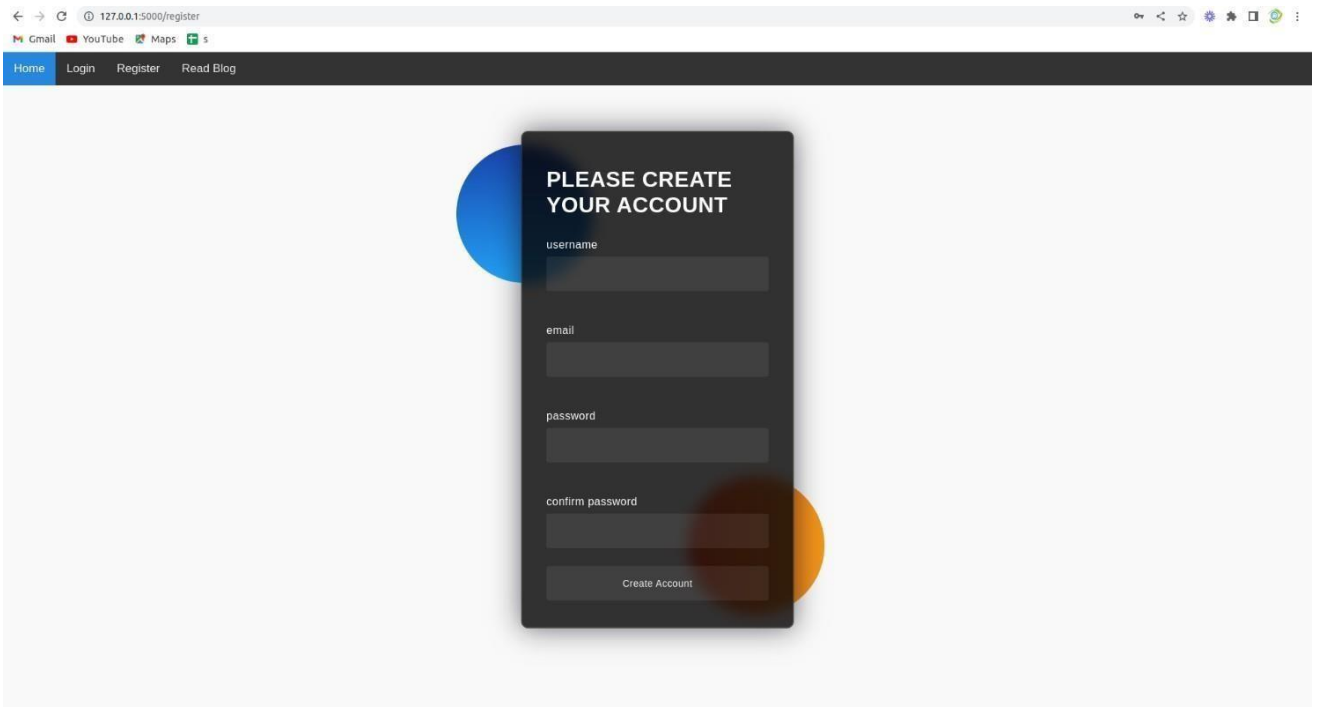


Fig 6.2 Register Page

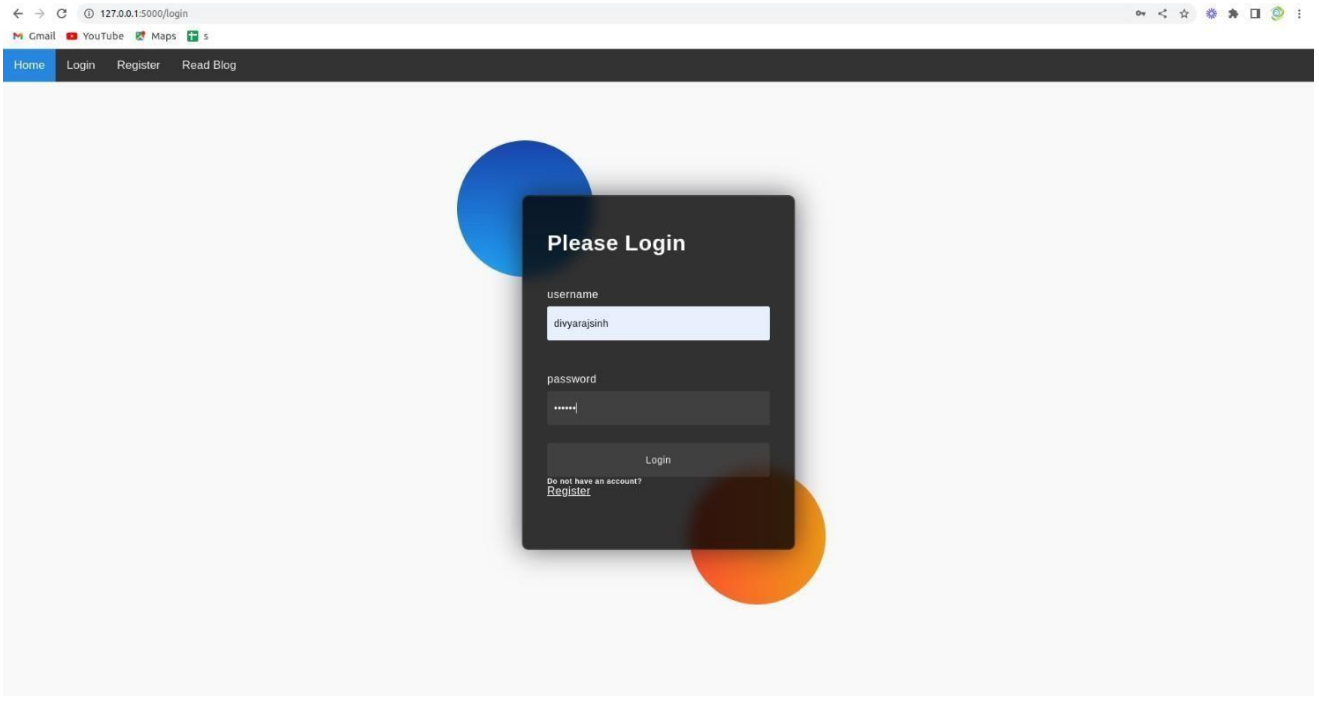


Fig 6.3 Login page

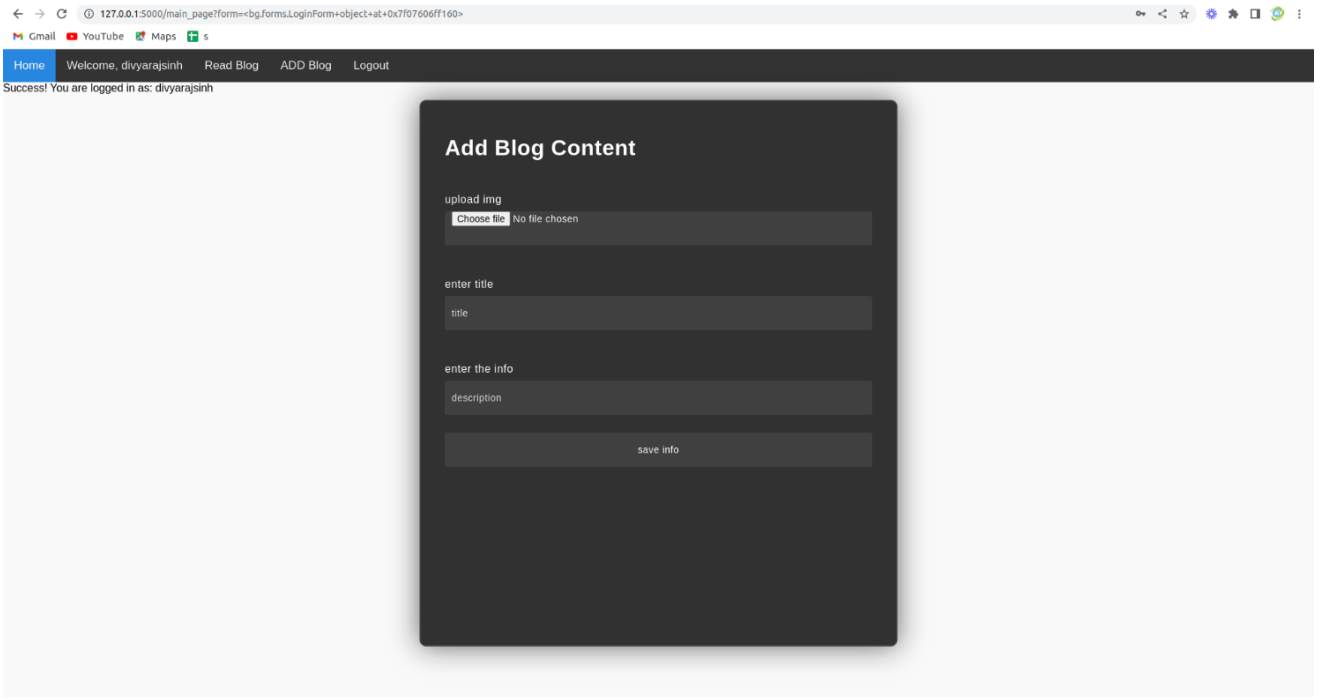


Fig 6.4 Add Blog

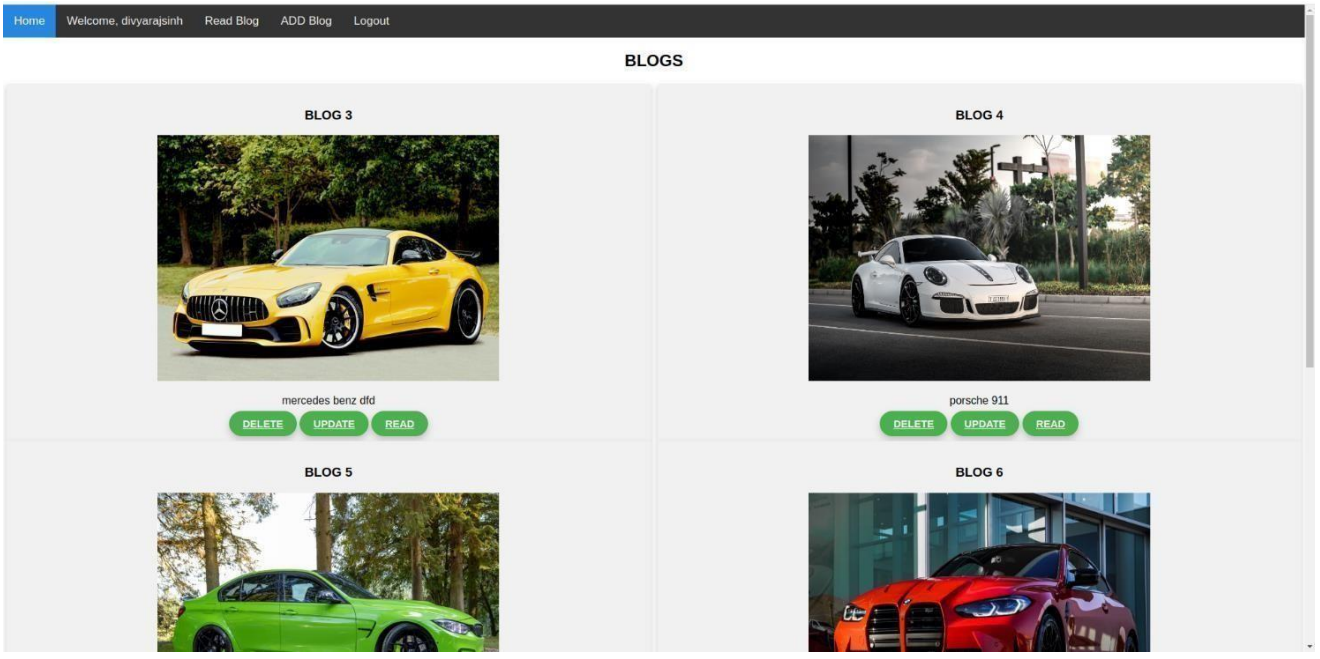


Fig 6.5 Read Blog

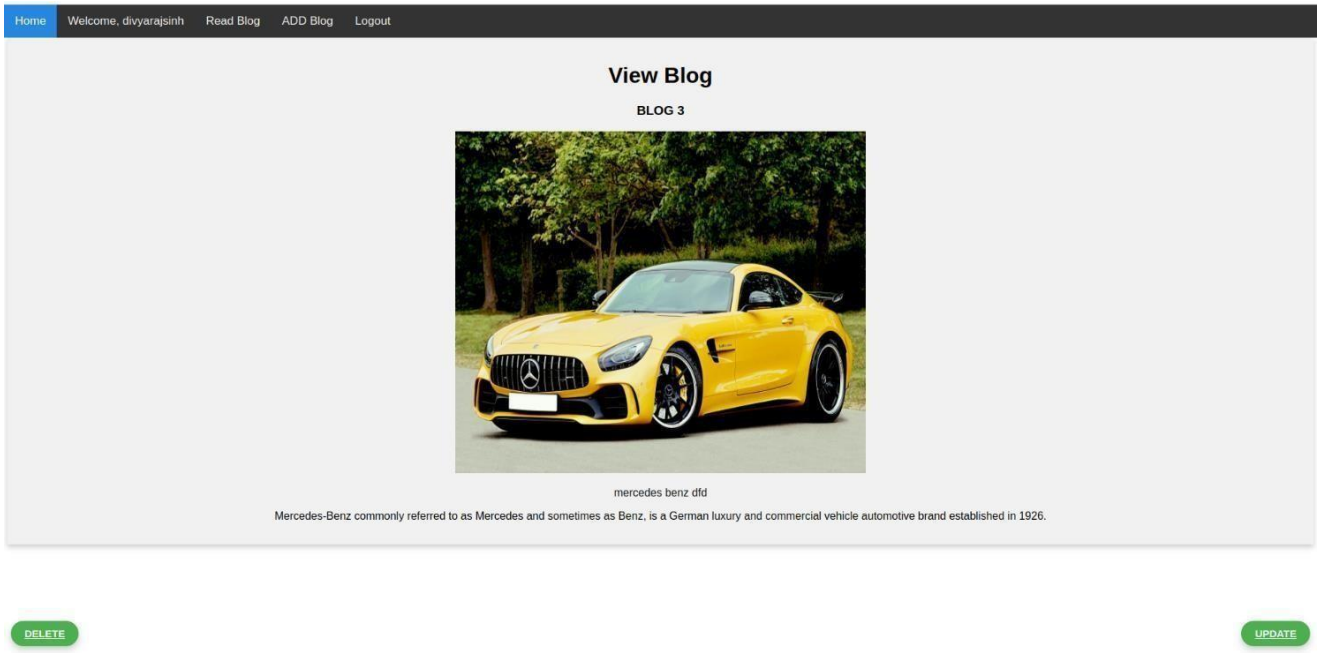


Fig 6.6 Update, Delete Blog

2. FarmEase

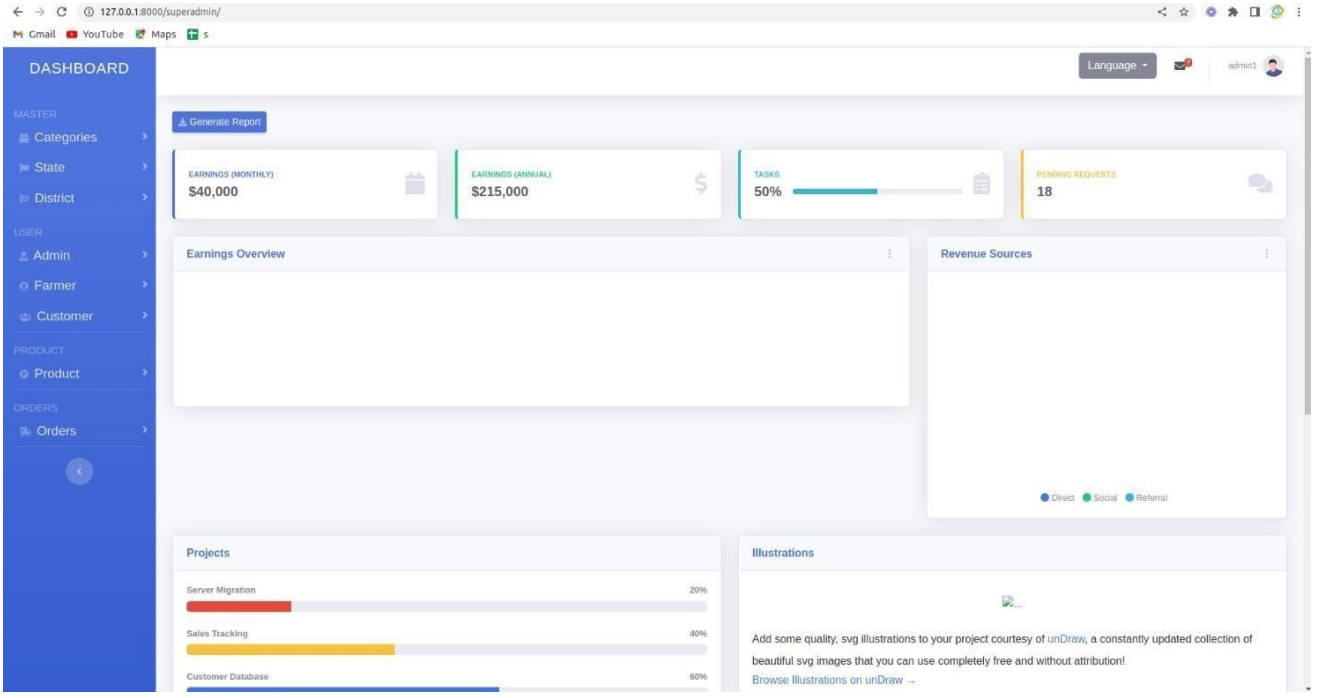


Fig 6.7 Dashboard.

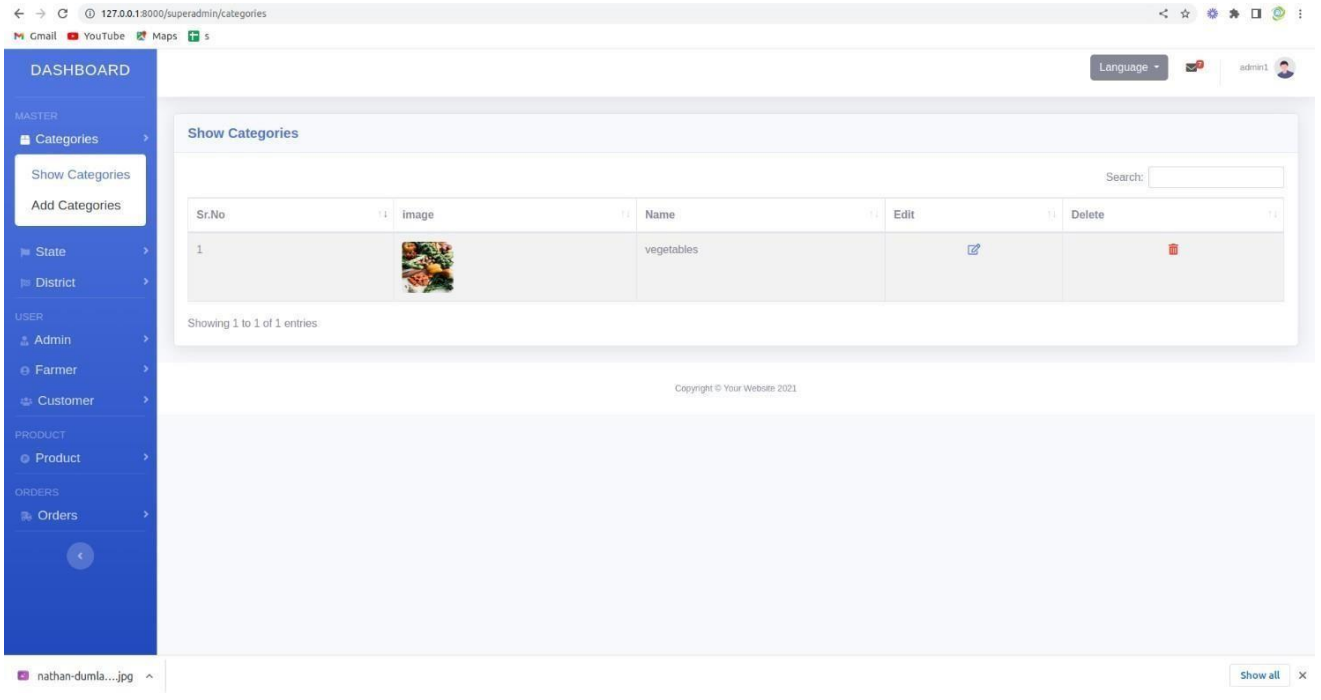


Fig 6.8 Show and Add categories

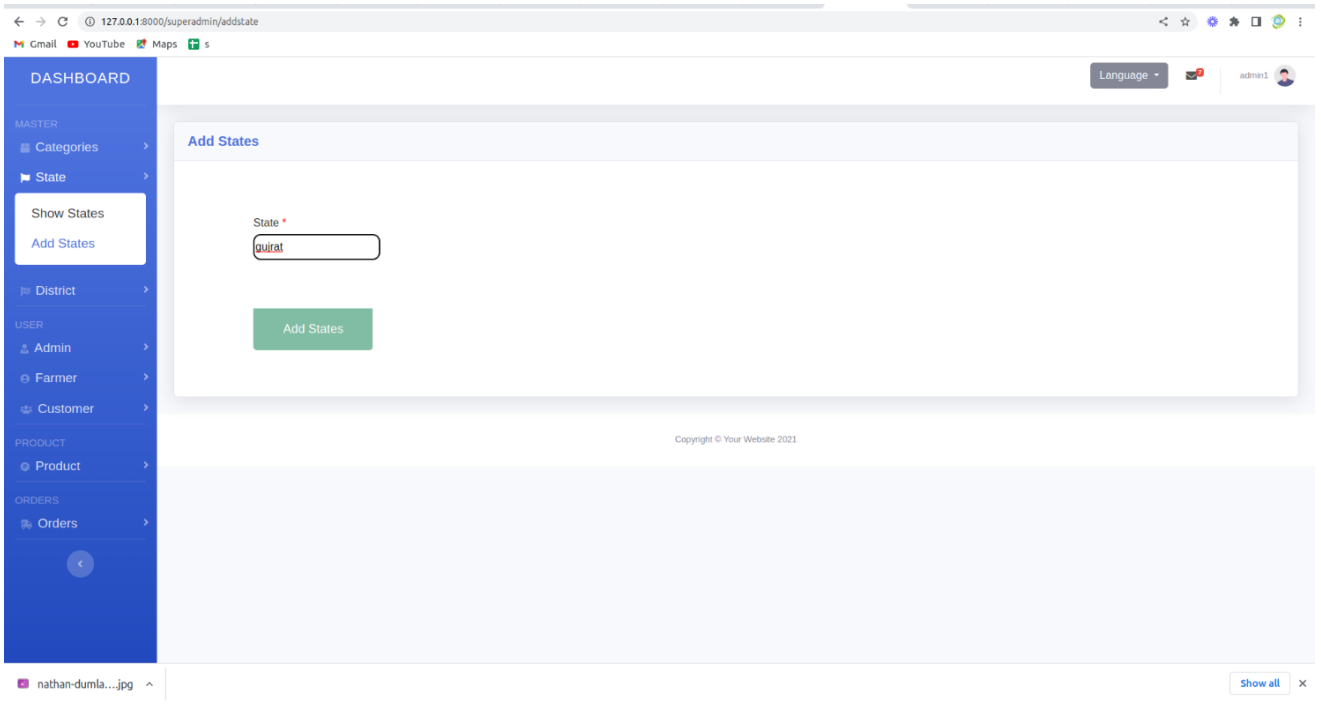


Fig 6.9 Show and Add States

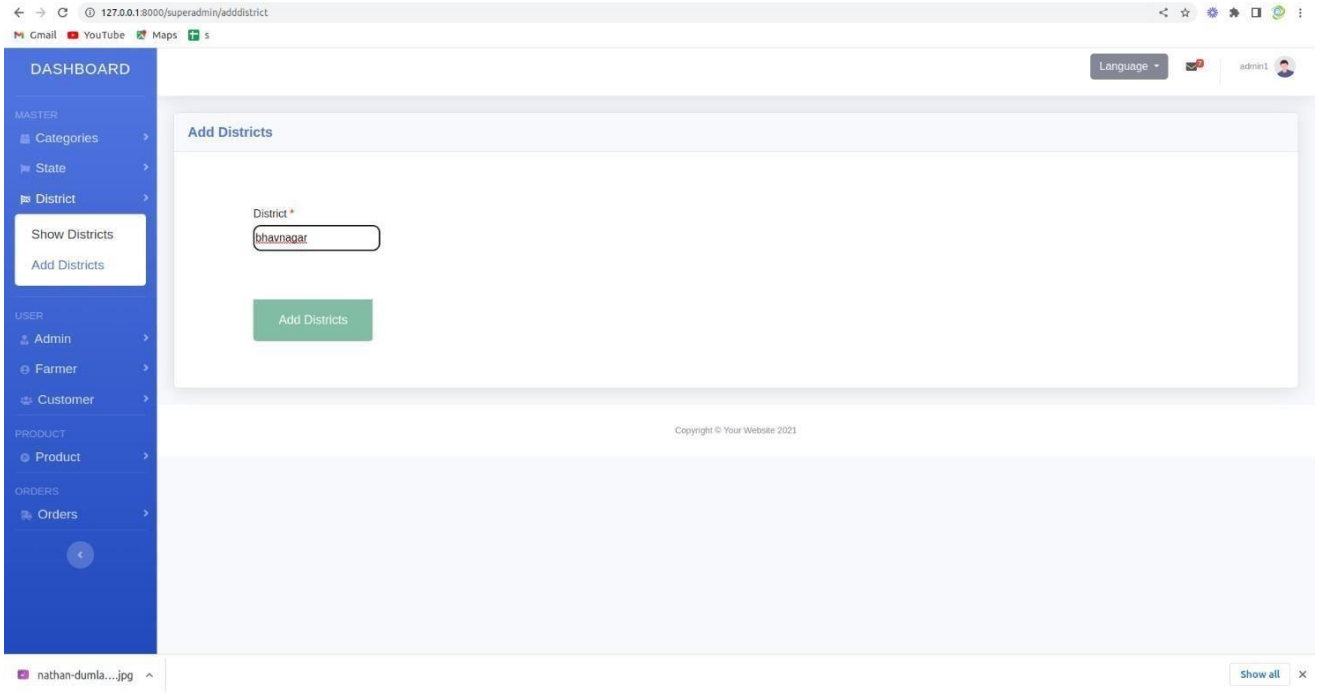
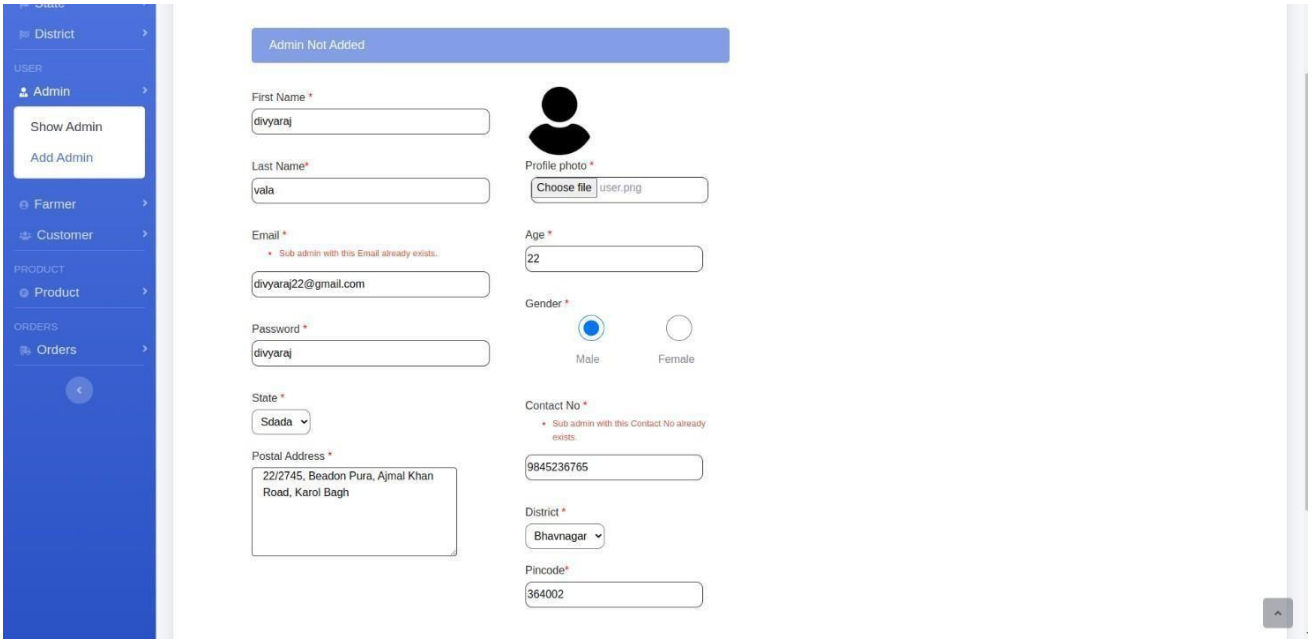


Fig 6.10 Show and Add Districts



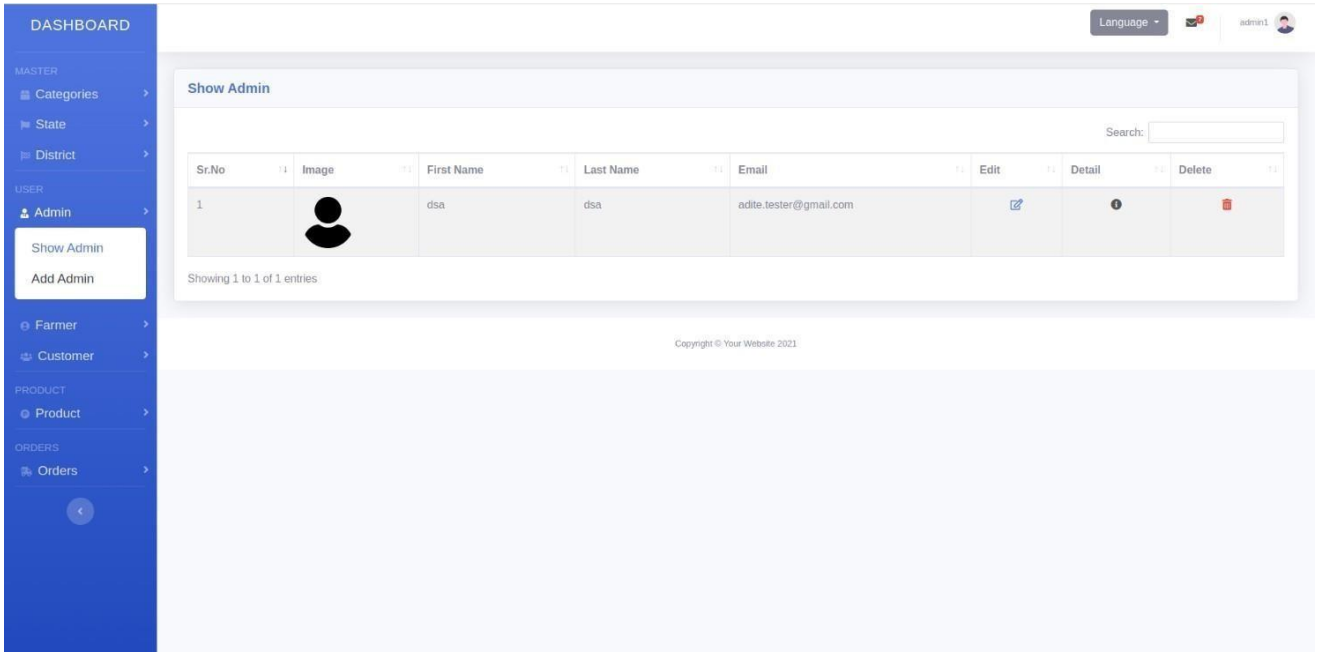


Fig 6.11 Show and Add Admin

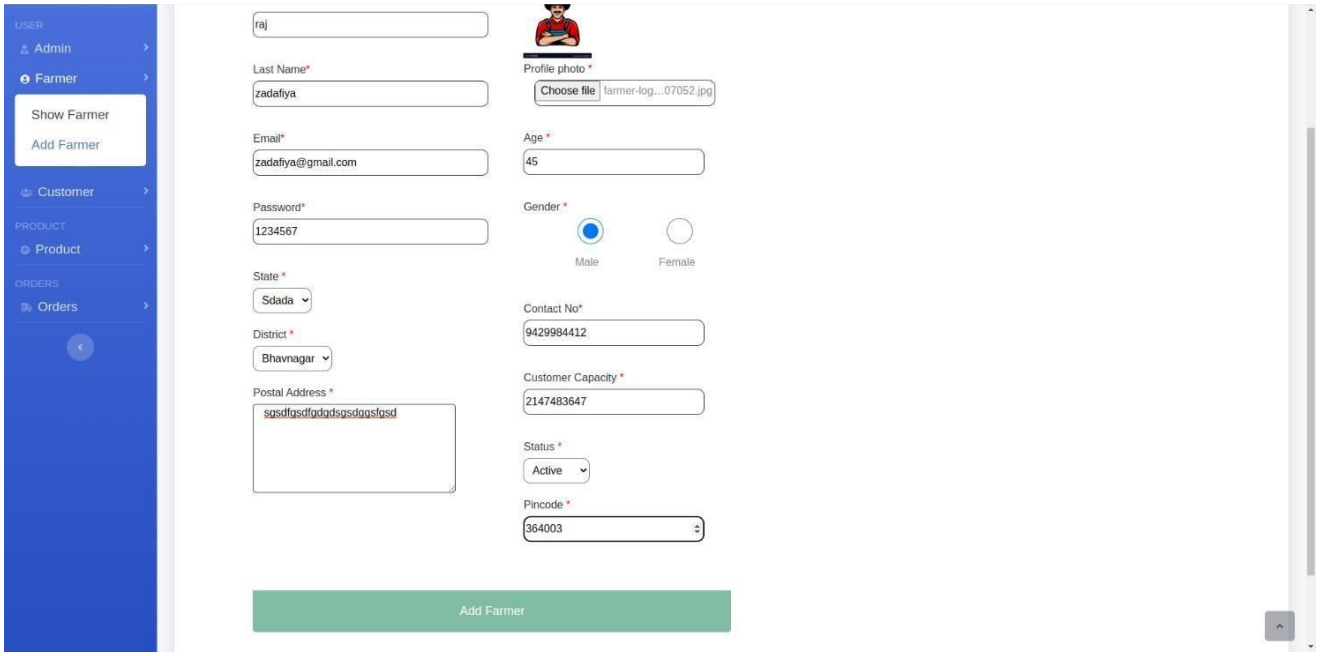


Fig 6.12 Show and Add Farmer

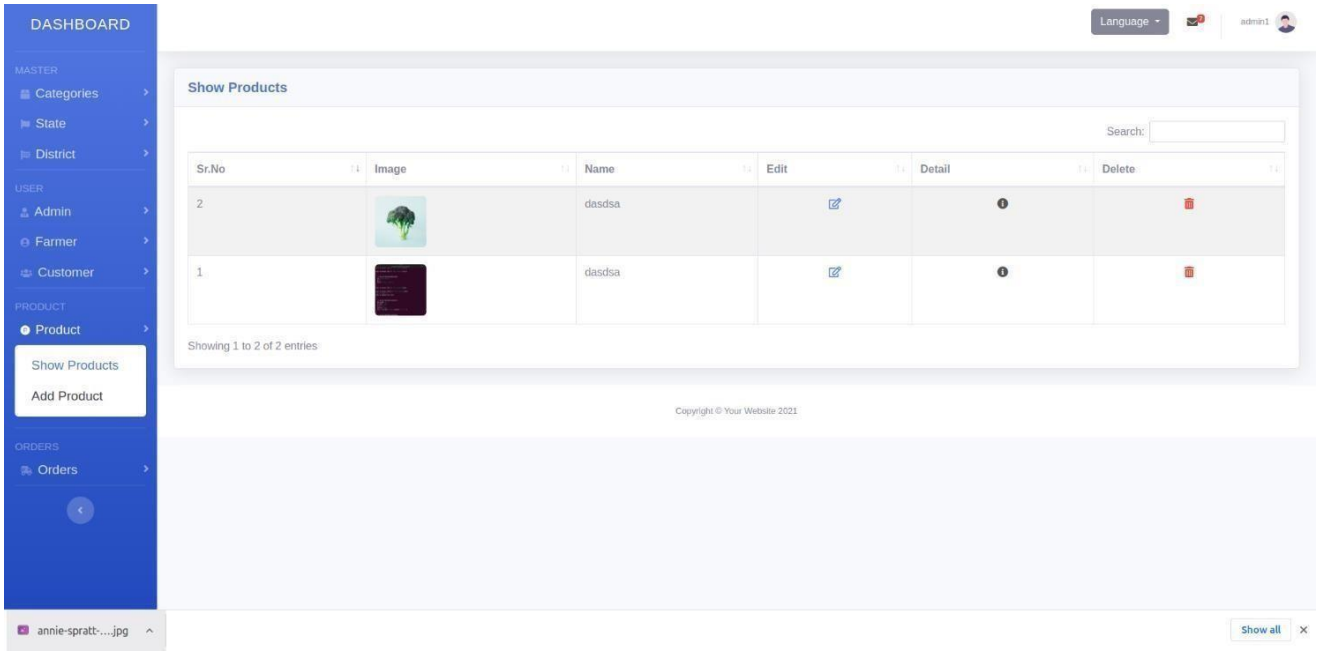


Fig 6.13 Show and Add Product

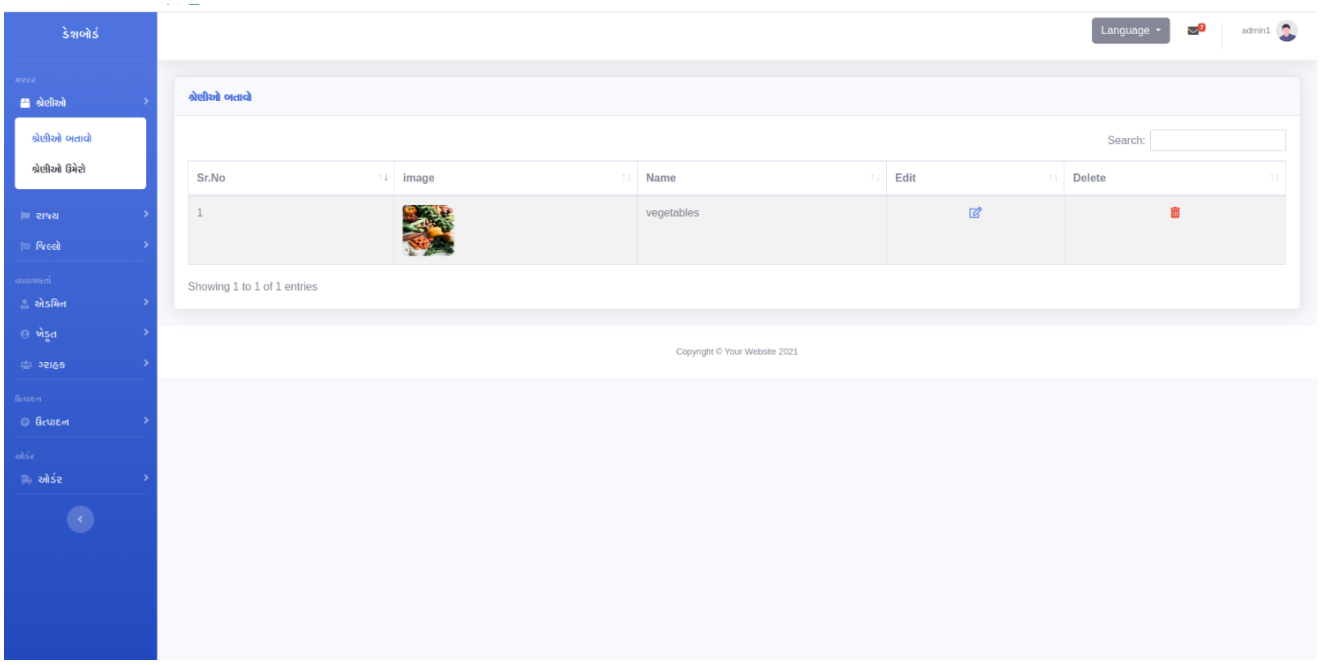


Fig 6.14 Show All the pages in gujrati

7. TESTING

7.1 TESTING PLAN / STRATEGY

A test is carried out to check the performance and issues and errors that occur in the project . It is to check the site alignment is not moving when otherthings are popup like wise.

A Test Plan is a detailed document that describes the test strategy, objectives, schedule, estimation, deliverables, and resources required to perform testing for a software product. Test Plan helps us determine the effort needed to validate the quality of the application under test. The test plan serves as a blueprint to conduct software testing activities as a defined process, which is minutely monitored and controlled by the test manager.

7.2 TESTING RESULT.

1) Blog:

Table 7.1 Test Result Blog

Test Id	Test Case	Excepted Output	Actual Output	Remark
1	Click add Blog data andsubmit.	Blog should be added.	Blog is added.	pass
2	Click edit button to edit the Blog.	Blog should be edit.	Blog is edited.	pass
3	Click delete button to deletet he Blog.	Blog should be deleted.	Blog is deleted.	pass

2.FarmEase

Table 7.2 Test Result Weather App

Testid	Testcase	Excepted output	Actual output	Remark
1	ADD Product, Admin, Farmer, Categories, States, SHOW Product, Admin, Farmer, Categories, States	All the add and show should work.	All the add and show functions are working	pass

8. CONCLUSION & DISCUSSION

8.1 OVERALL ANALYSIS OF INTERNSHIP VIABILITIES

During this Internship, I got to learn different technologies like Python, Flask, Django, Mysqlite, MongoDB etc and got to know how the IT industry works in real life and how the problems are solved.. Overall I got exposure to every aspect of software development made for different industries and for different requirements of clients.

8.2 DATES OF CONTINUOUS EVALUATION (CE-I AND CE-II)

1) Review1: 14/03/2023
2) Review2: 08/04/2023

8.3 PROBLEM ENCOUNTERED AND POSSIBLE SOLUTIONS

I When starting out in the IT industry, encountering problems is a common occurrence. However, these challenges can be overcome by using various methods, such as searching and experimenting with different approaches, and seeking guidance from mentors and colleagues.

Problem-solving in the IT industry often involves researching and analyzing original documents related to specific programming languages or technologies. This requires a deep understanding of the language and its syntax, as well as the ability to apply this knowledge to solve the problem at hand.

Overall, the IT industry requires a constant willingness to learn, adapt, and problem-solve in order to succeed. By utilizing a combination of research, experimentation, and collaboration, you can overcome challenges and continue to grow your skills and knowledge.

8.4 SUMMARY OF INTERNSHIP / PROJECT WORK

During my internship at Adite Technologies LLP starting in February 2022, I was able to find inspiration in the company's positive work environment and supportive team members. Working directly in the office provided me with a valuable opportunity to gain critical office experience and develop my versatility by working on various technology projects. Throughout my internship, I received direct feedback and guidance from my mentors, which helped me to become a reliable and motivated intern. I am incredibly grateful for the personal and professional growth that I experienced during my time at Adite Technologies LLP, and for the invaluable skills that I was able to develop.

8.5 LIMITATION AND FUTURE ENHANCEMENT

Limitation

- Learners can‘t get their progress report.
- Leaners can‘t know their weak areas after doing the course.
- Learners can‘t know the areas in which they are taking more time to complete
- Learners can‘t discuss directly regarding during their doubts with their instrcutors.

Future Enhancement

I gained so much experience from this Internship. If I did not have this experience it would be very hard for me to find a suitable job. And my future scopes will be good after a internship.

- Working as a software engineer is possible.
- Working as a data scientist is possible.
- Can work as Mobile app developing.

REFERENCES

1. https://www.w3schools.com/python/
2. https://flask.palletsprojects.com/en/2.2.x/
3. https://docs.djangoproject.com/en/4.2/
4. https://stackoverflow.com/questions/tagged/python
5. https://www.geeksforgeeks.org/python-programming-language/
6. https://pythoninstitute.org/
7. https://www.mongodb.com/docs/