VISVESVARAYA TECHNOLOGICAL UNIVERSITY

JNANASANGAMA, BELAGAVI – 590018

Mini Project Report
on
AGRICULTURE BASED MANAGEMENT SYSTEM

Bachelor of Engineering
in
COMPUTER SCIENCE AND ENGINEERING
Submitted by

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V SEMESTER

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B.N.M. Institute of Technology

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Approved by AICTE, Accredited as Grade A Institution by NAAC.
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Department of Computer Science and Engineering
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Vidyayāmruthamashnuthe

<u>CERTIFICATE</u>

Certified that the mini project work entitled **Agriculture based Management System** carried out by

Mr. **AKSHAT SAXENA (1BG18CS009)**, is a bonafide student of V Semester, BNM Institute of

Technology in partial fulfillment for the award of Bachelor of Engineering in COMPUTER

SCIENCE AND ENGINEERING of Visvesvaraya Technological University, Belagavi during the

year 2021-22. It is certified that all corrections / suggestions indicated for Internal Assessment have

been incorporated in the report deposited in the departmental library. The project report has been

approved as it satisfies the academic requirements in respect of mini project work prescribed for the

said degree.

Dr. Sreevidya R C   **Dr. Sahana D. Gowda**
Associate Professor   **Professor and HOD**
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BNMIT, Bengaluru   **BNMIT, Bengaluru**

Name and Signature
Examiner 1:

Examiner 2:

ABSTRACT

Khet Express: An Agriculture based Management System is an online website that helps buyers to shop for their desired Fruits and vegetables sitting comfortably at home along with their family. These days people want to explore as many options and are mostly interested in getting things delivered at home without them going outside. Buyers would not want to face external factors or buy bad products from any vegetable seller, customers rather feel buying fresh products online is better than offline. So, this management system works as a boon to both the farmer and the customer. The sellers can put up all the available products online along with the required details, buyers can make orders, know what they have ordered, etc. On the other side, it allows the users to have their own accounts where they can log into or register into the website and check the products, add it to the cart, place order, view the cart in order to decide about it again, and logout safely when they are done. Khet Express System will make better connection among Farmers and Buyers ensure quality food. It will also Standardize and increase efficiency of Agro-culture process.

ACKNOWLEDGEMENT

The completion of this project brings with a sense of satisfaction, but it is never complete without thanking the persons responsible for its successful completion.

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INTRODUCTION

1.1 Overview of Database Management System

A Database is a collection of related data organized in a way that data can be easily accessed, managed and updated. Any piece of information can be a data, for example name of your school. Database is actually a place where related piece of information is stored and various operations can be performed on it. A DBMS is a software that allows creation, definition and manipulation of database. DBMS also provides protection and security to database. It maintains data consistency in case of multiple users. The database system can be divided into four components:

● The database system can be divided into System developer and End users.

● Database application: Database application may be Personal, Departmental, Enterprise and Internal.

● DBMS: Software that allow users to define, create and manages database access.

● Database: Collection of logical data. Functions of database management system:

1. Provides Recovery services.
2. Provides utility.
3. Provides data Independence.
4. Provides a clear and logical view of the process that manipulates data.

Advantages of DBMS: ● Segregation of application program ● Minimal data duplicity ● Reduced development time and maintenance need ● Easy retrieval of data

Khet Express is the farmer system where they can plan, monitor and analyze the activity of the farmers production system. It manages farmer operation with one system and organizes data in one place. It helps smart farmers become even smarter. This creates in partnership with growers and buyers. It inspires farmer to produce and buyers to consume fresh goods. Khet Express System will make better connection among Farmers and Buyers ensure quality food. It will also Standardize and increase efficiency of Agro culture process.

1.2 PROBLEM STATEMENT

Design a project where farmers and buyers can create their accounts, they can buy or sell the products including fruits, vegetables, and grains using this website. They can also review the products and add a brief/blog regarding the same.

1.3 OBJECTIVES OF THE PROJECT

The specific objectives of the project include:

- To provide qualitative foods to the buyers.
- Implementing an automated/online Khet Express system.
- To inspire farmer to produce quality goods and supply to the buyers.
- Eco-friendly farming system.
- It is focused on studying the existing system of Agro Culture and to make sure that the peoples are getting quality fresh goods.
- Less effort and less labor intensive, as the primary cost and focus primary on creating, managing, and running a secure quality food supply.
- Increasing number of buyers as individuals will find it easier and more convenient to buy goods. Easy management.

1.4 BACKGROUND STUDY

India is fourth largest agriculture sector in the world. Agriculture sector provides employment to over two third population of the country. Not only this, agriculture is major source of income for more than 75% Indians. Although agriculture is of great significance to the national economy yet the condition of Indian farmers and other individuals depended on the sector is unfortunate.

Creating a Database Management System like Khet Express can help Farmer's plan, monitor and analyze the activity of the production system. It manages the organization of data in one place. It also helps farmers to become smart. It will also Standardize and increase efficiency of Agro culture process.The basic tools used to build websites are HTML, CSS and PHP. HTML describes the elements used in the given website, CSS is used for styling the website and PHP is an open-source, interpreted, and object-oriented scripting language that can be executed at the server-side. This allows us to access the MYSQL database which we will be using as the back end to store the data about the Khet Express website.

CHAPTER 2
SYSTEM REQUIREMENTS

2.1 SOFTWARE REQUIREMENT SPECIFICATION (SRS)

Requirement analysis for web application encompasses three major tasks: formulation, requirements gathering and analysis modelling. During formulation, the basic motivation and goals for the web application are identified, and the categories of users are defined. In the requirements gathering phase, the content and functional requirements are listed, and interaction scenarios written from end-user's point-of-view are developed. This intent is to establish a basic understanding of why the web application is built, who will use it, and what problems it will solve for its users.

➢ **Hardware requirements:**

Processor:	11th Gen Intel(R) Core (TM) i7-1165G7 (Minimum i3)
Clock speed:	@ 2.80GHz (Minimum 1.8 GHz)
Screen resolution:	1920 X 1080 (1024 X 768 recommended)
RAM:	16 GB (Minimum 2 GB)
Disk space:	1TB SSD (Minimum 15 GB HDD)
Input Output Console for interaction	

➢ **Software requirements:**
- Oracle SQL*Plus Release 11.1.0.6.0/MYSQL.
- Visual Studio Code IDE.
- Windows 7 or higher.
- Google chrome Browser (Chrome has an extensive compatibility list with many modules and hence is preferred by many web developers)
- PhpMyAdmin.
- Chrome dev tools (for inspections and verifications of element placement).

➢ **Front end tools used:** HTML, CSS.

➢ **Back-end tools used:** PHP, MYSQL.

CHAPTER 3

SYSTEM DESIGN

System design is the process of defining the architecture, modules, interfaces and data for a system to satisfy specific requirements. System design could be seen as the application of system theory to product development. There is some overlap with the disciplines of systems analysis, systems architecture and systems engineering.

3.1 SCHEMA DIAGRAM

A database schema is the skeleton structure that represents the logical view of the entire database. It defines how the data is organized and how the relations among them are associated. It formulates all the constraints that are to be applied on the data. A database schema defines its entities and the relationship among them. It contains a descriptive detail of the database, which can be depicted by means of schema diagrams. It's the database designers who design the schema to help programmers understand the database and make it useful.
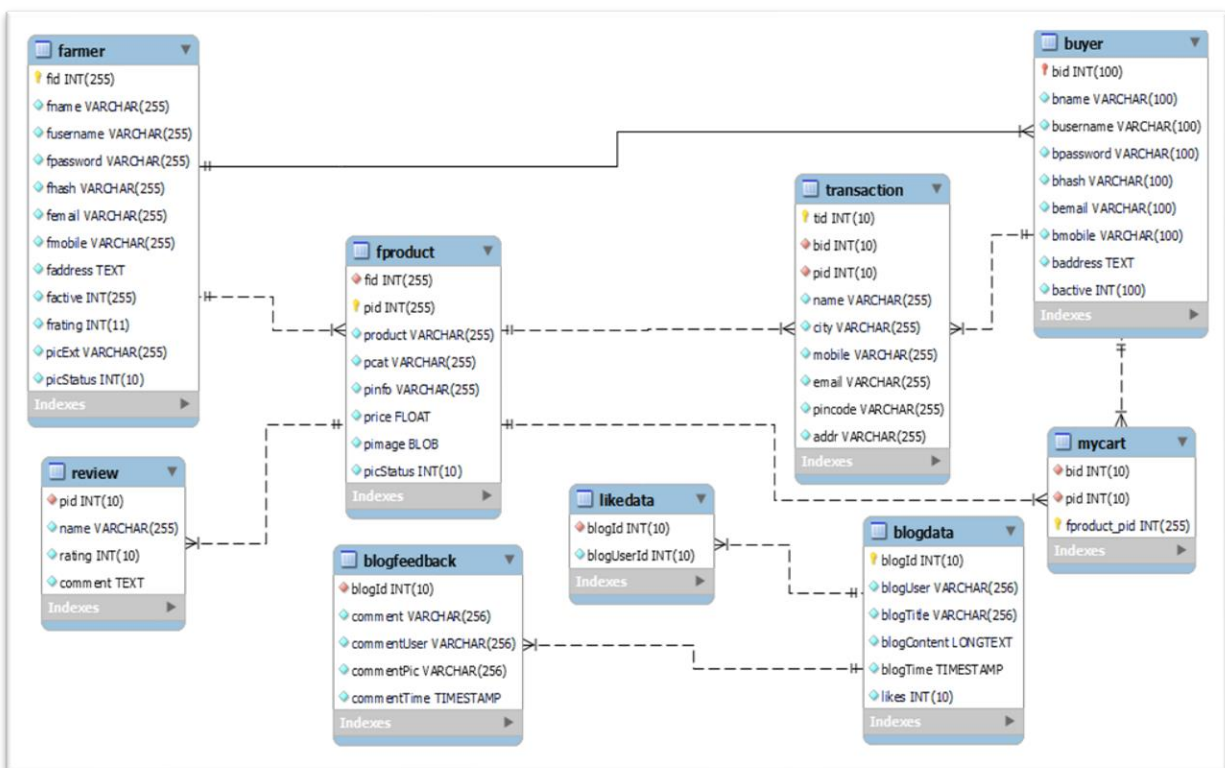
Figure 3.1: Schema Diagram of KhetExpress

3.2 ER DIAGRAM

An entity–relationship model describes interrelated things of interest in a specific domain of knowledge. A basic ER model is composed of entity types and specifies relationships that can exist between instances of those entity types. Consequently, the ER model becomes an abstract data model that defines a data or information structure which can be implemented in a database, typically a relational database.
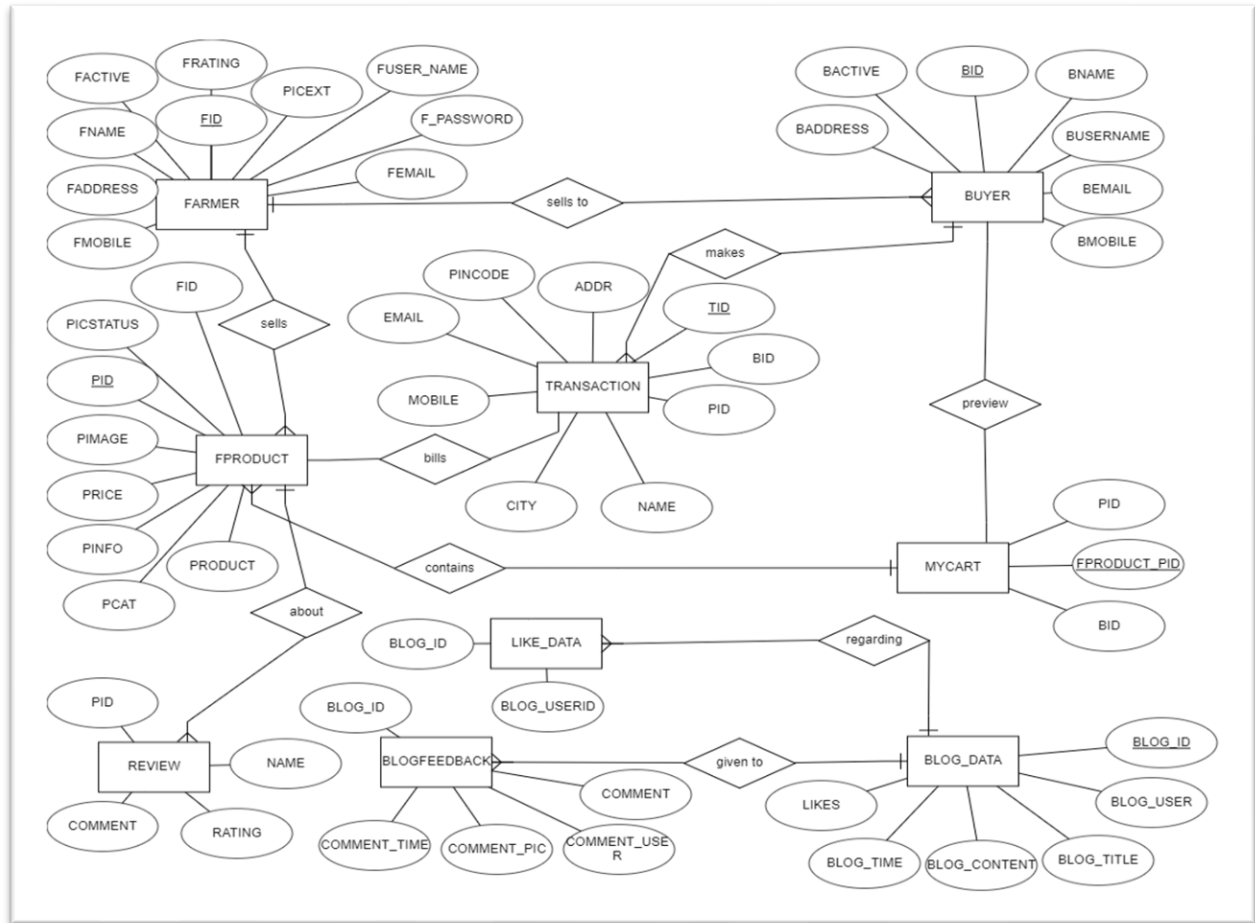

Figure 3.2: E-R diagram of KhetExpress

3.3 Overview of GUI

GUI is a program interface that takes advantage of the computer's graphics capabilities to make the program easier to use. Well-designed graphical user interfaces can free the user from learning complex command languages. On the other hand, many users find that they work more effectively with a command-driven interface, especially if they already know the command language.

Hypertext Markup Language (HTML) is the standard markup language for creating web pages and web applications. With JavaScript it forms a triad of cornerstone technologies for the World Wide Web. Web browsers receive HTML documents from a web server or from local storage and render them into multimedia web pages. HTML describes the structure of a web page semantically and originally included cues for the appearance of the document.

Cascading Style Sheets (CSS) is a style sheet language used for describing the presentation of a document written in a markup language like HTML. CSS is a cornerstone technology of the World Wide Web, alongside HTML and JavaScript. CSS is designed to enable the separation of presentation and content, including layout, colors, and fonts. This separation can improve content accessibility, provide more flexibility and control in the specification of presentation characteristics, enable multiple web pages to share formatting by specifying the relevant CSS in a separate .css file, and reduce complexity and repetition in the structural content.

3.4 Normalization

Normalization is a process of analyzing the given relation schema based on their functional dependencies and primary key to achieve desirable properties of minimizing redundancy and minimizing insert, delete, update anomaly. The normalization process takes a relation schema through a series of tests to certify whether it satisfies a certain normal form. The normal form of a relation refers to the highest normal form condition that it meets, and hence the degree to which it has been normalized.

Normalization rules are divided into the following normal form:

1. First Normal Form
2. Second Normal Form
3. Third Normal Form
4. Boyce-Codd Normal Form

3.4.1 First Normal Form

The first normal form states that the domain of an attribute must include only atomic (simple, individual) values and that the value of any attribute in a tuple must be a single value from the domain of the attribute. Consider the relations of the Khet Express System, all the relations are in 1NF as they have neither any multivalued attributes nor composite attributes. Hence the relations are said to be in 1NF.

3.4.2 Second Normal Form

Second normal from is based on the concept of full functional dependency. A functional dependency X -> Y is a full functional dependency if removal of any attribute A from X means that the dependency does not hold anymore. A relation schema R is in 2NF if every nonprime attribute A in R is fully functionally dependenton the primary key of R.

3.4.3 Third Normal Form

The third normal form is based on the concept of transitive dependency. A relation schema R is in 3NF if it satisfies 2NF and no non-prime attribute of R is transitively dependent on the primary key. A relation schema R is in 3NF if every nonprime attribute of R meets both of the following conditions:

- It is fully functionally dependent on every key of R.
- It is non-transitively dependent on every key of R.

The relations used in this database are fully functionally dependent on its key attribute and do not hold any transitive dependencies. Hence all the relations are in 3NF.

CHAPTER 4

IMPLEMENTATION

4.1 Table Creation

In the tables, data is organized in row and column format. The rows represent a unique record and the columns represent the attributes of a given table. The tables provide the overall structure of the different tables that are used; showcasing the various attributes and the respective data types.

```
CREATE TABLE `blogdata` (
 `blogId` int(10) NOT NULL,
 `blogUser` varchar(256) NOT NULL,
 `blogTitle` varchar(256) NOT NULL,
 `blogContent` longtext NOT NULL,
 `blogTime` timestamp NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp(),
 `likes` int(10) NOT NULL
) ;
CREATE TABLE `blogfeedback` (
 `blogId` int(10) NOT NULL,
 `comment` varchar(256) NOT NULL,
 `commentUser` varchar(256) NOT NULL,
 `commentPic` varchar(256) NOT NULL,
 `commentTime` timestamp NOT NULL DEFAULT current_timestamp() ON UPDATE current_timestamp()
) ;
CREATE TABLE `buyer` (
 `bid` int(100) NOT NULL,
 `bname` varchar(100) NOT NULL,
 `busername` varchar(100) NOT NULL,
 `bpassword` varchar(100) NOT NULL,
```

```
  `bhash` varchar(100) NOT NULL,

  `bemail` varchar(100) NOT NULL,

  `bmobile` varchar(100) NOT NULL,

  `baddress` text NOT NULL,

  `bactive` int(100) NOT NULL

);
CREATE TABLE `farmer` (

  `fid` int(255) NOT NULL,

  `fname` varchar(255) NOT NULL,

  `fusername` varchar(255) NOT NULL,

  `fpassword` varchar(255) NOT NULL,

  `fhash` varchar(255) NOT NULL,

  `femail` varchar(255) NOT NULL,

  `fmobile` varchar(255) NOT NULL,

  `faddress` text NOT NULL,

  `factive` int(255) NOT NULL,

  `frating` int(11) NOT NULL,

  `picExt` varchar(255) NOT NULL,

  `picStatus` int(10) NOT NULL

);
CREATE TABLE `fproduct` (

  `fid` int(255) NOT NULL,

  `pid` int(255) NOT NULL,

  `product` varchar(255) NOT NULL,

  `pcat` varchar(255) NOT NULL,

  `pinfo` varchar(255) NOT NULL,

  `price` float NOT NULL,

  `pimage` blob NOT NULL,

  `picStatus` int(10) NOT NULL

);
CREATE TABLE `likedata` (
```

```
 `blogId` int(10) NOT NULL,
 `blogUserId` int(10) NOT NULL
);
CREATE TABLE `mycart` (
 `bid` int(10) NOT NULL,
 `pid` int(10) NOT NULL,
 `fproduct_pid` int(255) NOT NULL
);
CREATE TABLE `review` (
 `pid` int(10) NOT NULL,
 `name` varchar(255) NOT NULL,
 `rating` int(10) NOT NULL,
 `comment` text NOT NULL
);
CREATE TABLE `transaction` (
 `tid` int(10) NOT NULL,
 `bid` int(10) NOT NULL,
 `pid` int(10) NOT NULL,
 `name` varchar(255) NOT NULL,
 `city` varchar(255) NOT NULL,
 `mobile` varchar(255) NOT NULL,
 `email` varchar(255) NOT NULL,
 `pincode` varchar(255) NOT NULL,
 `addr` varchar(255) NOT NULL
);
ALTER TABLE `blogdata`
 ADD PRIMARY KEY (`blogId`);
ALTER TABLE `blogfeedback`
 ADD KEY `f6` (`blogId`);
ALTER TABLE `buyer`
 ADD PRIMARY KEY (`bid`);
```

ALTER TABLE `farmer`

 ADD PRIMARY KEY (`fid`),

 ADD KEY `fid` (`fid`),

 ADD KEY `fid_2` (`fid`),

 ADD KEY `fid_3` (`fid`);

ALTER TABLE `fproduct`

 ADD PRIMARY KEY (`pid`),

 ADD KEY `fid` (`fid`);

ALTER TABLE `likedata`

 ADD KEY `f7` (`blogId`);

ALTER TABLE `mycart`

 ADD PRIMARY KEY (`fproduct_pid`),

 ADD KEY `f1` (`bid`),

 ADD KEY `f2` (`pid`);

ALTER TABLE `review`

 ADD KEY `foreign key` (`pid`);

ALTER TABLE `transaction`

 ADD PRIMARY KEY (`tid`),

 ADD KEY `f4` (`bid`),

 ADD KEY `f5` (`pid`);

ALTER TABLE `farmer`

MODIFY `fid` int(255) NOT NULL AUTO_INCREMENT;

ALTER TABLE `blogfeedback`

 ADD CONSTRAINT `f6` FOREIGN KEY (`blogId`) REFERENCES `blogdata` (`blogId`) ON
DELETE CASCADE;

ALTER TABLE `fproduct`

 ADD CONSTRAINT `f3` FOREIGN KEY (`fid`) REFERENCES `farmer` (`fid`) ON
DELETE CASCADE;

ALTER TABLE `likedata`

 ADD CONSTRAINT `f7` FOREIGN KEY (`blogId`) REFERENCES `blogdata` (`blogId`) ON
DELETE CASCADE;

ALTER TABLE `mycart`

ADD CONSTRAINT `f2` FOREIGN KEY (`pid`) REFERENCES `fproduct` (`pid`) ON DELETE CASCADE;

ALTER TABLE `review`

ADD CONSTRAINT `foreign key` FOREIGN KEY (`pid`) REFERENCES `fproduct` (`pid`) ON DELETE CASCADE;

ALTER TABLE `transaction`

ADD CONSTRAINT `f4` FOREIGN KEY (`bid`) REFERENCES `buyer` (`bid`) ON DELETE CASCADE,

ADD CONSTRAINT `f5` FOREIGN KEY (`pid`) REFERENCES `fproduct` (`pid`) ON DELETE CASCADE;

4.2 Table Description

Desc blogdata;

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	blogId 🔑	int(10)			No	None			🖊 Change ⊖ Drop ▾ More
2	blogUser	varchar(256)	utf8mb4_general_ci		No	None			🖊 Change ⊖ Drop ▾ More
3	blogTitle	varchar(256)	utf8mb4_general_ci		No	None			🖊 Change ⊖ Drop ▾ More
4	blogContent	longtext	utf8mb4_general_ci		No	None			🖊 Change ⊖ Drop ▾ More
5	blogTime	timestamp			No	current_timestamp()		ON UPDATE CURRENT_TIMESTAMP()	🖊 Change ⊖ Drop ▾ More
6	likes	int(10)			No	None			🖊 Change ⊖ Drop ▾ More

Figure 4.1: Description of BlogData table

In the above figure, the structure of the Blogdata table is given to provide the details regarding the blog written by the user of the website.

Desc blogfeedback

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	bid 🔑	int(10)			No	None			🖊 Change ⊖ Drop ▾ More
2	comment	varchar(256)	utf8mb4_general_ci		No	None			🖊 Change ⊖ Drop ▾ More
3	commentUser	varchar(256)	utf8mb4_general_ci		No	None			🖊 Change ⊖ Drop ▾ More
4	commentPic	varchar(256)	utf8mb4_general_ci		No	None			🖊 Change ⊖ Drop ▾ More
5	commentTime	timestamp			No	current_timestamp()		ON UPDATE CURRENT_TIMESTAMP()	🖊 Change ⊖ Drop ▾ More

Figure 4.2: Description of Blogfeedback table

In the above figure, the structure of the Blogfeedback table is given to provide the review/comments given by the people to blogs.

Desc buyer;

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	bid 🔑🔑	int(100)			No	None			✎ Change ⊖ Drop ▼ More
2	bname	varchar(100)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
3	busername	varchar(100)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
4	bpassword	varchar(100)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
5	bhash	varchar(100)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
6	bemail	varchar(100)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
7	bmobile	varchar(100)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
8	baddress	text	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
9	bactive	int(100)			No	None			✎ Change ⊖ Drop ▼ More

Figure 4.3: Description of Buyer table

In the above figure, the structure of the Buyer table is given to provide the buyer personal details like Name, Username, Password, Email, Mobile number, Contact Address.

Desc farmer;

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action
1	fid 🔑🔑	int(255)			No	None		AUTO_INCREMENT	✎ Change ⊖ Drop ▼ More
2	fname	varchar(255)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
3	fusername	varchar(255)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
4	fpassword	varchar(255)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
5	fhash	varchar(255)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
6	femail	varchar(255)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
7	fmobile	varchar(255)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
8	faddress	text	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
9	factive	int(255)			No	None			✎ Change ⊖ Drop ▼ More
10	frating	int(11)			No	None			✎ Change ⊖ Drop ▼ More
11	picExt	varchar(255)	utf8mb4_general_ci		No	None			✎ Change ⊖ Drop ▼ More
12	picStatus	int(10)			No	None			✎ Change ⊖ Drop ▼ More

Figure 4.4: Description of Farmer table

In the above figure, the structure of the Farmer table is given to provide the Farmer personal details like Name, Username, Password, Email, obile number, Contact Address.

Desc fproduct;

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
1	fid	int(255)			No	None			Change	Drop	More
2	pid	int(255)			No	None			Change	Drop	More
3	product	varchar(255)	utf8mb4_general_ci		No	None			Change	Drop	More
4	pcat	varchar(255)	utf8mb4_general_ci		No	None			Change	Drop	More
5	pinfo	varchar(255)	utf8mb4_general_ci		No	None			Change	Drop	More
6	price	float			No	None			Change	Drop	More
7	pimage	varchar(255)	utf8mb4_general_ci		No	None			Change	Drop	More
8	picStatus	int(10)			No	None			Change	Drop	More

Figure 4.5: Description of Fproduct table

In the above figure, the structure of the Fproduct table is given to provide the Product details like Name of the product, Category of the product, Price, Description and the Image of the product.

Desc likes;

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
1	blogId	int(10)			No	None			Change	Drop	More
2	blogUserId	int(10)			No	None			Change	Drop	More

Figure 4.6: Description of Likes table

In the above figure, the structure of the Likes table is given to provide the details of the likes provided by the users to the blogs like the ID of the blog and the UserId of the person who has given the upvote to the blog.

Desc mycart;

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐ 1	bid 🔑	int(10)			No	None			🖊 Change	⊖ Drop	▼ More
☐ 2	pid 🔑	int(10)			No	None			🖊 Change	⊖ Drop	▼ More
☐ 3	fproduct_pid 🔑	int(255)			No	None			🖊 Change	⊖ Drop	▼ More

Figure 4.7: Description of mycart table

In the above figure, the structure of the mycart table is given to provide the cart details.

Desc transaction;

#	Name	Type	Collation	Attributes	Null	Default	Comments	Extra	Action		
☐ 1	tid 🔑	int(10)			No	None		AUTO_INCREMENT	🖊 Change	⊖ Drop	▼ More
☐ 2	bid	int(10)			No	None			🖊 Change	⊖ Drop	▼ More
☐ 3	pid	int(10)			No	None			🖊 Change	⊖ Drop	▼ More
☐ 4	name	varchar(255)	utf8mb4_general_ci		No	None			🖊 Change	⊖ Drop	▼ More
☐ 5	city	varchar(255)	utf8mb4_general_ci		No	None			🖊 Change	⊖ Drop	▼ More
☐ 6	mobile	varchar(255)	utf8mb4_general_ci		No	None			🖊 Change	⊖ Drop	▼ More
☐ 7	email	varchar(255)	utf8mb4_general_ci		No	None			🖊 Change	⊖ Drop	▼ More
☐ 8	pincode	varchar(255)	utf8mb4_general_ci		No	None			🖊 Change	⊖ Drop	▼ More
☐ 9	addr	varchar(255)	utf8mb4_general_ci		No	None			🖊 Change	⊖ Drop	▼ More

Figure 4.8: Description of Transaction table

In the above figure, the structure of the Transaction table is given to provide the Checkout details of the transaction like the Buyer Id, Product Id, Name of the buyer, Mobile, Email and Address where the products are to be delivered.

4.3 Populated Tables

select * from blogdata;

		blogId	blogUser	blogTitle	blogContent	blogTime	likes
☐	🖊 Edit Copy ⊖ Delete	1	admin	Nice work	Hey!! Its a really great website!	2022-01-19 19:50:18	3
☐	🖊 Edit Copy ⊖ Delete	2	Akki	Keep it up	Its good	2022-01-19 19:50:09	1

Figure 4.9: Values of blogdata table

select * from blogfeedback;

bid	comment	commentUser	commentPic	commentTime
2	Yeah it is!!	Akkhi		2022-01-17 17:44:24
1	You said it correctly!	Akkhi		2022-01-19 08:42:06

Figure 4.10: Values of blogfeedback table

select * from buyer;

				bid	bname	busername	bpassword	bhash	bemail	bmobile	baddress	bactive
☐	✎ Edit	⌸ Copy	⊖ Delete	0	Akshat	8112238859	123123		akki7@gmail.com	9468611758	BNMIT,Bangalore.	0
☐	✎ Edit	⌸ Copy	⊖ Delete	1	Akki	Akki	Akki	Akki	akki@gmail.com	9876543210	Ajmer	1

Figure 4.11: Values of Buyer table

select * from farmer;

				fid	fname	fusername	fpassword	fhash	femail	fmobile	faddress	factive	frating	picExt	picStatus
☐	✎ Edit	⌸ Copy	⊖ Delete	1	Akshat	8112238859	@AksVipo7		akshatsaxena799@gmail.com	akki	BNMIT, BANASHANKARI 2ND STAGE, BANGALORE.	0	0	./images/akshat.jpg	0
☐	✎ Edit	⌸ Copy	⊖ Delete	3	Charan	8912812911	123123@		charansan@gmail.com	Not Available	Andhra	0	0	./images/profile.png	0
☐	✎ Edit	⌸ Copy	⊖ Delete	4	Yash	9468611758	123123@		yash@gmail.com	yash	BNMIT, BANASHANKARI 2ND STAGE, BANGALORE.	0	0	./images/profile.png	0
☐	✎ Edit	⌸ Copy	⊖ Delete	5	admin	admin	admin		admin@gmail.com	admin	Ajmer	0	0		0

Figure 4.12: Values of Farmer table

select * from fproduct;

				fid	pid	product	pcat	pinfo	price	pimage	picStatus
☐	✎ Edit	⌸ Copy	⊖ Delete	5	0	Chickoo	Fruit	Chikoo	150	./ImagesAg/chikoo.jpg	0
☐	✎ Edit	⌸ Copy	⊖ Delete	1	1	MANGO	Fruit	<p>A mango is a sweet tropical fruit, and it's als...	500	./ImagesAg/mango.jpg	1
☐	✎ Edit	⌸ Copy	⊖ Delete	1	2	LadyFinger	Vegetable	A green colored oblong shaped vegetable, tapering ...	40	./ImagesAg/ladyfinger.jpg	1
☐	✎ Edit	⌸ Copy	⊖ Delete	3	3	Apple	Fruit	<p>An apple is an edible fruit produced by an appl...	200	./ImagesAg/apple.jpg	1
☐	✎ Edit	⌸ Copy	⊖ Delete	3	4	Banana	Fruit	<p>A banana is a curved, yellow fruit with a thick...	25	./ImagesAg/banana.jpg	1
☐	✎ Edit	⌸ Copy	⊖ Delete	5	10	Mushroom	Vegetable	Mushroom	250	./ImagesAg/mushroom.jpg	0
☐	✎ Edit	⌸ Copy	⊖ Delete	5	11	Potato	Vegetable	Potato	40	./ImagesAg/potato.jpg	0

Figure 4.13: Values of Fproduct table

select * from likedata;

blogId	blogUserId
1	1
2	5
1	5
1	3

Figure 4.14: Values of Likedata table

select * from mycart; (empty)

select * from transaction;

	tid	bid	pid	name	city	mobile	email	pincode	addr
☐ 🖉 Edit 👬 Copy ⊖ Delete	39	5	1	Akshat	BANGALORE	8112238859	akshatsaxena799@gmail.com	560070	BNMIT, BANASHANKARI 2ND STAGE, BANGALORE.
☐ 🖉 Edit 👬 Copy ⊖ Delete	40	3	4	Charan	BANGALORE	8912812911	charansan@gmail.com	560070	BNMIT, BANASHANKARI 2ND STAGE, BANGALORE.
☐ 🖉 Edit 👬 Copy ⊖ Delete	43	3	4	Yash	BANGALORE	8112238859	akshatsaxena799@gmail.com	560070	BNMIT, BANASHANKARI 2ND STAGE, BANGALORE.
☐ 🖉 Edit 👬 Copy ⊖ Delete	44	5	2	admin	Ajmer	9876543210	admin@bnmit.in	560070	BNMIT

Figure 4.15: Values of transaction table

4.4 SQL Triggers and Stored Procedures

4.4.1 Trigger

A database trigger is procedural code that is automatically executed in response to certain events on a particular table or view in a database. The trigger is mostly used for maintaining the integrity of the information on the database. Triggers execute when a user tries to modify data through a data manipulation language (DML) event. DML events are INSERT, UPDATE, or DELETE statements on a table or view.

Figure 4.16: Trigger Implementation

4.4.2 Stored Procedure

A stored procedure is a set of Structured Query Language (SQL) statements with an assigned name, which are stored in a relational database management system as a group. If a query has to be written over and over again, instead of having to write that query each time, it can be saved as a stored product and can be executed just by calling the procedure. In addition, parameters can also be passed to the stored procedure. Therefore, depending on the need, the stored procedure can act accordingly.

```
CREATE PROCEDURE getCustomers() NOT DETERMINISTIC CONTAINS SQL SQL SECURITY DEFINER SELECT * FROM transaction;
```

4.5 Database Connectivity

A Database connection is a facility in computer science that allows client software to talk to database server software, whether on the same machine or not. A connection is required to send

commands and receive answers, usually in the form of a result set. PHP has a pretty straight forward method to working with MySQL databases.

There are five steps to make PHP database interaction:

1. Create a connection
2. Select database
3. Perform database query
4. Use return data
5. Close connection

PHP CODE

```php
<?php
session_start()
//1. Create a database connection
$conn=mysql_connect('localhost','root','');
if($conn) echo "Connection Successful";
//2. Select a database to use
$db=mysql_select_db('KhetExpress',$conn);
If($db) echo "Database selected!";
//3. Perform database query
$sql="Select * from buyer";
If(mysql_query($sql,$conn) echo "Rows selected";
$result = mysql_query($sql,$conn);
//4. Use returned data
While($row=mysql_fetch_array($result)
{
        echo $row['username']; echo $row['email'];
}
//5. Close the connection
mysql_close($conn);
?>
```

4.6 Modules

The below flowchart explains how the system runs in the real world. The system can be easily implemented under various situations. Reusability is possible as and when required in this application. There is flexibility in all the modules which makes the task of the user easier.

The first-time users are required to register to this site else the user will not be able to access the features of the site. After successful registration, the user can log in to his account and view the Catalogue and place orders
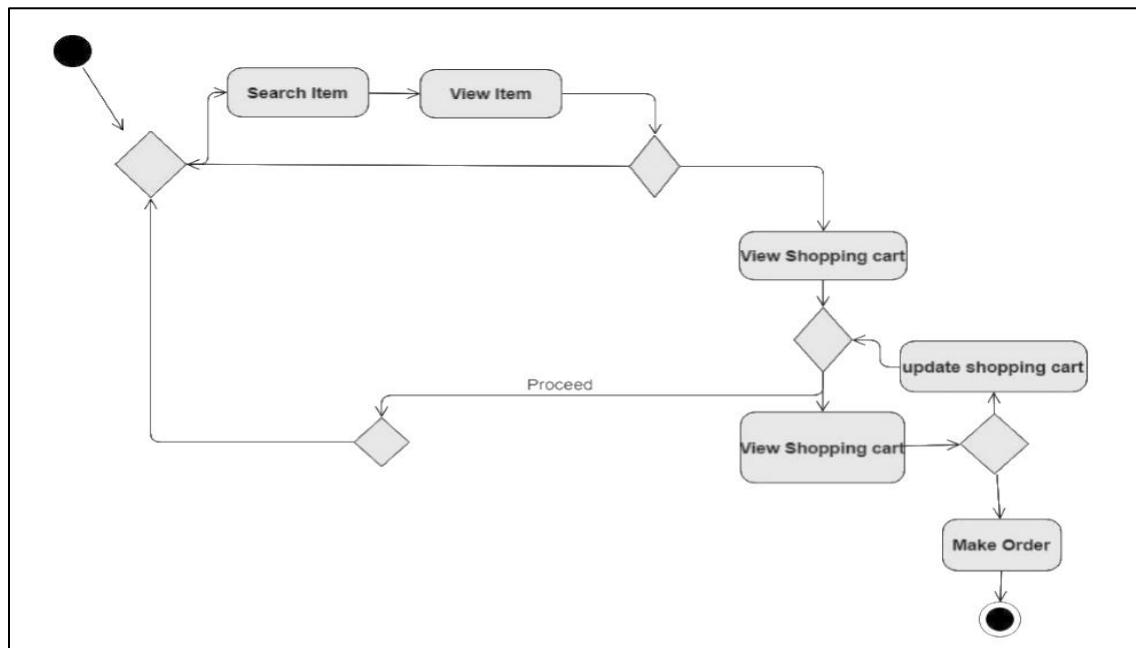
Figure 4.17: Workflow of System
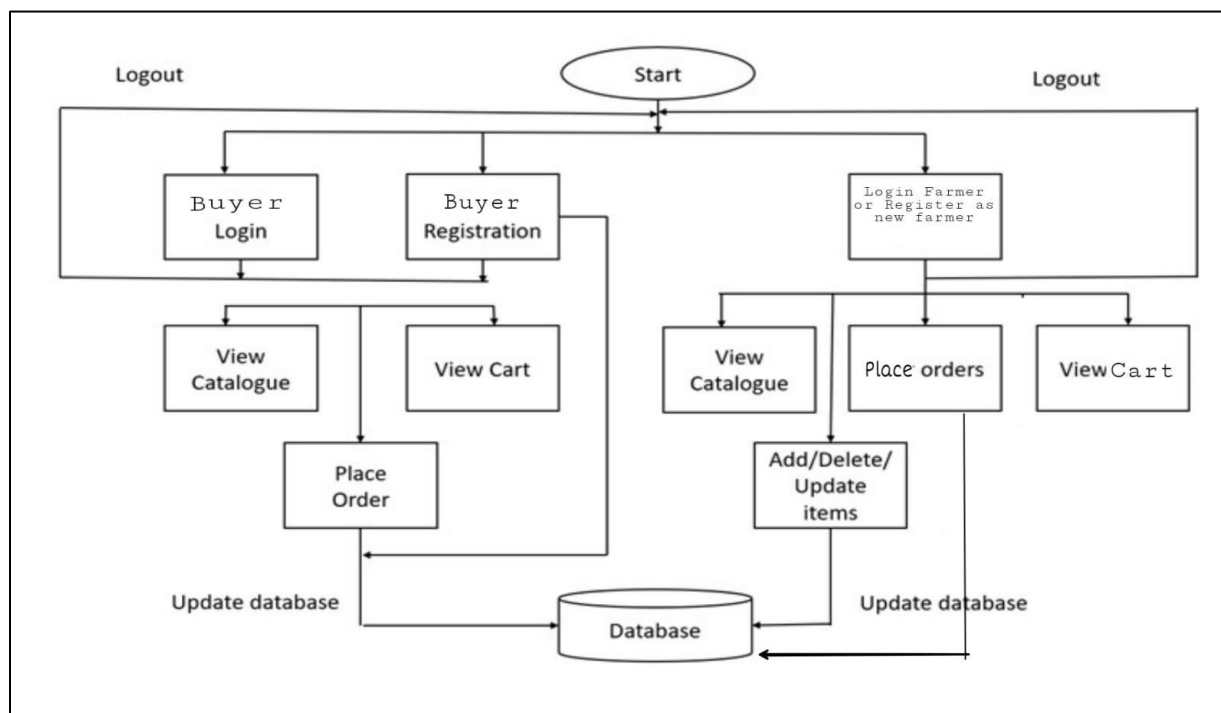
Figure 4.18: Modules of KhetExpress

CHAPTER 5

RESULTS

Home Page: The below figure of the home page shows the first page of the application. The user can go straight into the login page using this screen or go straight to registration using the register tab.
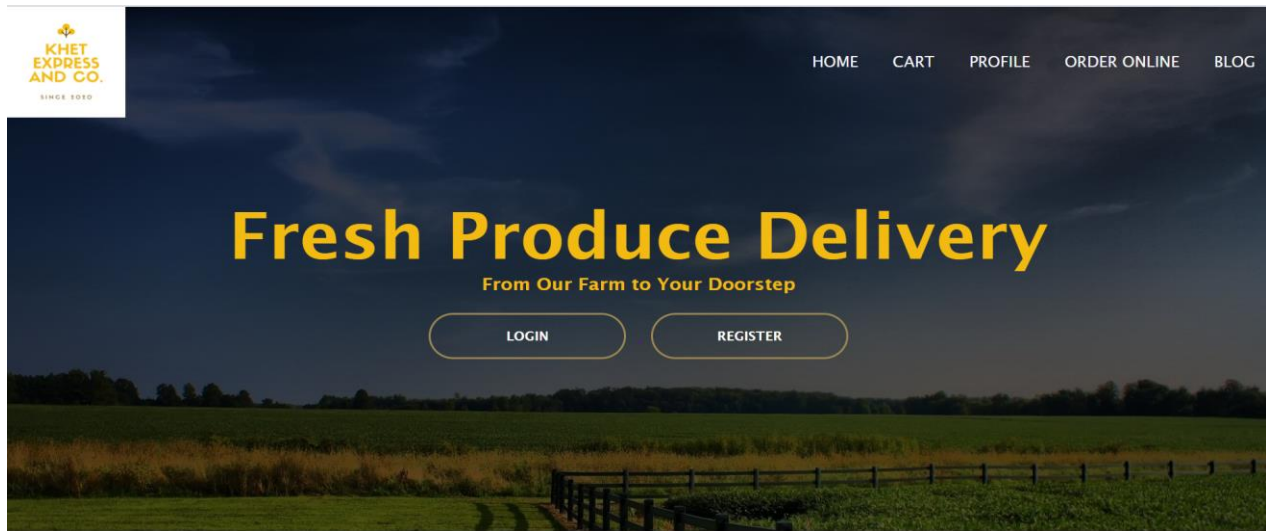
Figure 5.1: Home page

SignUp: The below figure of the starting of registration page shows the various options the user can register under like as a buyer or as a farmer.
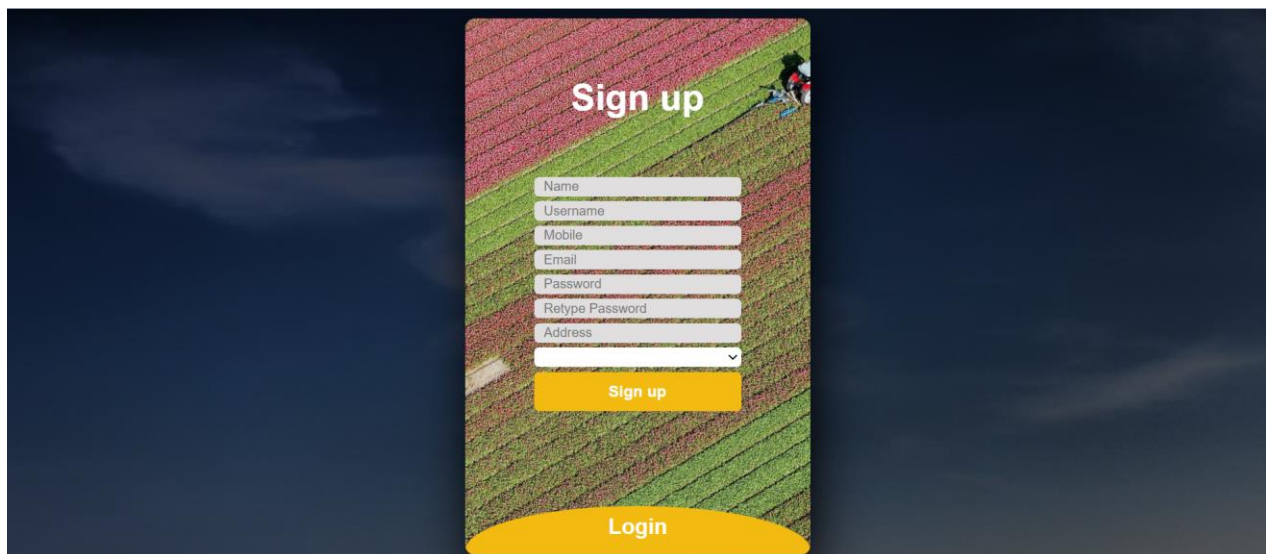

Figure 5.2: Starting of Registration page

Login Page: The below figure of the Login page shows the Username and Password fields for which the user has to provide his/her credentials in order to login to the platform.
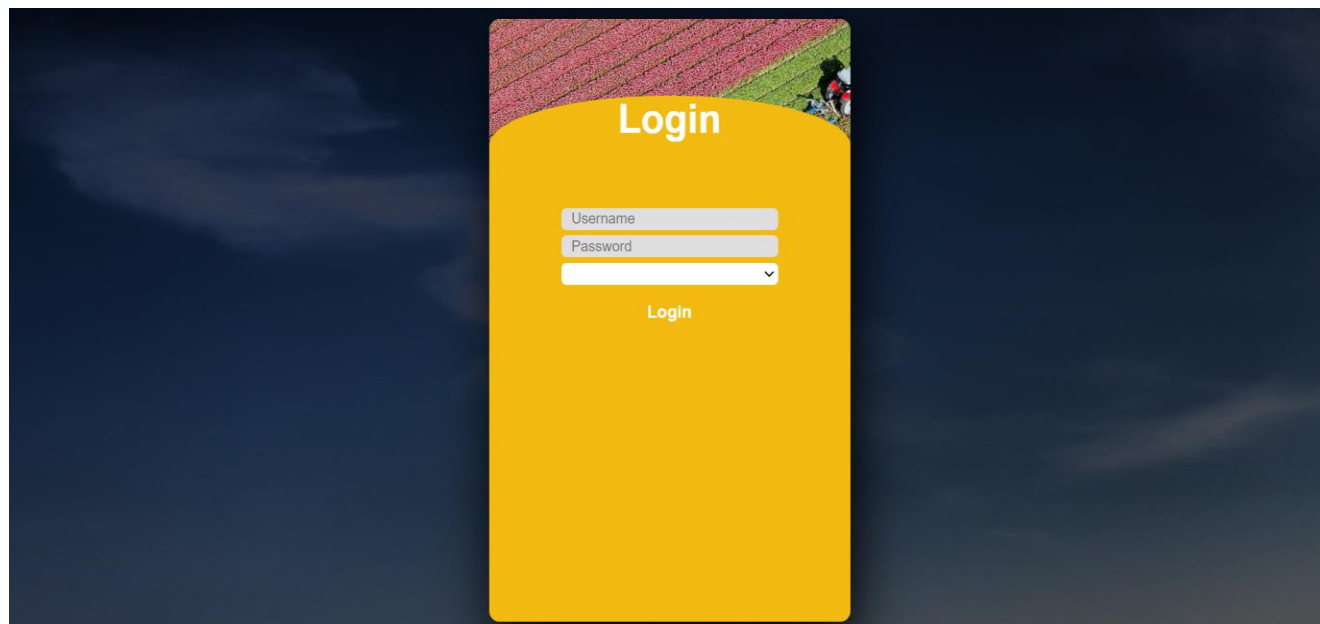
Figure 5.3: Login page

Profile Page: : The below figure of the Profile shows the various options the user can use to Update their profiles, Access the main menu or Upload the Product in the Database.
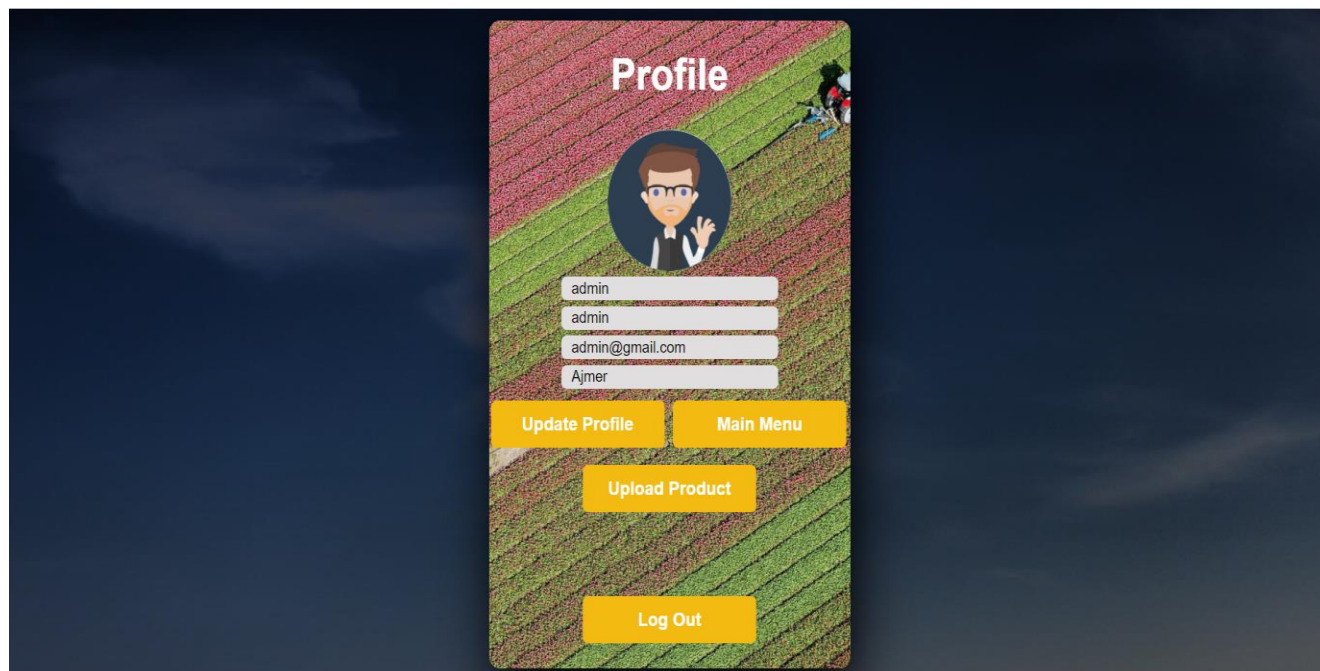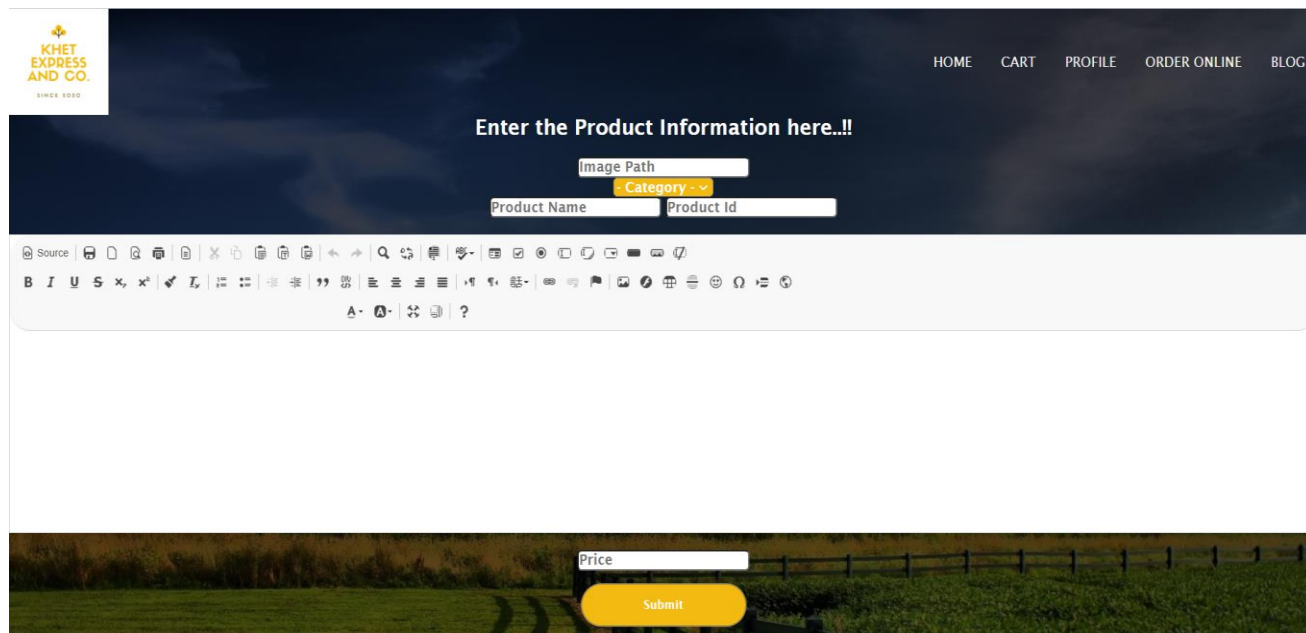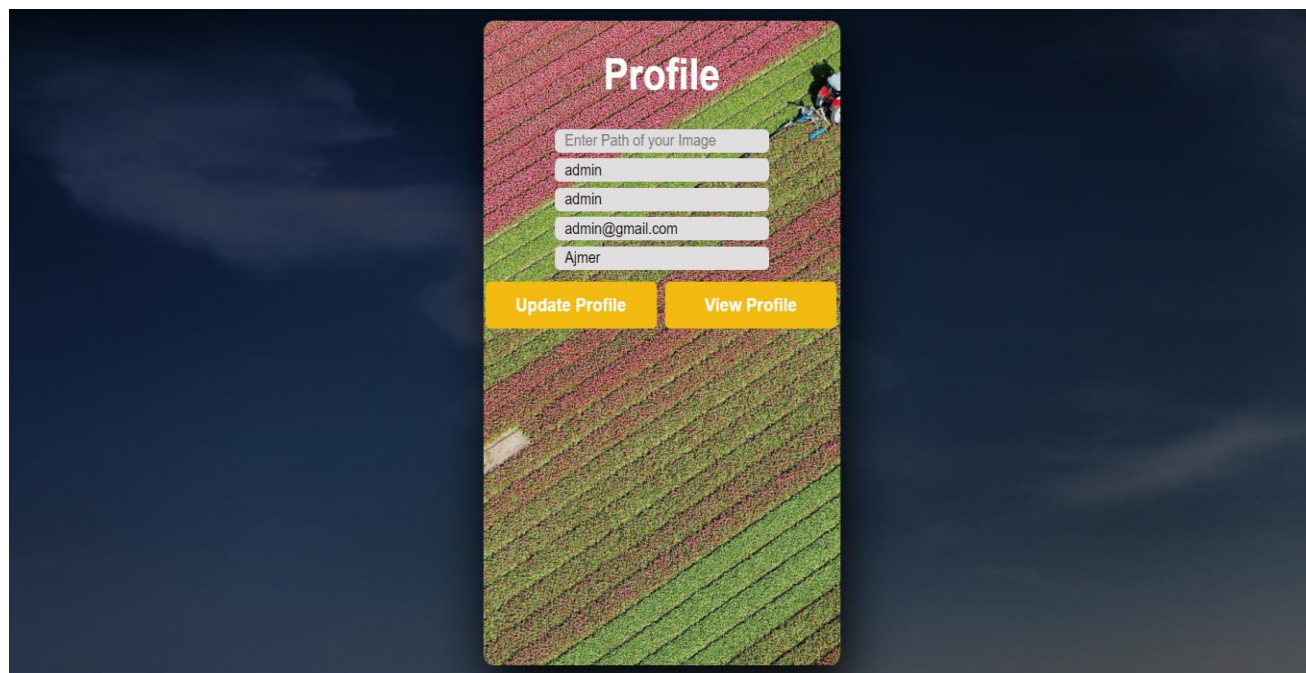

Figure 5.4: Profile page

Add product Page: The below figure of the Product addition page shows the various details to be given in order to Upload the Product in the Database.

Figure 5.5: Add product page

Update Profile Page: The below figure of the Update profile page shows the various details to be given in order to update the Profile in the Database.

Figure 5.6: Update profile page

Home2 page: This is alternative to the main index page.

Figure 5.7: Home2 page

About Page: This provides us the Information regarding the project.

Figure 5.8: About page

Catalogue Page: The below figure of the catalogue page provides us the different products which can be added to the cart along with a quantity input box.
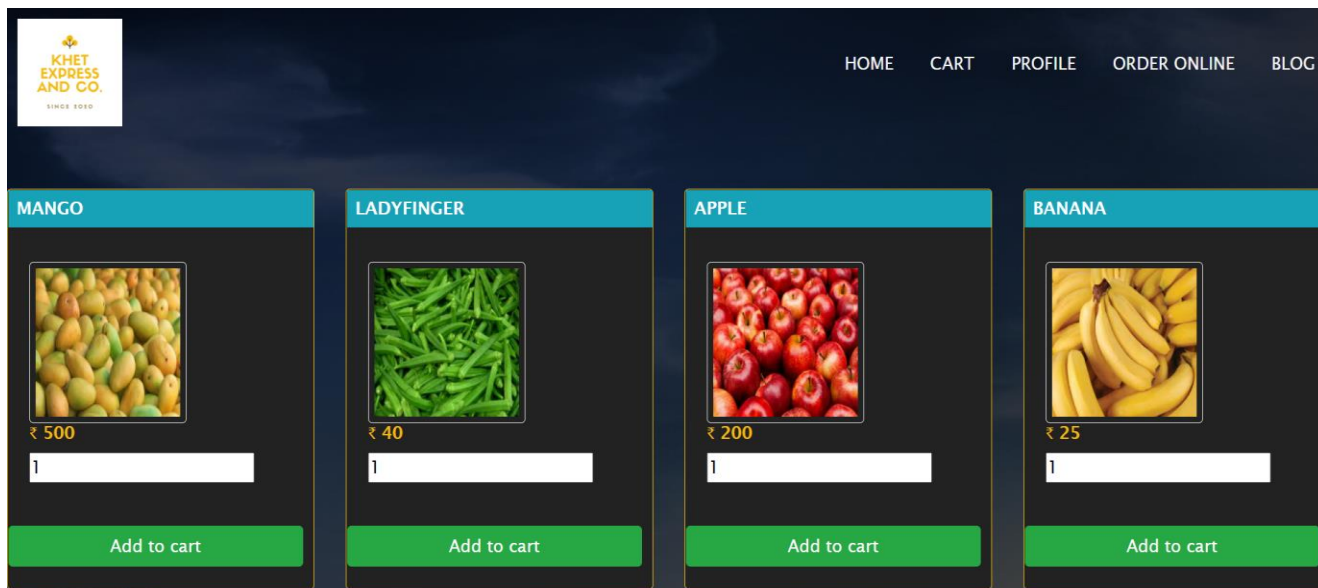

Figure 5.9: Catalogue page

View Cart Page: The below figure shows the MyCart page which gives us the brief of the products user added in his/her cart.
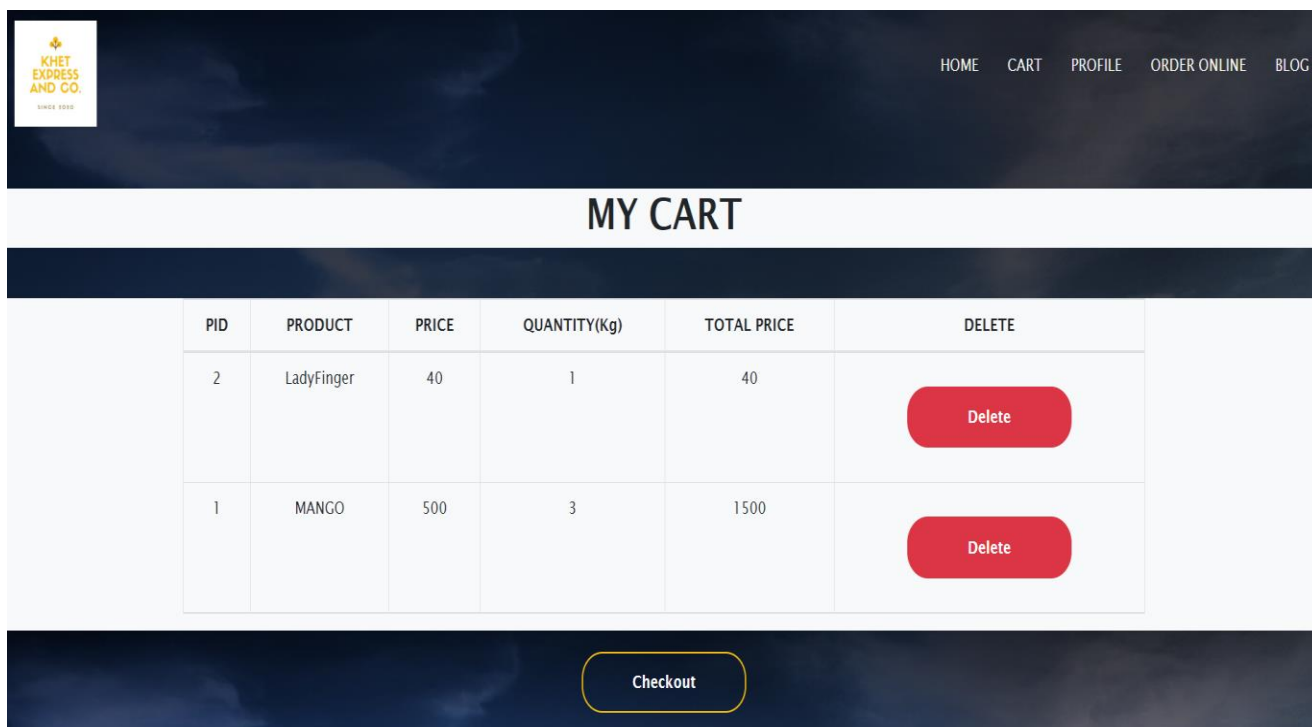

Figure 5.10: My cart page

Transaction Page: The below figure shows the transaction page where the Delivery details are to be updated.
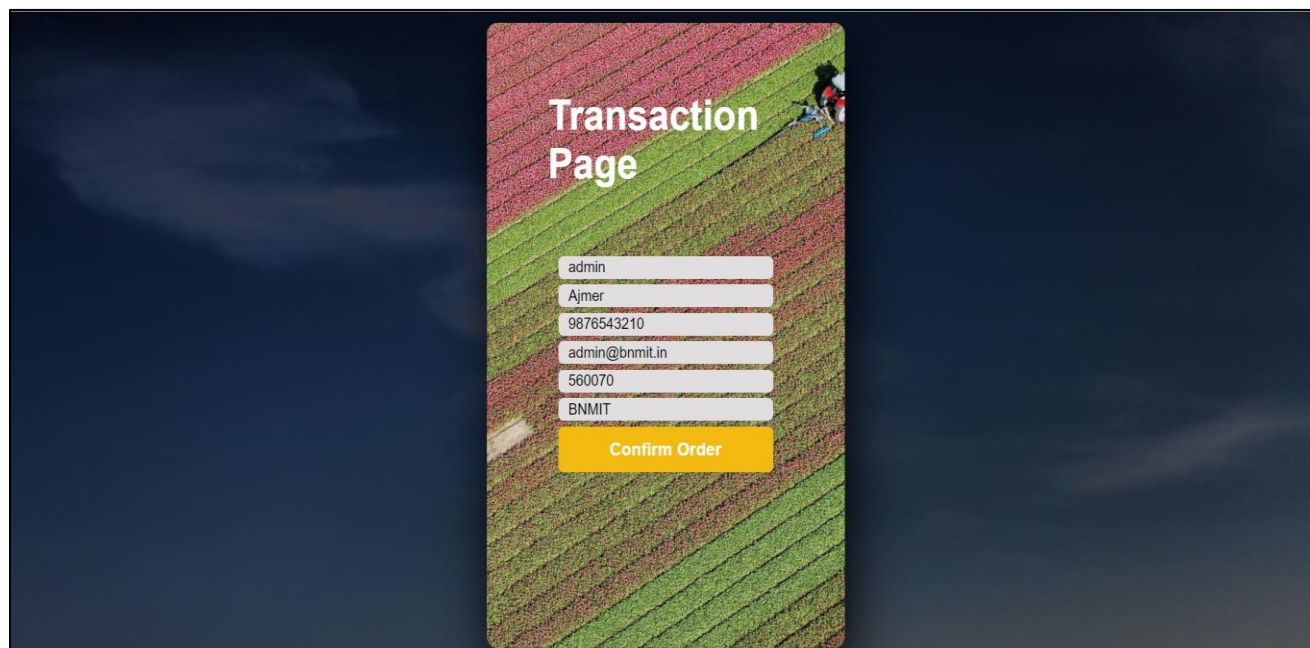

Figure 5.11: Transaction page

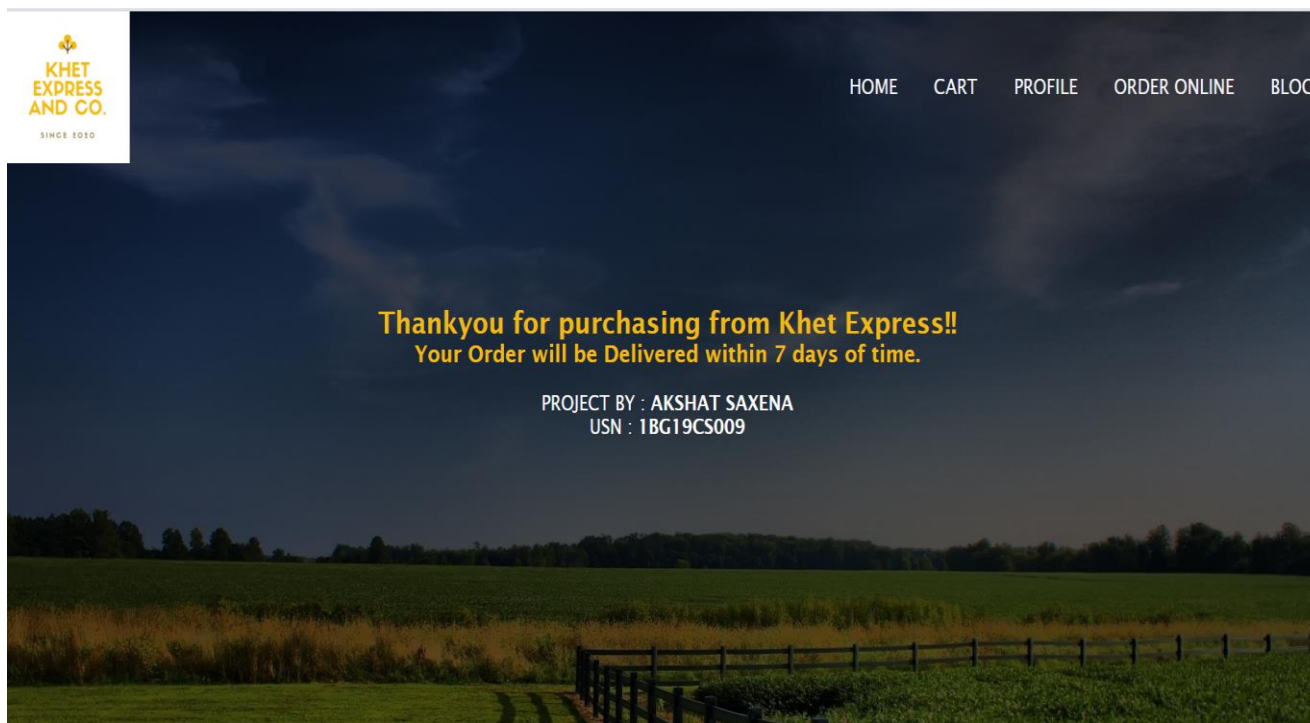Transaction Successful Page: The below figure shows that the transaction is done successfully.

Figure 5.12: Transaction Successful page

Blog View Page: In the below figure, the structure is given to provide the details regarding the blog written by the user of the website. Users can give the blogs either upvotes or comments.
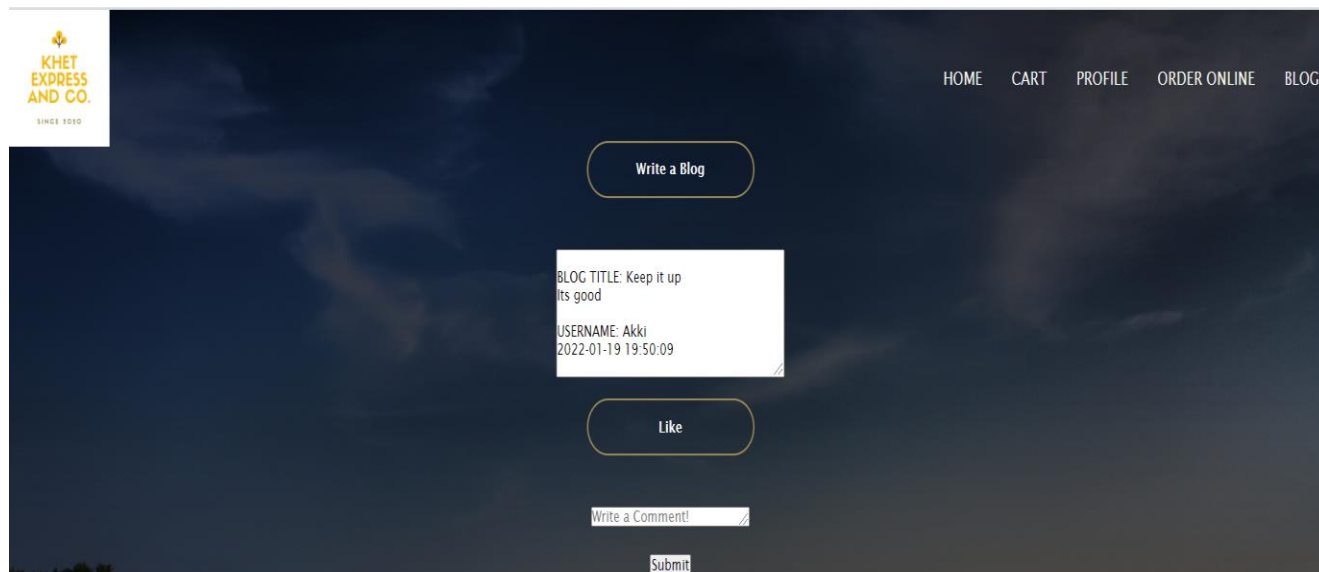

Figure 5.13: Blog View page

Blog Write Page: The below figure shows the Blog Write page where people can write the blogs and upload it in the database.
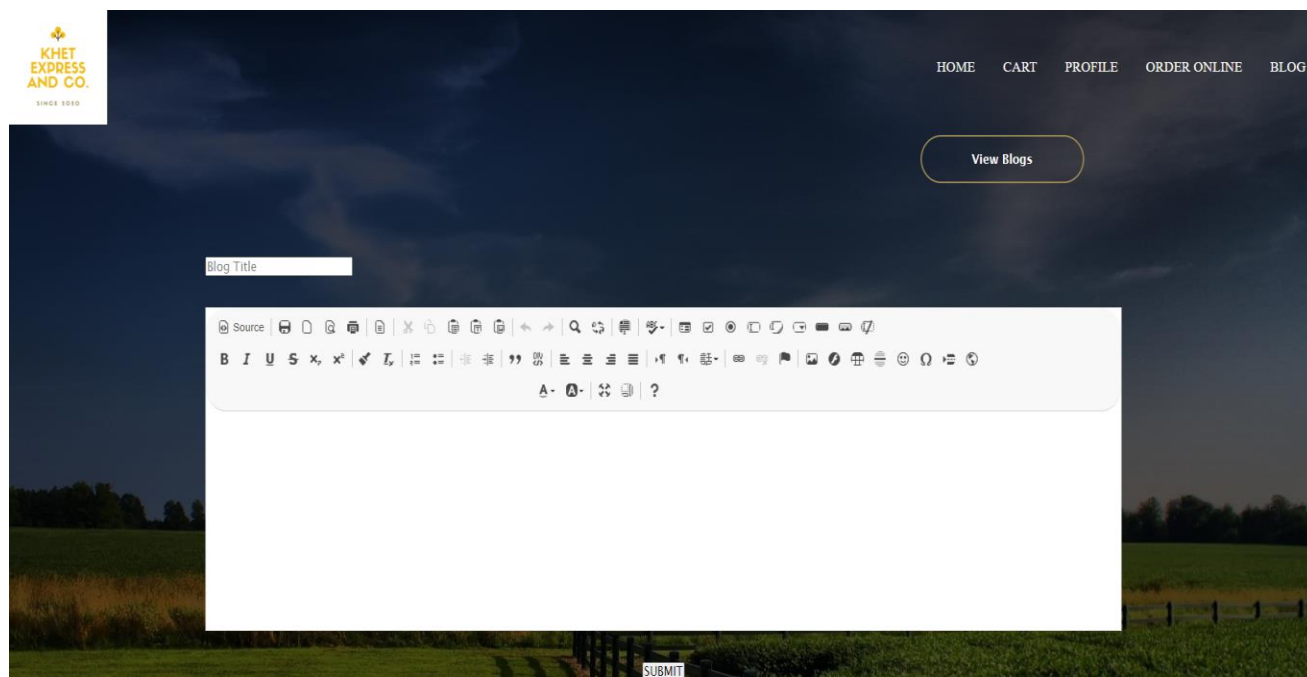

Figure 5.14: Blog Write page

Logout Page: The below figure shows that user got logged out successfully.

Figure 5.15: Logout page

CHAPTER 6

CONCLUSION AND FUTURE ENHANCEMENTS

Conclusion

The proposed Management System provides a user-friendly and helpful means of booking and purchasing Agro-products online without any confusion or problems that might occur usually. Thus, the site modifies the usual way of service booking and thus creates a new platform for the people to utilize and reap the benefits offered. This project reduces the efforts of both buyer and farmer. This is also a more trustable and accurate way of handling data as there is a high risk of data loss or data corruption in keeping offline records, thus improving data redundancy. Thus, we can say our project is a very trustable and accurate type of data management for Agriculture data management and will be very helpful in the real world.

The project teaches us the essential skills like:

- Understanding database handling and query processing.
- Implement, analyze and evaluate the project developed for an application.
- Demonstrate the working of different concepts of DBMS.

Future Enhancements

Due to time constraints, some features are not implemented yet and will be implemented soon. We have not yet included a Billing System and Payment Gateway. A feedback module can be incorporated in order provide feedback of the vegetables, fruits or cereals purchased by a buyer. Furthermore, we are providing services on web platforms. The app version of the system might come in near future. The bill details have to be entered by admin manually, we will automate this in the future versions. There is also going to be some improvement in our user interface and we are going to make it more user-friendly and attractive.